esp®

ISSUE 23

FIRE AND SECURITY PRODUCTS

About ESP®

For more than 20 years ESP® has been developing and supplying security related products to the UK electrical industry. As a leading safety and security product specialist, the company offers a comprehensive range of electronic security and fire detection solutions to meet the requirements of installers and contractors. The range includes CCTV, Access Control, Video Door Entry, a growing collection of conventional and addressable Fire Protection products, Duceri Emergency Lighting, Essentials, and the new addition of Sangamo Time Switches and Heating Controls.

Central Location – England

Based in Worcestershire in the Midlands at our purpose built Head Office and Distribution Centre, we are ideally located to design, develop, manufacture and distribute our ever-expanding product range worldwide.

Delivering New Products

Our New Product Development Team are constantly tracking market trends, approval standards and providing customised products according to unique specification. This ensures we continue to increase our product range to meet the ever-changing needs of our customers.

A Scolmore® Group Company

ESP® has been part of the Scolmore® Group of companies since 2011, and whilst the company operates independently, ESP® benefits from the expertise, knowledge and support of the Scolmore® Group and continues to create strong growth within its product categories.

Scolmore® has been a leading UK manufacturer of electrical accessories and lighting products since 1989 and has earned a reputation worldwide for high quality products, innovative solutions and exemplary customer service.
Key to the continued success of the group is the commitment to developing new products which incorporate the very latest in technological advancements, and provide contractors and installers with cost-efficient, easy to install solutions that help them remain highly competitive.

New from ESP®...

rekor HD

HD CCTV Cameras and Kits

HDVIEW IP

POE Extender

HDVIEW IP

PTZ Controller
for use with IP PTZ Camera

SANGAMO

Sangamo Plus Range

SANGAMO

We now also sell Sangamo Time Switches & Heating Controls

Round Pattern Time Switches

Sangamo have manufactured the renowned RPTS from our Port Glasgow factory since 1951. These 20A switches are famous for their high capacity, quality and reliability.

DIN & Panel Range

Our DIN and panel range now includes Bluetooth and NFC time switches, DIN rail mountable time switches and panel time switches.

Choice Programmers & Thermostats

Programmers and thermostats are key components of heating control systems.

Powersaver Controllers

The primary application for the Powersaver range is to control immersion heaters. Fitting a Sangamo immersion heater controller can reduce costs by up to 50%.

Scolmore® Group App

The Scolmore® Group app allows you to use your smart phone to browse our complete range of products, add products to your Favourites or to the Quote Basket and allows you to email the contents of the basket back to yourself.

With Scolmore®, Ovia® lighting, Esp® and Unicrimp® products available you can use the search facility to easily locate the products required.

Our App also has a useful tool kit featuring: Quick Quote Calculator, Zs Values, Cables Selection & Voltage Drop, Adiabatic Equation Calculator, Power Factor Calculator, KVA Converter, Lighting Cost Saving Calculator, Lighting No. Calculator and many more...

ESP® Website | espuk.com

The refreshed new site provides customers with access to detailed product information for the company's extensive range of security products, which includes cctv, access control, fire protection, emergency lighting and essentials.

Stockists can also take advantage of a comprehensive product image library, plus a range of literature covering every product category - all available to download at the click of a button. Visitors can keep informed of the latest new products and company developments via regular updates on the news section.

Online Ordering | espukonline.com/

The updated site now incorporates a number of improved features that allow users to access new information directly and more easily:

- Ordering 24 hours a day 7 days a week with the ability to check current stock levels as required, meaning you are not restricted to ordering during normal office hours.
- Access to on-line catalogues will keep you fully updated with the complete product range and provide information on new products as and when they become available.
- The order tracking service keeps you up to date with the progress of your shipment.
- Managing your administration paper work is now even easier with instant access to reports and essential documents at a click of a button.
- A 'quick buy tab' and the ability to store the most common orders for repeated use, adds to the versatility and flexibility of the revised system.

E-mail us at info@espuk.com or call our Sales Office on 01527 51 51 50 and one of our Sales Representatives will be more than happy to get you on-line.

Marketing Hub |
espuk.com/marketing-hub

A brand new feature of the revamped site is the Marketing Hub area which provides ESP® stockists with a range of tools to enhance their own marketing facilities, with very little effort or cost.

A number of templates featuring some of the most popular products are available to download and these can be customised with the stockist's own details to optimise sales opportunities.

CCTV

Emergency Lighting

Access Control

Essentials

Fire Protection

SANGAMO

CCTV

The ESP® CCTV range offers the installer a practical range of security and observation solutions reflecting the best features of established and emerging CCTV technology. The range includes cameras from 1080p (2 Megapixel) to 5 Megapixel resolution using the latest in analog and IP technology to deliver superior image quality.

HDVIEW IP   rekor IP   HDview   DigiviewHD⁺   HDview WF   rekor HD

CAMERA SELECTION GUIDE

To select the correct camera consider if the location is internal or external (bear in mind that external cameras are also suitable for internal use). Decide which lens size will achieve the desired image from the guide below.

Viewing Capability / Distance from Camera	< 3 METERS >	< 10 METERS >	< 15 METERS >
10 meters	9-22mm Lens	2.8-12mm Lens	2.8-12mm Lens
20 meters	5-50mm Lens	9-22mm Lens	4-9mm Lens
30 meters	5-50mm Lens	9-22mm Lens	9-22mm Lens
50 meters	N/A	5-50mm Lens	9-22mm Lens

rekor IP™

2 Megapixel IP POE Cameras and Kits

Get kitted out with the code finder

(B) Bullet
(D) Dome

(W) White
(G) Grey

REKIPXXXX

Rekor IP 2MP Range

(C36F) 3.6mm Fixed Camera
(4K) 4 Channel CCTV Kit

Kits Only
(2) 2 Camera Kit
(4) 4 Camera Kit

2MP Cameras

Premium Surveillance Hard Drive

ESP View App for Smart Devices

Power over Ethernet Connection

Fixed Lens Cameras — Fixed Lens

Ingress Protection Rating — IP66

Suitable for use during Day and Night — Day and Night

Efficient Data Storage — H.265

Code (White)	Code (Grey)	Description
Rekor IP 2MP Cameras & Kits		
REKIPC36FBW	REKIPC36FBG	Rekor IP Bullet POE 2MP Camera Fixed 3.6mm
REKIPC36FDW	REKIPC36FDG	Rekor IP Dome POE 2MP Camera Fixed 3.6mm
REKIP4KB2W	REKIP4KB2G	Rekor IP 4 Channel POE 2MP 2 Bullet Camera Kit (1TB)
REKIP4KB4W	REKIP4KB4G	Rekor IP 4 Channel POE 2MP 4 Bullet Camera Kit (1TB)
REKIP4KD2W	REKIP4KD2G	Rekor IP 4 Channel POE 2MP 2 Dome Camera Kit (1TB)
REKIP4KD4W	REKIP4KD4G	Rekor IP 4 Channel POE 2MP 4 Dome Camera Kit (1TB)

IPCDBW White Camera Deep Base
IPCDBG Grey Camera Deep Base

IPCDBW White Camera Deep Base
IPCDBG Grey Camera Deep Base

REKIPC36FBW
White 3.6mm Lens 2MP IP Bullet Camera

REKIPC36FBG
Grey 3.6mm Lens 2MP IP Bullet Camera

REKIPC36FDW
White 3.6mm Lens 2MP IP Dome Camera

REKIPC36FDG
Grey 3.6mm Lens 2MP IP Dome Camera

- HD 2MP Resolution
- 3.6mm Fixed Lens
- 1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 88° Viewing Angle
- H265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection

Sensor Size	1/2.7"
Lens	3.6mm
Effective Pixels	2MP (1920 x 1080)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PP-PoE,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø71 X138mm
Weight	250g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

Sensor Size	1/2.7"
Lens	3.6mm
Effective Pixels	2MP (1920 x 1080)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PP-PoE,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø100x82 mm
Weight	260g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

- HD 2MP Resolution
- 3.6mm Fixed Lens
- 1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 88° Viewing Angle
- H265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection

Grey Kits

White Kits

REKIP4KB2G Grey **REKIP4KB2W** White
4 Channel CCTV System

- Complete with NVR, IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- 2 x 2MP, Day/ Night, Weatherproof, Bullet Style IP Cameras
- H.265 Video Compression for Efficient Storage
- Pre-Installed 1TB Premium Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR (HDD inc.), 2 x IP Cameras, 2 x 18.3 Meter Pre-terminated Network Cable, System Power Supply, Manual, HDMI Lead, Mouse Control

System

Operating System	LINUX
Recording Bandwidth	50Mbps
POE	4CH (<100 Meters per Channel)

Video & Audio

Video Input	4CH
Audio Output	1CH

Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160

Recording

Compression	H.265/H.264
Resolution	2 Megapixel
Record Rate (Main Stream)	2 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	2 Megapixel
Backup Mode	Network/2 x USB2.0

Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS

Storage

Internal HDD	1TB HDD

General

NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300X227X53mm

External Power Supply

Power Input	AC 110-240V
Power Output	DC48V/1.2A - 60W

White Kits

Grey Kits

REKIP4KB4G Grey **REKIP4KB4W** White
4 Channel CCTV System

- Complete with NVR, IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- 4 x 2MP, Day/ Night, Weatherproof, Bullet Style IP Cameras
- H.265 Video Compression for Efficient Storage
- Pre-Installed 1TB Premium Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR (HDD inc.), 4 x IP Cameras, 4 x 18.3 Meter Pre-terminated Network Cable, System Power Supply, Manual, HDMI Lead, Mouse Control

System

Operating System	LINUX
Recording Bandwidth	50Mbps
POE	4CH (<100 Meters per Channel)

Video & Audio

Video Input	4CH
Audio Output	1CH

Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160

Recording

Compression	H.265/H.264
Resolution	2 Megapixel
Record Rate (Main Stream)	2 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	2 Megapixel
Backup Mode	Network/2 x USB2.0

Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS

Storage

Internal HDD	1TB HDD

General

NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300X227X53mm

External Power Supply

Power Input	AC 110-240V
Power Output	DC48V/1.2A - 60W

Grey Kits   White Kits

REKIP4KD2G Grey   **REKIP4KD2W** White

4 Channel CCTV System

- Complete with NVR, IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- 4 x 2MP, Day/ Night, Weatherproof, Dome Style IP Cameras
- H.265 Video Compression for Efficient Storage
- Pre-Installed 1TB Premium Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR (HDD inc.), 4 x IP Cameras, 4 x 18.3 Meter Pre-terminated Network Cable, System Power Supply, Manual, HDMI Lead, Mouse Control

System

Operating System	LINUX
Recording Bandwidth	50Mbps
POE	4CH (<100 Meters per Channel)

Video & Audio

Video Input	4CH
Audio Output	1CH

Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160

Recording

Compression	H.265/H.264
Resolution	2 Megapixel
Record Rate (Main Stream)	2 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	2 Megapixel
Backup Mode	Network/2 x USB2.0

Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS

Storage

Internal HDD	1TB HDD

General

NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300X227X53mm

External Power Supply

Power Input	AC 110–240V
Power Output	DC48V/1.2A - 60W

White Kits   Grey Kits

REKIP4KD4G Grey   **REKIP4KD4W** White

4 Channel CCTV System

- Complete with NVR, IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- 4 x 2MP, Day/ Night, Weatherproof, Dome Style IP Cameras
- H.265 Video Compression for Efficient Storage
- Pre-Installed 1TB Premium Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR (HDD inc.), 4 x IP Cameras, 4 x 18.3 Meter Pre-terminated Network Cable, System Power Supply, Manual, HDMI Lead, Mouse Control

System

Operating System	LINUX
Recording Bandwidth	50Mbps
POE	4CH (<100 Meters per Channel)

Video & Audio

Video Input	4CH
Audio Output	1CH

Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160

Recording

Compression	H.265/H.264
Resolution	2 Megapixel
Record Rate (Main Stream)	2 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	2 Megapixel
Backup Mode	Network/2 x USB2.0

Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS

Storage

Internal HDD	1TB HDD

General

NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300X227X53mm

External Power Supply

Power Input	AC 110–240V
Power Output	DC48V/1.2A - 60W

HDVIEW IP™

5 Megapixel IP POE Cameras and NVRs
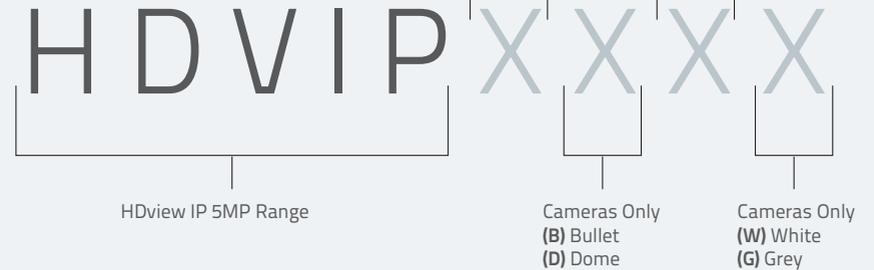
Code	Description
(C36F)	3.6mm Fixed Camera
(C28F)	2.8mm Fixed Camera
(C2812VF)	2.8mm -12mm Varifocal Camera
(C550VF)	5mm -50mm Varifocal Camera
(C11F)	1.1mm Fisheye Camera
(CPTZ)	Pan, Tilt, Zoom Camera
(4R)	4 Channel CCTV Recorder
(8R)	8 Channel CCTV Recorder
(16R)	16 Channel CCTV
(32R)	32 Channel CCTV

NVR's Only
Code	Description
(2TB)	2TB Hard Drive
(4TB)	4TB Hard Drive
(8TB)	8TB Hard Drive
(12TB)	12TB Hard Drive
(16TB)	16TB Hard Drive

H D V I P X X X X

HDview IP 5MP Range

Cameras Only
(B) Bullet
(D) Dome

Cameras Only
(W) White
(G) Grey

Code (White)	Code (Grey)	Description
HDview IP 5MP Cameras		
HDVIPC36FBW	HDVIPC36FBG	HDview IP Bullet POE 5MP Camera Fixed 3.6mm
HDVIPC36FDW	HDVIPC36FDG	HDview IP Dome POE 5MP Camera Fixed 3.6mm
HDVIPC28FDWAV		HDview IP Dome POE 5MP Camera Fixed 2.8mm Vandal
HDVIPC2812VFBW	HDVIPC2812VFBG	HDview IP Bullet POE 5MP Camera Varifocal 2.8-12mm
HDVIPC2812VFDW	HDVIPC2812VFDG	HDview IP Dome POE 5MP Camera Varifocal 2.8-12mm
HDVIPC2812VFDWAV	HDVIPC2812VFDGAV	HDview IP Dome POE 5MP Camera Varifocal 2.8-12mm Vandal
HDVIPCPTZ		HDview IP PTZ Dome POE 5MP Camera
HDVIPC28FDW		HDview IP Dome POE 5MP Camera Mini 2.8mm Internal
HDVIPC11FDW		HDview IP Fisheye POE 5MP Camera 1.1mm
HDVIPC550VFBW		HDview IP Bullet POE 5MP Camera 5-50mm Lens

Code	Description
HDview IP NVR's	
HDVIP4R	HDview IP 4 Channel NVR 5MP (1TB)
HDVIP4R2TB	HDview IP 4 Channel NVR 5MP (2TB)
HDVIP4R4TB	HDview IP 4 Channel NVR 5MP (4TB)
HDVIP4R8TB	HDview IP 4 Channel NVR 5MP (8TB)
HDVIP8R	HDview IP 8 Channel NVR 5MP (1TB)
HDVIP8R2TB	HDview IP 8 Channel NVR 5MP (2TB)
HDVIP8R4TB	HDview IP 8 Channel NVR 5MP (4TB)
HDVIP8R8TB	HDview IP 8 Channel NVR 5MP (8TB)
HDVIP16R	HDview IP 16 Channel NVR 5MP (4TB)
HDVIP16R8TB	HDview IP 16 Channel NVR 5MP (8TB)
HDVIP16R12TB	HDview IP 16 Channel NVR 5MP (12TB)
HDVIP16R16TB	HDview IP 16 Channel NVR 5MP (16TB)
HDVIP32R	HDview IP 32 Channel NVR 5MP (4TB)
HDVIP32R8TB	HDview IP 32 Channel NVR 5MP (8TB)
HDVIP32R12TB	HDview IP 32 Channel NVR 5MP (12TB)
HDVIP32R16TB	HDview IP 32 Channel NVR 5MP (16TB)

5MP Cameras

Premium Surveillance Hard Drive

ESP View App for Smart Devices

Power over Ethernet Connection

Pan and Tilt Options

Motorized Lens Cameras

Fixed Lens Cameras — Fixed Lens

Ingress Protection Rating — IP66

Suitable for use during Day and Night — Day and Night

Efficient Data Storage — H.265

Impact Rating — IK10

360° Rotation — 360° Rotation

■ HD 5MP Resolution
■ 3.6mm Fixed Lens
■ 1/2.7" Image Sensor
■ 30m Infrared LED Illumination
■ 88° Viewing Angle
■ H265 Compression
■ ONVIF Compliant
■ IP66 Housing Ingress Protection

IPCDBW White Camera Deep Base
IPCDBG Grey Camera Deep Base

Sensor Size	1/2.7"
Lens	3.6mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DD-NS,RTP/RTSP,PPPoE,SMTP,NT-P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø71 X138mm
Weight	250g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

HDVIPC36FBW White 3.6mm Lens 5MP IP Bullet Camera
HDVIPC36FBG Grey 3.6mm Lens 5MP IP Bullet Camera

■ HD 5MP Resolution
■ 2.8~12mm Varifocal Lens (Motorized)
■ 1/2.7" Image Sensor
■ 40m Infrared LED Illumination
■ 103° - 51° Viewing Angle
■ H.265 Compression
■ ONVIF Compliant
■ Additional Features: SD storage / Alarm Trigger Input / Audio I/O
■ IP66 Housing Ingress Protection

Sensor Size	1/2.7"
Lens	2.8-12mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	40 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DD-NS,RTP/RTSP,PPPoE,SMTP,NT-P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	microSD Card (<128G Capcity)
Alarm	I/O
Audio	I/O
Power	12vDC/POE
Consumption	<7W
Dimension	Ø77X240mm
Weight	805g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

IPCDBW White Camera Deep Base
IPCDBG Grey Camera Deep Base

White 2.8-12mm Lens 5MP IP Bullet Camera **HDVIPC2812VFBW**
Grey 2.8-12mm Lens 5MP IP Bullet Camera **HDVIPC2812VFBG**

■ HD 5MP Resolution
■ 3.6mm Fixed Lens
■ 1/2.7" Image Sensor
■ 30m Infrared LED Illumination
■ 88° Viewing Angle
■ H265 Compression
■ ONVIF Compliant
■ IP66 Housing Ingress Protection

IPCDBW White Camera Deep Base
IPCDBG Grey Camera Deep Base

Sensor Size	1/2.7"
Lens	3.6mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DD-NS,RTP/RTSP,PPPoE,SMTP,NT-P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø100x82 mm
Weight	260g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

HDVIPC36FDW White 3.6mm Lens 5MP IP Dome Camera
HDVIPC36FDG Grey 3.6mm Lens 5MP IP Dome Camera

■ HD 5MP Resolution
■ 2.8~12mm Varifocal Lens (Motorized)
■ 1/2.7" Image Sensor
■ 45m Infrared LED Illumination
■ 103 - 51° Viewing Angle
■ H.265 Compression
■ ONVIF Compliant
■ Additional Features: SD storage / Alarm Trigger Input / Audio I/O
■ IP66 Housing Ingress Protection

Sensor Size	1/2.7"
Lens	2.8-12mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	45 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DD-NS,RTP/RTSP,PPPoE,SMTP,NT-P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	microSD Card (<128G Capcity)
Alarm	I/O
Audio	I/O
Power	12vDC/POE
Consumption	<7W
Dimension	Ø126 x 102mm
Weight	720g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

IPCDBW White Camera Deep Base
IPCDBG Grey Camera Deep Base

White 2.8-12mm Lens 5MP IP Dome Camera **HDVIPC2812VFDW**
Grey 2.8-12mm Lens 5MP IP Dome Camera **HDVIPC2812VFDG**

- HD 5MP Resolution
- 5~50mm Varifocal Lens (Motorized)
- 1/2.7" Image Sensor
- 60m Infrared LED Illumination
- 45~7° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection

IPCDBW   White Camera Deep Base

HDVIPC550VFBW   White 5-50mm Lens 5MP IP Bullet Camera

Sensor Size	1/2.7"
Lens	5-50mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	60 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PPPoE,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Power	12vDC/POE
Consumption	<8W

- HD 5MP Resolution
- 2.8~12mm Varifocal Lens (Motorized)
- 1/2.7" Image Sensor
- 45m Infrared LED Illumination
- 103 - 51° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD storage / Alarm Trigger Input & output /Audio I&O/Reset
- IP66 Housing Ingress Protection
- IK10 Impact Protection

Sensor Size	1/2.7"
Lens	2.8-12mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Impact Rating	IK10
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	45 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PPPoE,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	microSD Card (<128G Capcity)
Alarm	I/O
Audio	I/O
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø147X117mm
Weight	1067g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

IPCDBWAV   White Camera Deep Base
IPCDBGAV   Grey Camera Deep Base

HDVIPC2812VFDWAV
White 2.8-12mm Lens 5MP IP Vandal Resistant Dome Camera

HDVIPC2812VFDGAV
Grey 2.8-12mm Lens 5MP IP Vandal Resistant Dome Camera

- HD 5MP Resolution
- 4.8-86.4mm Varifocal Lens (18x Zoom)
- Full Pan, tilt and zoom operation
- Full 360° rotation pan function
- 1/2.5" Image Sensor
- 60m Infrared LED Illumination
- 61.2~2.32° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection
- Powered via Supplied PSU or POE Injector Required

HDVIPCPTZC   IP Pan, Tilt, and Zoom Controller

HDVIPCPTZ
4.8-86.4mm Lens 5MP IP PTZ Camera

Sensor Size	1/2.5"
Lens	4.8-86.4mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.1 Lux
Auto Electronic Shutter	1/2 ~ 1/20000s
IR Distance	60 Meters
Compression	H.265/H.264
Video bit rate	8Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP/IP, UDP, IGMP, ICMP, DHCP, PPPoE
Network Monitoring	Web browser, Client Software
Power	12vDC/POE
Consumption	< 30W
Dimension	208 X 251mm (Excludes bracket)
Weight	4Kg
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

- HD 5MP Resolution
- 2.8 mm Fixed Lens
- 1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 92° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection
- IK10 Impact Protection

Sensor Size	1/2.7"
Lens	2.8mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Impact Rating	IK10
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PPPoE,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Power	12vDC/POE
Consumption	<7W
Dimension	Ø115mm x 91.6mm
Weight	520g
Storage Temperature	-30°C~60°C
Operating Temperature	-30°C~55°C

HDVIPC28FDWAV2
White 2.8mm Lens 5MP IP Vandal Resistant Dome Camera

HDVIPC28FDW
White 2.8mm Lens 5MP IP Dome Camera

- HD 5MP Resolution
- 2.8mm Fixed Lens
- 1/2.7" Image Sensor
- 10m Infrared LED Illumination
- 92° Viewing Angle
- H265 Compression
- ONVIF Compliant
- Additional Features: SD storage / Microphone
- IP66 Housing Ingress Protection

Sensor Size	1/2.7"
Lens	2.8mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	10 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PP-PoE,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	microSD Card (<128G Capcity)
Audio	Mic.
Power	12vDC/POE
Consumption	<7W
Dimension	Ø120X64mm
Weight	450g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

HDVIPC11FDW
White 1.1mm Lens 5MP IP Dome Camera

Sensor Size	1/2.9"
Lens	1.1mm
Effective Pixels	5MP (2160 x 2160)
Ingress Protection	IP64
Minimum Illumination	0.1 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	5 Meters
Compression	H.265/H.264
Video bit rate	8Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PP-PoE,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	microSD Card (<128G Capcity)
Alarm	I/O
Audio	Mic.
Video Out	CVBS
Power	12vDC/POE
Consumption	< 5W
Dimension	Ø120*55mm
Weight	400g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

- HD 5MP Resolution
- 1.1mm Fixed Lens
- 1/2.9" Image Sensor
- 5m Infrared LED Illumination
- 360° Viewing Angle
- H265 Compression
- ONVIF Compliant
- Additional Features: SD Storage / Alarm Trigger Input & Output/Audio I&O / Video Output
- IP64 Housing Ingress Protection
- Suitable for NVR Models HDVIP16R, HDVIP32R Only and PC Viewing

HDVIP4R
4 Channel HD 1TB NVR

- HD 5MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- H.265 Video Compression for Efficient Storage
- ONVIF Compliant
- Premium Surveillance Hard Drive (1TB, 2TB, 4TB, 8TB Options)
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR, Power Supply, Manual, HDMI Lead, Mouse Control

System

Operating System	LINUX
Recording Bandwidth	50Mbps
POE	4CH (<100 Meters per Channel)

Video & Audio

Video Input	4CH
Audio Output	1CH

Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160

Recording

Compression	H.265/H.264
Resolution	5 Megapixel
Record Rate (Main Stream)	5 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	5 Megapixel
Backup Mode	Network/2 x USB2.0

Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS

Storage

Internal HDD	<8TB HDD

General

NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300X227X53mm

External Power Supply

Power Input	AC 110~240V
Power Output	DC48V/1.2A - 60W

HDVIP8R
8 Channel HD 1TB NVR

- HD 5MP Resolution Viewing and Recording
- 8CH POE NVR- Power Over Ethernet
- H.265 Video Compression for Efficient Storage
- ONVIF Compliant
- Premium Surveillance Hard Drive (1TB, 2TB, 4TB, 8TB Options)
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR, Power Supply, Manual, HDMI Lead, Mouse Control

System

Operating System	LINUX
Recording Bandwidth	80Mbps
POE	8CH (<100 Meters per Channel)

Video & Audio

Video Input	8CH
Audio Output	1CH

Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4/6/8/9
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160

Recording

Compression	H.265/H.264
Resolution	5 Megapixel
Record Rate (Main Stream)	5 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	5 Megapixel
Backup Mode	Network/2 x USB2.0

Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS

Storage

Internal HDD	<8TB HDD

General

NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300X227X53mm

External Power Supply

Power Input	AC 110~240V
Power Output	DC48V/1.5A - 80W

HDVIP16R
16 Channel HD 4TB NVR

- HD 5MP Resolution Viewing and Recording
- 16CH POE NVR- Power Over Ethernet
- H.265 Video Compression for Efficient Storage
- ONVIF Compliant
- Premium Surveillance Hard Drive (4TB, 8TB, 12TB, 16TB Options)
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR, Power Supply, Manual, HDMI Lead, Mouse Control

System

Operating System	LINUX
Recording Bandwidth	320Mbps
POE	16CH (<100 Meters per Channel, Requires 4-Twisted Pair Cable)

Video & Audio

Video Input	16CH
Audio Output	1CH
Line In	1CH

Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4/6/8/9/10/13/14/16
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160

Recording

Compression	H.265/H.264
Resolution	5 Megapixel
Record Rate (Main Stream)	5 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	5 Megapixel
Backup Mode	Network / 2 x USB2.0 / 1 x USB3.0 / e-SATA

Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS

Storage

Internal HDD	<16TB HDD
External HDD	e-SATA < 4x6TB

Interface

Alarm In	16CH
Alarm Out	1CH
Data	RS485

General

NVR Power Consumption	<12W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	380X340X50mm

Internal Power Supply

Power Input	AC 110-240V
Power Output	DC12V/8A, 53V DC/4.2A -280W

HDVIP32R
32 Channel HD 4TB NVR

- HD 5MP Resolution Viewing and Recording
- 32CH NVR/ 16CH Video Input with POE – Power Over Ethernet
- H.265 Video Compression for Efficient Storage
- ONVIF Compliant
- Premium Surveillance Hard Drive (4TB, 8TB, 12TB, 16TB Options)
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR, Power Supply, Manual, HDMI Lead, Mouse Control

System

Operating System	LINUX
Recording Bandwidth	320Mbps
POE	16CH (<100 Meters per Channel, Requires 4-Twisted Pair Cable)

Video & Audio

Video Input	16CH
Audio Output	1CH
Line In	1CH

Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4/6/8/9/10/13/14/16/17/19/22/25/32/36
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160

Recording

Compression	H.265/H.264
Resolution	5 Megapixel
Record Rate (Main Stream)	5 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	5 Megapixel
Backup Mode	Network / 2 x USB2.0 / 1 x USB3.0 / e-SATA

Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS

Storage

Internal HDD	<16TB HDD
External HDD	e-SATA < 4x6TB

Interface

Alarm In	16CH
Alarm Out	1CH
Data	RS485

General

NVR Power Consumption	<12W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	380X340X50mm

Internal Power Supply

Power Input	AC 110-240V
Power Output	DC12V/8A, 53V DC/4.2A -280W

HDview

4 Megapixel Cameras, DVRs and Kits

(C36F) 3.6mm Fixed Camera
(C2812VF) 2.8-12mm Vari-Focal Camera
(C622VF) 6-22mm Vari-Focal Camera
(C550VF) 5-50mm Vari-Focal Camera
(4R) 4 Channel CCTV Recorder
(8R) 8 Channel CCTV Recorder
(16R) 16 Channel CCTV Recorder
(4K) 4 Channel CCTV Kit
(8K) 8 Channel CCTV Kit

Kits Only
(2) 2 Camera Kit
(4) 4 Camera Kit

Kits Only
(1TB) 1TB Hard Drive
(2TB) 2TB Hard Drive
(4TB) 4TB Hard Drive
(8TB) 8TB Hard Drive

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HDview 4MP Range

(D) Dome
(B) Bullet

(W) White
(G) Grey

- 4MP Cameras
- Premium Surveillance Hard Drive
- HDview App for Smart Devices
- OSD Menu
- Varifocal Lens Cameras

- Fixed Lens Cameras
- Ingress Protection Rating — IP66
- Suitable for use during Day and Night
- 360° Rotation
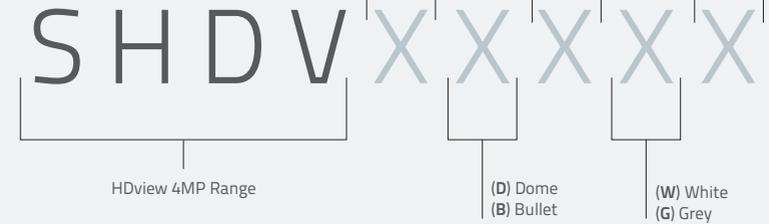
Code (White)	Code (Grey)	Description
SHDVC36FDW	SHDVC36FDG	4MP Super HD Dome CCTV Camera, 3.6mm Fixed Lens
SHDVC2812VFDW	SHDVC2812VFDG	4MP Super HD Dome CCTV Camera, 2.8-12mm Vari-Focal Lens
SHDVC622VFDW	N/A	4MP Super HD Dome CCTV Camera, 6-22mm Vari-Focal Lens
SHDVC36FBW	SHDVC36FBG	4MP Super HD Bullet CCTV Camera, 3.6mm Fixed Lens
SHDVC2812VFBW	SHDVC2812VFBG	4MP Super HD Bullet CCTV Camera, 2.8-12mm Vari-Focal Lens
SHDVC622VFBW	SHDVC622VFBG	4MP Super HD Bullet CCTV Camera, 6-22mm Vari-Focal Lens
SHDVC550VFBW	SHDVC550VFBG	4MP Super HD Bullet CCTV Camera, 5-50mm Vari-Focal Lens
SHDV4R		4MP Super HD 4 Channel CCTV Recorder
SHDV8R		4MP Super HD 8 Channel CCTV Recorder
SHDV16R		4MP Super HD 16 Channel CCTV Recorder
SHDV4KD2W	SHDV4KD2G	4MP Super HD 4 Channel CCTV Dome Kit - 2 Cameras (500GB, 1TB, 2TB, 4TB & 8TB hard drive options)
SHDV4KD4W	SHDV4KD4G	4MP Super HD 4 Channel CCTV Dome Kit - 4 Cameras (500GB, 1TB, 2TB, 4TB & 8TB hard drive options)
SHDV8KD4W	SHDV8KD4G	4MP Super HD 8 Channel CCTV Dome Kit - 4 Cameras (1TB, 2TB, 4TB & 8TB hard drive options)
SHDV4KB2W	SHDV4KB2G	4MP Super HD 4 Channel CCTV Bullet Kit - 2 Cameras (500GB, 1TB, 2TB, 4TB & 8TB hard drive options)
SHDV4KB4W	SHDV4KB4G	4MP Super HD 4 Channel CCTV Bullet Kit - 4 Cameras (500GB, 1TB, 2TB, 4TB & 8TB hard drive options)
SHDV8KB4W	SHDV8KB4G	4MP Super HD 8 Channel CCTV Bullet Kit - 4 Cameras (1TB, 2TB, 4TB & 8TB hard drive options)

Camera 1

- 5 to 50mm Varifocal Lens
- High Definition 4MP AHD sensor
- Built in 50m Infrared LED Illumination
- Viewing Angle 42.1~ 6.3°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing in Metal

SHDVCDBLG Large Grey Camera Deep Base
SHDVCDBLW Large White Camera Deep Base

SHDVC550VFBG Grey 5-50mm Lens 4MP HD Camera
SHDVC550VFBW White 5-50mm Lens 4MP HD Camera

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	50 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/720mA
Lens	5-50mm Manual Zoom
Dimension	Ø104 x 276 (L) mm inc. Bracket
Weight	1190g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max

Camera 2

- 2.8 to 12mm Varifocal Lens
- High Definition 4MP AHD sensor
- Built in 30m Infrared LED Illumination
- Viewing Angle 98~ 34°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing in Metal

SHDVCDBG Grey Camera Deep Base
SHDVCDBW White Camera Deep Base

SHDVC2812VFBG Grey 2.8-12mm Lens 4MP HD Camera
SHDVC2812VFBW White 2.8-12mm Lens 4MP HD Camera

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	30 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/400mA
Lens	2.8-12mm Manual Zoom
Dimension	Ø75 x 211 (L) mm inc. Bracket
Weight	720g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max

Camera 3

- 6 to 22mm Varifocal Lens
- High Definition 4MP AHD sensor
- Built in 50m Infrared LED Illumination
- Viewing Angle 37.2~ 14.4°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing in Metal

SHDVCDBLG Large Grey Camera Deep Base
SHDVCDBLW Large White Camera Deep Base

SHDVC622VFBG Grey 6-22mm Lens 4MP HD Camera
SHDVC622VFBW White 6-22mm Lens 4MP HD Camera

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	50 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/720mA
Lens	6-22mm Manual Zoom
Dimension	Ø104 x 276 (L) mm inc. Bracket
Weight	1190g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max

Camera 4

- 3.6mm Fixed Lens
- High Definition 4MP AHD sensor
- Built in 25m Infrared LED Illumination
- Viewing Angle 76°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing in Metal

SHDVCDBG Grey Camera Deep Base
SHDVCDBW White Camera Deep Base

SHDVC36FBG Grey 3.6mm Lens 4MP HD Camera
SHDVC36FBW White 3.6mm Lens 4MP HD Camera

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	25 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/300mA
Lens	3.6mm Fixed Lens
Dimension	Ø68 x 162 (L) mm inc. Bracket
Weight	400g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max

SHDVCDBLW Large White Camera Deep Base

- Vandal resistant
- 6 to 22mm Varifocal Lens
- High Definition 4MP AHD sensor
- 30m Infrared LED Illumination
- Viewing Angle 40~ 15°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Dome Housing

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	30 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/450mA
Lens	6-22mm Manual Zoom
Dimension	Ø 138 x 119 (H) mm inc. Base
Weight	1070g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max

SHDVC622VFDW
White 6-22mm Lens 4MP HD Camera

- 3.6mm Fixed Lens
- High Definition 4MP AHD sensor
- Built in 25m Infrared LED Illumination
- Viewing Angle 76°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- IP66 Weatherproof Dome Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	25 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/220mA
Lens	3.6mm Fixed Lens
Dimension	Ø114 x 83 (H) mm inc. Base
Weight	350g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max

SHDVCDBW White Camera Deep Base

SHDVC36FDW
White 3.6mm Lens 4MP HD Camera

SHDVCDBLG Large Grey Camera Deep Base
SHDVCDBLW Large White Camera Deep Base

- 2.8 to 12mm Varifocal Lens
- High Definition 4MP AHD sensor
- 30m Infrared LED Illumination
- Viewing Angle 98~ 34°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- IP66 Weatherproof Dome Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	30 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/360mA
Lens	2.8-12mm Manual Zoom
Dimension	Ø 140 x 105 (H) mm inc. Base
Weight	690g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max

SHDVC2812VFDG Grey 2.8-12mm Lens 4MP HD Camera
SHDVC2812VFDW White 2.8-12mm Lens 4MP HD Camera

- 3.6mm Fixed Lens
- High Definition 4MP AHD sensor
- Built in 25m Infrared LED Illumination
- Viewing Angle 76°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- IP66 Weatherproof Dome Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	25 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/220mA
Lens	3.6mm Fixed Lens
Dimension	Ø114 x 83 (H) mm inc. Base
Weight	350g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max

SHDVCDBG Grey Camera Deep Base

SHDVC36FDG
Grey 3.6mm Lens 4MP HD Camera

SHDV4R 4 Channel Full HD 500GB DVR
SHDV8R 8 Channel Full HD 1TB CCTV DVR

- Hard drive options: SHDV4R - 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options – Continuous / Scheduled / Motion
- Remote view via ESP® HDview APP for smartphones
- USB back up of recordings for easy evidence transfer
- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed

- Programmable Spot Output
- CMS software included for remote viewing via a pc.
- Remote monitoring via wired connection or Wi-Fi (requires DVRWLA)
- Mouse driven comprehensive user interface
- RS485 control for PTZ cameras
- Silent DVR operation

System
Main Processor	Embedded Processor
Operating System	Embedded LINUX

Video & Audio
Video Input	SHDV4R - 4 channel BNC SHDV8R - 8 channel BNC
Audio Input	SHDV4R - 4 channel RCA SHDV8R - 4 channel RCA
Audio Output	1 channel RCA

Display
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4R - 1 and 4 SHDV8R - 1, 4 and 10
Resolution	1024×768, 1280×720, 1280×1024, 1440×900, 1920×1080, 2560x1440

Recording
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4R - 4ch 4MP recording SHDV8R - 8ch 4MP recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup
Sync Playback	SHDV4R - 4ch 4MP recording SHDV8R - 8ch 4MP recording
Backup Mode	Network/USB2.0 devices

Network
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps

Storage
Internal HDD	1 SATA HDD, up to 8TB per HDD

Auxiliary Interface
USB Interface	2

General
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	250(W)x230(D)x45(H)mm

SHDV16R
16 Channel Full HD 2TB CCTV DVR

- Hard drive options: 2TB, 4TB, 8TB, 12TB & 16TB
- 16 Channel System (Supports up to 16 cameras)
- 4 Megapixel live view and recording
- Recording options – Continuous / Scheduled / Motion
- Remote view via ESP® HDview APP for smartphones
- USB back up of recordings for easy evidence transfer
- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed

- Programmable Spot Output
- CMS software included for remote viewing via a PC
- Remote monitoring via wired connection or Wi-Fi (requires DVRWLA)
- Mouse driven comprehensive user interface
- RS485 control for PTZ cameras
- Programmable alarm inputs & outputs
- Audio inputs & outputs
- Silent DVR operation

System
Main Processor	Embedded Processor
Operating System	Embedded LINUX

Video & Audio
Video Input	16 channel BNC
Audio Input	4 channel RCA
Audio Output	1 channel RCA

Display
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	1, 4, 6, 9,16 and 20
Resolution	1024×768, 1280×720, 1280×1024, 1440×900, 1920×1080, 2560x1440

Recording
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	16ch 4MP recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup
Sync Playback	16ch 4MP recording
Backup Mode	Network/USB2.0 devices

Network
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & IOS APP

Storage
Internal HDD	2 SATA HDD, up to 8TB per HDD

Auxiliary Interface
Alarm Input	4 Channel
Alarm Output	1 Channel
PTZ Control	RS485 with multi-protocol
USB Interface	2

General
Power Supply	DC12V/5A
Power Consumption	<15W (without hard disk)
Operation Condition	−10°C – +55°C / 10% – 90%
Dimensions	326(W) x 243(D) x 52(H) mm

Grey Kits

White Kits

Please add colour to the code. G=Grey, W=White. e.g. SHDV4KD4**G**1TB

Grey Kits

White Kits

Please add colour to the code. G=Grey, W=White. e.g. SHDV4KD4**W**4TB

SHDV4KD2G
4 Channel Full HD 500GB CCTV System

4 Channel Full HD 500GB CCTV System **SHDV4KD4G**
8 Channel Full HD 1TB CCTV System **SHDV8KD4G**

- Complete with DVR, Cameras, Cable & System Power Supply
- 2 x 4MP HD day/night dome Cameras - SHDVC36FDG/ SHDVC36FDW
- Hard drive options: SHDV4KD - 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options – Continuous / Scheduled / Motion
- Remote view via ESP® HDview APP for smartphones
- USB back up of recordings for easy evidence transfer

- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed
- Programmable Spot Output
- CMS software included for remote viewing via a pc
- Remote monitoring via wired connection or Wi-Fi (requires DVRWLA)
- Mouse driven comprehensive user interface
- Silent DVR operation

- Complete with DVR, Cameras, Cable & System Power Supply
- 4 x 4MP HD day/night dome Cameras - SHDVC36FDG/ SHDVC36FDW
- Hard drive options: SHDV4KD - 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options – Continuous / Scheduled / Motion
- Remote view via ESP® HDview APP for smartphones
- USB back up of recordings for easy evidence transfer

- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed
- Programmable Spot Output
- CMS software included for remote viewing via a pc
- Remote monitoring via wired connection or Wi-Fi (requires DVRWLA)
- Mouse driven comprehensive user interface
- Silent DVR operation

System

Main Processor	Embedded Processor
Operating System	Embedded LINUX

Video & Audio

Video Input	SHDV4KD - 4 channel BNC SHDV8KD - 8 channel BNC
Audio Input	SHDV4KD - 4 channel RCA SHDV8KD - 4 channel RCA
Audio Output	1 channel RCA

Display

Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4KD - 1 and 4 SHDV8KD - 1, 4 and 10
Resolution	1024×768, 1280×720, 1280×1024, 1440×900, 1920×1080, 2560×1440

Recording

Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4KD - 4ch 4MP recording SHDV8KD - 8ch 4MP recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	SHDV4KD - 4ch 4MP recording SHDV8KD - 8ch 4MP recording
Backup Mode	Network/USB2.0 devices

Network

Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps

Storage

Internal HDD	1 SATA HDD, up to 8TB per HDD

Auxiliary Interface

USB Interface	2

General

Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	250(W)x230(D)x45(H)mm

System

Main Processor	Embedded Processor
Operating System	Embedded LINUX

Video & Audio

Video Input	SHDV4KD - 4 channel BNC SHDV8KD - 8 channel BNC
Audio Input	SHDV4KD - 4 channel RCA SHDV8KD - 4 channel RCA
Audio Output	1 channel RCA

Display

Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4KD - 1 and 4 SHDV8KD - 1, 4 and 10
Resolution	1024×768, 1280×720, 1280×1024, 1440×900, 1920×1080, 2560×1440

Recording

Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4KD - 4ch 4MP recording SHDV8KD - 8ch 4MP recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	SHDV4KD - 4ch 4MP recording SHDV8KD - 8ch 4MP recording
Backup Mode	Network/USB2.0 devices

Network

Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps

Storage

Internal HDD	1 SATA HDD, up to 8TB per HDD

Auxiliary Interface

USB Interface	2

General

Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	250(W)x230(D)x45(H)mm

Grey Kits

White Kits

Please add colour to the code. G=Grey, W=White. e.g. SHDV4KB4**G**1TB

SHDV4KB2G
4 Channel Full HD 500GB CCTV System

- Complete with DVR, Cameras, Cable & System Power Supply
- 2 x 4MP HD day/night bullet Cameras - SHDVC36FBG/ SHDVC36FBW
- Hard drive options: SHDV4KB - 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options – Continuous / Scheduled / Motion
- Remote view via ESP® HDview APP for smartphones
- USB back up of recordings for easy evidence transfer
- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed
- Programmable Spot Output
- CMS software included for remote viewing via a pc
- Remote monitoring via wired connection or Wi-Fi (requires DVRWLA)
- Mouse driven comprehensive user interface
- Silent DVR operation

System

Main Processor	Embedded Processor
Operating System	Embedded LINUX

Video & Audio

Video Input	SHDV4KB - 4 channel BNC / SHDV8KB - 8 channel BNC
Audio Input	SHDV4KB - 4 channel RCA / SHDV8KB - 4 channel RCA
Audio Output	1 channel RCA

Display

Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4KB - 1 and 4 / SHDV8KB - 1, 4 and 10
Resolution	1024×768, 1280×720, 1280×1024, 1440×900, 1920×1080, 2560×1440

Recording

Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4KB - 4ch 4MP recording / SHDV8KB - 8ch 4MP recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	SHDV4KB - 4ch 4MP recording / SHDV8KB - 8ch 4MP recording
Backup Mode	Network/USB2.0 devices

Network

Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps

Storage

Internal HDD	1 SATA HDD, up to 8TB per HDD

Auxiliary Interface

USB Interface	2

General

Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	250(W)x230(D)x45(H)mm

Please add colour to the code. G=Grey, W=White. e.g. SHDV4KB4**W**4TB

4 Channel Full HD 500GB CCTV System **SHDV4KB4G**
8 Channel Full HD 1TB CCTV System **SHDV8KB4G**

- Complete with DVR, Cameras, Cable & System Power Supply
- 4 x 4MP HD day/night bullet Cameras - SHDVC36FBG/ SHDVC36FBW
- Hard drive options: SHDV4KB - 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options – Continuous / Scheduled / Motion
- Remote view via ESP® HDview APP for smartphones
- USB back up of recordings for easy evidence transfer
- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed
- Programmable Spot Output
- CMS software included for remote viewing via a pc
- Remote monitoring via wired connection or Wi-Fi (requires DVRWLA)
- Mouse driven comprehensive user interface
- Silent DVR operation

System

Main Processor	Embedded Processor
Operating System	Embedded LINUX

Video & Audio

Video Input	SHDV4KB - 4 channel BNC / SHDV8KB - 8 channel BNC
Audio Input	SHDV4KB - 4 channel RCA / SHDV8KB - 4 channel RCA
Audio Output	1 channel RCA

Display

Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4KB - 1 and 4 / SHDV8KB - 1, 4 and 10
Resolution	1024×768, 1280×720, 1280×1024, 1440×900, 1920×1080, 2560×1440

Recording

Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4KB - 4ch 4MP recording / SHDV8KB - 8ch 4MP recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	SHDV4KB - 4ch 4MP recording / SHDV8KB - 8ch 4MP recording
Backup Mode	Network/USB2.0 devices

Network

Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps

Storage

Internal HDD	1 SATA HDD, up to 8TB per HDD

Auxiliary Interface

USB Interface	2

General

Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	250(W)x230(D)x45(H)mm

FHDVC18PTZ

1080P External Pan, Tilt & Zoom Camera

- Pan and Tilt
- 360° Rotation
- Day and Night
- IP66
- Varifocal Lens
- 2MP

- ■ True High Definition 2MP AHD sensor
- ■ 4.7-84.6mm varifocal lens
- ■ Full pan, tilt and zoom operation
- ■ Full 360° rotation pan function
- ■ 18 x optical zoom
- ■ Up to 50m IR night illumination
- ■ Complete with 2 amp power supply
- ■ IP66 weatherproof rating

Rated Voltage	12V DC
Max Current	1 .25A
IR Effective Distance	50M
Protection	IP66
Pan Rotation	360° Endless rotation
Speed	Pan 0.6-200°/s Tilt 3.5-30°/s
Working Conditions	-10°C - +50°C
Dimensions	150(W) x 235(H) x 205(D)mm

PTZCON

Pan, Tilt And Zoom Controller

- ■ For use with PTZ Cameras
- ■ Keyboard for programming and Camera control
- ■ Integrated LCD display
- ■ 3D joystick for control of Camera pan, tilt and zoom functions

Protocol	Pelco-P, Pelco-D, Panasonic, HikVision, Samsung, RULE, Dahua, SAE
Baud Rate (bps)	1200, 2400, 4800, 9600, 19200
Max Camera Support	255
Controllers Supported	16 in total (15 auxiliary)
Power Supply	DC 12V±10%
Power Consumption	6W MAX
Working Temperature	0°C-50°C
Dimensions	420 x 260 x 170mm
Outputs	BNC, Audio
VESA Wall Hanging	100 x 100mm
Power Supply	AC100-240V~50/60 Hz 1.1A

HDview **WF**

2 Megapixel Wire Free Cameras and Kits

X H D V X X X X W F X X X

Kits Only
(F) 2MP

(C4F) 4mm Fixed Wire Free Camera
(4K) 4 Channel CCTV Kit
(8K) 8 Channel CCTV Kit

(B) Black

Kits Only
(1TB) 1TB Hard Drive
(2TB) 2TB Hard Drive
(4TB) 4TB Hard Drive

(D) Dome
(B) Bullet

2MP Cameras

Premium Surveillance Hard Drive

HDview WF App for Smart Devices

Fixed Lens Cameras — **Fixed Lens**

Ingress Protection Rating — **IP66**

Suitable for use during Day and Night — **Day and Night**
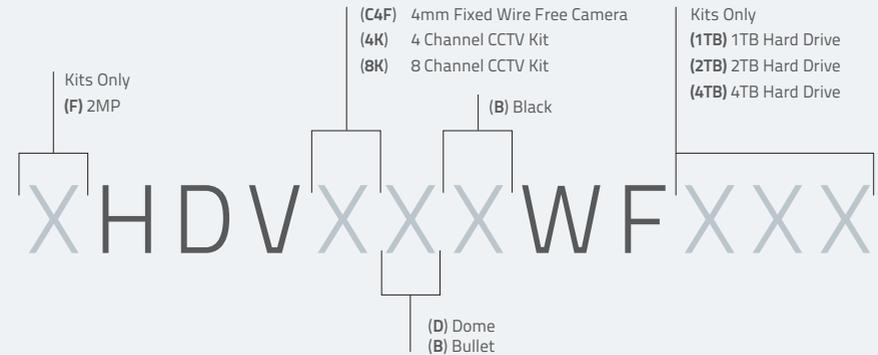
Code (White)	Code (Black)	Description
2MP Bullet Cameras & Kits		
FHDVC4FBWF	FHDVC4FBBWF	WIFI CCTV Bullet Camera - 2MP/1080P
FHDV4KBWF	FHDV4KBBWF	4 Channel 2 Bullet Camera 500GB WIFI CCTV Kit - 2MP/1080P (500GB, 1TB, 2TB & 4TB hard drive options)
FHDV4KB4WF	FHDV4KBB4WF	4 Channel 4 Bullet Camera 500GB WIFI CCTV Kit - 2MP/1080P (500GB, 1TB, 2TB & 4TB hard drive options)
FHDV8KB4WF	FHDV8KBB4WF	8 Channel 4 Bullet Camera 1TB WIFI CCTV Kit - 2MP/1080P (500GB, 1TB, 2TB & 4TB hard drive options)
2MP Dome Cameras & Kits		
FHDVC4FDWF	FHDVC4FDBWF	WIFI CCTV Dome Camera - 2MP/1080P
FHDV4KDWF	FHDV4KDBWF	4 Channel 2 Dome Camera 500GB WIFI CCTV Kit - 2MP/1080P (500GB, 1TB, 2TB & 4TB hard drive options)
FHDV4KD4WF	FHDV4KDB4WF	4 Channel 4 Dome Camera 500GB WIFI CCTV Kit - 2MP/1080P (500GB, 1TB, 2TB & 4TB hard drive options)
FHDV8KD4WF	FHDV8KDB4WF	8 Channel 4 Dome Camera 1TB WIFI CCTV Kit - 2MP/1080P (500GB, 1TB, 2TB & 4TB hard drive options)

■ 4mm Fixed Lens

■ High definition 2MP sensor

■ Built in 20m Infrared LED Illumination

■ 3-Axis Cable Management Bracket

■ IP66 Weatherproof Bullet Housing

■ 12vDC PSU Included

Sensor Size	1/2.8"
Lens	4mm Fixed Lens
Resolution	1080p
Minimum Illumination	0.1 Lux/F2.00 0 Lux (with IR LED ON)
IR Distance	< 20 Meters
Power	DC12V 240mA
Weight	575g
Operating Temperature	-10 ~ +50°C
Dimensions (Excluding antenna)	180(W) x 65(H) x 65(D)mm

FHDVC4FBWF

4mm Lens 1080P Wire Free HD Camera - White

■ 4mm Fixed Lens

■ High definition 2MP sensor

■ Built in 20m Infrared LED Illumination

■ 3-Axis Cable Management Bracket

■ IP66 Weatherproof Bullet Housing

■ 12vDC PSU Included

Sensor Size	1/2.8"
Lens	4mm Fixed Lens
Resolution	1080p
Minimum Illumination	0.1 Lux/F2.00 0 Lux (with IR LED ON)
IR Distance	< 20 Meters
Power	DC12V 240mA
Weight	575g
Operating Temperature	-10 ~ +50°C
Dimensions (Excluding antenna)	180(W) x 65(H) x 65(D)mm

FHDVC4FBBWF

4mm Lens 1080P Wire Free HD Camera - Black

■ 4mm Fixed Lens

■ High definition 2MP sensor

■ Built in 20m Infrared LED Illumination

■ IP66 Weatherproof Dome Housing

■ 12vDC PSU Included

Sensor Size	1/2.8"
Lens	4mm Fixed Lens
Resolution	1080p
Minimum Illumination	0.1 Lux/F2.00 0 Lux (with IR LED ON)
IR Distance	< 20 Meters
Power	DC12V 240mA
Weight	575g
Operating Temperature	-10 ~ +50°C

FHDVC4FDWF

4mm Lens 1080P Wire Free HD Camera - White

■ 4mm Fixed Lens

■ High definition 2MP sensor

■ Built in 20m Infrared LED Illumination

■ IP66 Weatherproof Dome Housing

■ 12vDC PSU Included

Sensor Size	1/2.8"
Lens	4mm Fixed Lens
Resolution	1080p
Minimum Illumination	0.1 Lux/F2.00 0 Lux (with IR LED ON)
IR Distance	< 20 Meters
Power	DC12V 240mA
Weight	575g
Operating Temperature	-10 ~ +50°C

FHDVC4FDBWF

4mm Lens 1080P Wire Free HD Camera - Black

White Kits

Black Kits

For Black kits please add **B**=Black in to the code. e.g. FHDV4KB**B**WF2TB

White Kits

Black Kits

For Black kits please add **B**=Black in to the code. e.g. FHDV4KB**B**4WF2TB

FHDV4KBWF
4 Channel Full HD 500GB Wire Free CCTV System

4 Channel Full HD 500GB Wire Free CCTV System **FHDV4KB4WF**
8 Channel Full HD 1TB Wire Free CCTV System **FHDV8KB4WF**

Left column (FHDV4KBWF)

- Wire Free 1080p CCTV kit
- 2 camera kit expandable to 4 cameras
- Offers 150 meter wire free open field range
- 2 x 2MP HD day/night bullet cameras (PSUs Included)
- Remote Cloud monitoring via LAN connection
- Hard drive options: 500GB, 1TB, 2TB or 4TB
- Mobile monitoring with Android or iPhone ESP® APP

- Triplex operation – Playback / Record / Remote view simultaneously
- VGA or HDMI output (HDMI lead supplied)
- Recording options – Continuous / Scheduled / Motion
- USB back up of recordings for easy evidence transfer
- Mouse driven comprehensive user interface
- Silent operation

System	
Main Processor	3520V 200
Operating System	LINUX system
Video	
Video Support	4 IP cameras
Display	
Video Output	1 x HDMI, 1 x VGA
Display Split	1 and 4
Resolution	1024×768, 1280×720, 1280×1024, 1440×900, 1920×1080
Recording	
Video/Audio Compression	H.264
Resolution	1080P
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Alarm/Motion Detection/Schedule
Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	Network/USB

Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 4TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Weight	1.7kg
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C
NVR Dimensions (Excluding antenna)	257(W) x 206(D) x 42(H) mm

Right column (FHDV4KB4WF / FHDV8KB4WF)

- Wire Free 1080p CCTV kit
- 4 camera kit
- Offers 150 meter wire free open field range
- 4 x 2MP HD day/night bullet cameras (PSUs Included)
- Remote Cloud monitoring via LAN connection
- Hard drive options: 500GB, 1TB, 2TB or 4TB
- Mobile monitoring with Android or iPhone ESP® APP

- Triplex operation – Playback / Record / Remote view simultaneously
- VGA or HDMI output (HDMI lead supplied)
- Recording options – Continuous / Scheduled / Motion
- USB back up of recordings for easy evidence transfer
- Mouse driven comprehensive user interface
- Silent operation

System	
Main Processor	3520V 200
Operating System	LINUX system
Video	
Video Support	4 IP cameras
Display	
Video Output	1 x HDMI, 1 x VGA
Display Split	1 and 4
Resolution	1024×768, 1280×720, 1280×1024, 1440×900, 1920×1080
Recording	
Video/Audio Compression	H.264
Resolution	1080P
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Alarm/Motion Detection/Schedule
Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	Network/USB

Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 4TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Weight	1.7kg
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C
NVR Dimensions (Excluding antenna)	257(W) x 206(D) x 42(H) mm

White Kits

Black Kits

For Black kits please add **B**=Black to the code. e.g. FHDV4KD**B**WF1TB

White Kits

Black Kits

For Black kits please add **B**=Black to the code. e.g. FHDV4KD**B**4WF1TB

FHDV4KDWF
4 Channel Full HD 500GB Wire Free CCTV System

- Wire Free 1080p CCTV kit
- 2 camera kit
- Offers 150 meter wire free open field range
- 2 x 2MP HD day/night dome cameras (PSUs Included)
- Remote Cloud monitoring via LAN connection
- Hard drive options: 500GB, 1TB, 2TB or 4TB
- Mobile monitoring with Android or iPhone ESP® APP

- Triplex operation – Playback / Record / Remote view simultaneously
- VGA or HDMI output (HDMI lead supplied)
- Recording options – Continuous / Scheduled / Motion
- USB back up of recordings for easy evidence transfer
- Mouse driven comprehensive user interface
- Silent operation

System
Main Processor	3520V 200
Operating System	LINUX system

Video
Video Support	4 IP cameras

Display
Video Output	1 x HDMI, 1 x VGA
Display Split	1 and 4
Resolution	1024×768, 1280×720, 1280×1024, 1440×900, 1920×1080

Recording
Video/Audio Compression	H.264
Resolution	1080P
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Alarm/Motion Detection/Schedule

Playback & Backup
Sync Playback	4ch 1080P playback
Backup Mode	Network/USB

Network
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps

Storage
Internal HDD	1 SATA HDD, up to 4TB per HDD

Auxiliary Interface
USB Interface	2

General
Weight	1.7kg
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C
NVR Dimensions (Excluding antenna)	257(W) x 206(D) x 42(H) mm

4 Channel Full HD 500GB Wire Free CCTV System **FHDV4KD4WF**
8 Channel Full HD 1TB Wire Free CCTV System **FHDV8KD4WF**

- Wire Free 1080p CCTV kit
- 4 camera kit
- Offers 150 meter wire free open field range
- 4 x 2MP HD day/night dome cameras (PSUs Included)
- Remote Cloud monitoring via LAN connection
- Hard drive options: 500GB, 1TB, 2TB or 4TB
- Mobile monitoring with Android or iPhone ESP® APP

- Triplex operation – Playback / Record / Remote view simultaneously
- VGA or HDMI output (HDMI lead supplied)
- Recording options – Continuous / Scheduled / Motion
- USB back up of recordings for easy evidence transfer
- Mouse driven comprehensive user interface
- Silent operation

System
Main Processor	3520V 200
Operating System	LINUX system

Video
Video Support	4 IP cameras

Display
Video Output	1 x HDMI, 1 x VGA
Display Split	1 and 4
Resolution	1024×768, 1280×720, 1280×1024, 1440×900, 1920×1080

Recording
Video/Audio Compression	H.264
Resolution	1080P
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Alarm/Motion Detection/Schedule

Playback & Backup
Sync Playback	4ch 1080P playback
Backup Mode	Network/USB

Network
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps

Storage
Internal HDD	1 SATA HDD, up to 4TB per HDD

Auxiliary Interface
USB Interface	2

General
Weight	1.7kg
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C
NVR Dimensions (Excluding antenna)	257(W) x 206(D) x 42(H) mm

rekor HD ▶

2 Megapixel Cameras and Kits

(C36F) Camera
(2812VF) Camera
(550VF) Camera
(4K) 4 Channel Kit

(8K) 8 Channel Kit
(4R) 4 Channel DVR
(8R) 8 Channel DVR
(16R) 16 Channel DVR

(2) or **(4)**
No. of Cameras in Kit

(1TB), **(2TB)**, **(4TB)**, **(8TB)** or **(16TB)**
Hard drive options

R H D X X X X X

Rekor HD Range

(D) Dome
(B) Bullet
Camera & Kits only

(W) White
(G) Grey
Camera & Kits only

2MP Cameras

Premium Surveillance Hard Drive

ESP View App for Smart Devices

360° Rotation

Fixed Lens Cameras — **Fixed Lens**

Ingress Protection Rating — **IP66**

Suitable for use during Day and Night — **Day and Night**
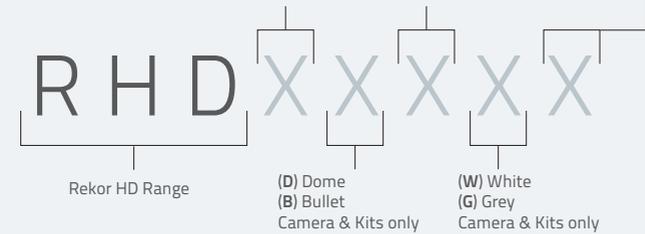
Code (White)	Code (Grey)	Description
RekorHD Cameras		
RHDC36FBW	RHDC36FBG	3.6mm Lens Full HD Bullet Camera
RHDC36FDW	RHDC36FDG	3.6mm Lens Full HD Dome Camera
RHDC2812VFDW	RHDC2812VFDG	2.8-12mm Lens 2MP HD Analog Dome Camera
RHDC2812VFBW	RHDC2812VFBG	2.8-12mm Lens 2MP HD Analog Bullet Camera
RHDC550VFBW	RHDC550VFBG	5-50mm Lens 2MP HD Analog Bullet Camera
RHDC2812VFDWAV	RHDC2812VFDGAV	2.8-12mm Lens 2MP HD Analog Vandal Resistant Dome Camera
RekorHD Kits		
RHD4KB2W	RHD4KB2G	4 Channel HD 500GB CCTV System – 2 x Bullet
RHD4KB2W1TB	RHD4KB2G1TB	4 Channel HD 1TB CCTV System – 2 x Bullet
RHD4KB2W2TB	RHD4KB2G2TB	4 Channel HD 2TB CCTV System – 2 x Bullet
RHD4KB4W	RHD4KB4G	4 Channel HD 500GB CCTV System – 4 x Bullet
RHD4KB4W1TB	RHD4KB4G1TB	4 Channel HD 1TB CCTV System – 4 x Bullet
RHD4KB4W2TB	RHD4KB4G2TB	4 Channel HD 2TB CCTV System – 4 x Bullet
RHD8KB4W	RHD8KB4G	8 Channel HD 1TB CCTV System – 4 x Bullet
RHD8KB4W2TB	RHD8KB4G2TB	8 Channel HD 2TB CCTV System – 4 x Bullet
RHD8KB4W4TB	RHD8KB4G4TB	8 Channel HD 4TB CCTV System – 4 x Bullet
RHD4KD2W	RHD4KD2G	4 Channel HD 500GB CCTV System – 2 x Dome
RHD4KD2W1TB	RHD4KD2G1TB	4 Channel HD 1TB CCTV System – 2 x Dome
RHD4KD2W2TB	RHD4KD2G2TB	4 Channel HD 2TB CCTV System – 2 x Dome
RHD4KD4W	RHD4KD4G	4 Channel HD 500GB CCTV System – 4 x Dome
RHD4KD4W1TB	RHD4KD4G1TB	4 Channel HD 1TB CCTV System – 4 x Dome
RHD4KD4W2TB	RHD4KD4G2TB	4 Channel HD 2TB CCTV System – 4 x Dome
RHD8KD4W	RHD8KD4G	8 Channel HD 1TB CCTV System – 4 x Dome
RHD8KD4W2TB	RHD8KD4G2TB	8 Channel HD 2TB CCTV System – 4 x Dome
RHD8KD4W4TB	RHD8KD4G4TB	8 Channel HD 4TB CCTV System – 4 x Dome
RekorHD DVRs		
RHD4R		4 Channel Full HD 500GB DVR
RHD4R1TB		4 Channel Full HD 1TB DVR
RHD4R2TB		4 Channel Full HD 2TB DVR
RHD8R		8 Channel Full HD 1TB DVR
RHD8R2TB		8 Channel Full HD 2TB DVR
RHD8R4TB		8 Channel Full HD 4TB DVR
RHD16R		16 Channel Full HD 2TB DVR
RHD16R4TB		16 Channel Full HD 4TB DVR
RHD16R8TB		16 Channel Full HD 8TB DVR

- HD 2MP Resolution
- 3.6mm Fixed Lens
- 1/2.8" Image Sensor
- 30 Infrared LED Illumination
- 87° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: –30 ~ +50°C
- Dimensions: Ø71 X 151 mm
- Weight: 350g

IPCDBW White Camera Deep Base
IPCDBG Grey Camera Deep Base

Sensor Size	1/2.8"
Effective Pixels	NTSC/ PAL:1920(H) x 1080(V)
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	30m
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power	12vDC
Lens	3.6mm
Dimensions	Ø71mm x 151mm
Weight	350g
Operating Temperature	–30 ~ +50°C

RHDC36FBW
White 3.6mm Lens Full HD Camera

- HD 2MP Resolution
- 3.6mm Fixed Lens
- 1/2.8" Image Sensor
- 30 Infrared LED Illumination
- 87° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: –30 ~ +50°C
- Dimensions: Ø100 X 82 mm
- Weight: 400g

IPCDBW White Camera Deep Base
IPCDBG Grey Camera Deep Base

Sensor Size	1/2.8"
Effective Pixels	NTSC/ PAL:1920(H) x 1080(V)
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	30m
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power	12vDC
Lens	3.6mm
Dimensions	Ø100mm x 82mm
Weight	400g
Operating Temperature	–30 ~ +50°C

RHDC36FDW
White 3.6mm Lens Full HD Camera

- HD 2MP Resolution
- 3.6mm Fixed Lens
- 1/2.8" Image Sensor
- 30 Infrared LED Illumination
- 87° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: –30 ~ +50°C
- Dimensions: Ø71 X 151 mm
- Weight: 350g

IPCDBW White Camera Deep Base
IPCDBG Grey Camera Deep Base

Sensor Size	1/2.8"
Effective Pixels	NTSC/ PAL:1920(H) x 1080(V)
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	30m
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power	12vDC
Lens	3.6mm
Dimensions	Ø71mm x 151mm
Weight	350g
Operating Temperature	–30 ~ +50°C

RHDC36FBG
Grey 3.6mm Lens Full HD Camera

- HD 2MP Resolution
- 3.6mm Fixed Lens
- 1/2.8" Image Sensor
- 30 Infrared LED Illumination
- 87° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: –30 ~ +50°C
- Dimensions: Ø100 X 82 mm
- Weight: 400g

IPCDBW White Camera Deep Base
IPCDBG Grey Camera Deep Base

Sensor Size	1/2.8"
Effective Pixels	NTSC/ PAL:1920(H) x 1080(V)
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	30m
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power	12vDC
Lens	3.6mm
Dimensions	Ø100mm x 82mm
Weight	400g
Operating Temperature	–30 ~ +50°C

RHDC36FDG
Grey 3.6mm Lens Full HD Camera

- HD 2MP Resolution
- 2.8-12mm Varifocal Lens
- 1/2.7" Image Sensor
- 35 Infrared LED Illumination
- 113~30° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30~ +50°C
- Dimensions: Ø88 X 240 mm

IPCDBW   White Camera Deep Base
IPCDBG   Grey Camera Deep Base

RHDC2812VFBW   White 2.8~12mm Lens Full HD Camera
RHDC2812VFBG   Grey 2.8~12mm Lens Full HD Camera

Sensor Size	1/2.7"
Effective Pixels	1936 x 1096
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	35m
Video Output	1Vpp, 75 ohms
Gain Control	Auto
Power	12VDC
Lens	2.8~12mm Varifocal Lens
Ingress Protection	IP66
Dimensions	Ø88mm x 240 mm
Weight	980g
Operating Temperature	-30~ +50°C

- HD 2MP Resolution
- 2.8-12mm Varifocal Lens
- 1/2.7" Image Sensor
- 40 Infrared LED Illumination
- 113~30° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30~ +50°C
- Dimensions: Ø126 X 102 mm

IPCDBW   White Camera Deep Base
IPCDBG   Grey Camera Deep Base

Grey 2.8~12mm Lens Full HD Camera   **RHDC2812VFDG**
White 2.8~12mm Lens Full HD Camera   **RHDC2812VFDW**

Sensor Size	1/2.7"
Effective Pixels	1936 x 1096
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	40m
Video Output	1Vpp, 75 ohms
Gain Control	Auto
Power	12VDC
Lens	2.8~12mm Varifocal Lens
Ingress Protection	IP66
Dimensions	Ø126mm x 102 mm
Weight	735g
Operating Temperature	-30~ +50°C

- HD 2MP Resolution
- 5-50mm Varifocal Lens
- 1/2.8" Image Sensor
- 60m Infrared LED Illumination
- 49~7° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30~ +50°C
- Dimensions: Ø108 X 301 mm

IPCDBW   White Camera Deep Base
IPCDBG   Grey Camera Deep Base

RHDC550VFBW   White 5~50mm Lens Full HD Camera
RHDC550VFBG   Grey 5~50mm Lens Full HD Camera

Sensor Size	1/2.8"
Effective Pixels	1936 x 1096
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	60m
Video Output	1Vpp, 75 ohms
Gain Control	Auto
Power	12VDC
Lens	5~50mm Varifocal Lens
Ingress Protection	IP66
Dimensions	Ø108mm x 301 mm
Weight	1450g
Operating Temperature	-30~ +50°C

- HD 2MP Resolution
- 2.8-12mm Varifocal Lens
- 1/2.7" Image Sensor
- 30 Infrared LED Illumination
- 113~30° Viewing Angle
- IP66 Housing Ingress Protection
- IK10 Impact Protection
- 12vDC
- Operating Temperature: -30~ +50°C
- Dimensions: Ø147 X 117 mm

IPCDBWAV   White Camera Deep Base
IPCDBGAV   Grey Camera Deep Base

Grey 2.8~12mm Lens Full HD Vandal Resistant Camera   **RHDC2812VFDGAV**
White 2.8~12mm Lens Full HD Vandal Resistant Camera   **RHDC2812VFDWAV**

Sensor Size	1/2.7"
Effective Pixels	1936 x 1096
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	30m
Video Output	1Vpp, 75 ohms
Gain Control	Auto
Power	12VDC
Lens	2.8~12mm Varifocal Lens
Ingress Protection	IP66
Impact Resistance	IK10
Dimensions	Ø147 X 117 mm
Weight	800g

RHD4R 4 Channel Full HD 500GB DVR
RHD8R 8 Channel Full HD 1TB DVR

- HD 2MP Resolution Viewing and Recording
- 4CH Analog DVR
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage
- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System

Operating System	LINUX

Video & Audio

Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA

Display

Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	01-Apr
Resolution	1024 x 768, 1280 x720, 1280 x1024, 1440 x900, 1920 x1080, 1080 x 1440, 3840 x 2160

Recording

Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices

Network

Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps

Storage

Internal HDD	1 SATA

Auxiliary Interface

USB Interface	2

General

Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300mm x 227mm x 53mm
Power Supply	DC12V/2A
DVR Power Consumption	<10W
Operating Temperature	0°C~+40°C
Relative Humidity Resistance	Less than 90%RH
Dimensions	300mm x 227mm x 53mm

RHD16R
16 Channel Full HD 2TB DVR

- HD 2MP Resolution Viewing and Recording
- 16CH Analog DVR
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage
- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System

Operating System	LINUX

Video & Audio

Video Input	16 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA

Display

Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	1/4/9/16/20
Resolution	1024 x 768, 1280 x720, 1280 x1024, 1440 x900, 1920 x1080, 1080 x 1440, 3840 x 2160

Recording

Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	16ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	16ch 1080P playback
Backup Mode	USB2.0 devices

Network

Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps

Storage

Internal HDD	2 SATA 2TB HDD

Auxiliary Interface

USB Interface	2

General

Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300mm x 227mm x 53mm
Power Supply	DC12V/2A
DVR Power Consumption	<10W
Operating Temperature	0°C~+40°C
Relative Humidity Resistance	Less than 90%RH
Dimensions	380mm x 340mm x 50mm

Grey Kits 　　　　　　　　　 White Kits

For 1TB or 2TB kits please add **1TB or 2TB** to the code. e.g. RHD4KD2G**1TB**

Grey Kits 　　　　　　　　　 White Kits

For 1TB or 2TB kits please add **1TB or 2TB** to the code. e.g. RHD4KD4G**2TB** (4 Channel)
For 2TB or 4TB kits please add **2TB or 4TB** to the code. e.g. RHD8KD4G**2TB** (8 Channel)

RHD4KD2G Grey 　　 RHD4KD2W White
4 Channel HD 500GB CCTV System

- Complete with 4 Channel DVR, Cameras, Cables &
- System Power Supply
- HD 2MP Resolution Viewing and Recording
- 2 x 2MP, Day/ Night, Weatherproof Cameras
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage

- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System

Operating System	LINUX

Video & Audio

Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA

Display

Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	Single / Quad
Resolution	1024 x 768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 1080 x 1440, 3840 x 2160

Recording

Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices

Network

Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps

Storage

Internal HDD	1 SATA 500GB HDD

Auxiliary Interface

USB Interface	2

General

Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300mm x 227mm x 53mm

4 Channel HD 500GB CCTV System 　RHD4KD4G Grey 　RHD4KD4W White
8 Channel HD 1TB CCTV System 　　RHD8KD4G Grey 　RHD8KD4W White

- Complete with 4 Channel DVR, Cameras, Cables &
- System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4 x 2MP, Day/ Night, Weatherproof Cameras
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage

- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System

Operating System	LINUX

Video & Audio

Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA

Display

Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	Single / Quad
Resolution	1024 x 768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 1080 x 1440, 3840 x 2160

Recording

Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices

Network

Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps

Storage

Internal HDD	1 SATA 500GB HDD

Auxiliary Interface

USB Interface	2

General

Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300mm x 227mm x 53mm

Grey Kits   White Kits

For 1TB or 2TB kits please add **1TB or 2TB** to the code. e.g. RHD4KB2G**1TB**

Grey Kits   White Kits

For 1TB or 2TB kits please add **1TB or 2TB** to the code. e.g. RHD4KB4G**2TB** (4 Channel)
For 2TB or 4TB kits please add **2TB or 4TB** to the code. e.g. RHD8KB4G**2TB** (8 Channel)

RHD4KB2G Grey   **RHD4KB2W** White

4 Channel HD 500GB CCTV System

4 Channel HD 500GB CCTV System   **RHD4KB4G** Grey   **RHD4KB4W** White
8 Channel HD 1TB CCTV System   **RHD8KB4G** Grey   **RHD8KB4W** White

- Complete with 4 Channel DVR, Cameras, Cables &
- System Power Supply
- HD 2MP Resolution Viewing and Recording
- 2 x 2MP, Day/ Night, Weatherproof Cameras
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage

- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

- Complete with 4 Channel DVR, Cameras, Cables &
- System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4 x 2MP, Day/ Night, Weatherproof Cameras
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage

- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System

Operating System	LINUX

Video & Audio

Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA

Display

Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	Single / Quad
Resolution	1024 x 768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 1080 x 1440, 3840 x 2160

Recording

Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices

Network

Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps

Storage

Internal HDD	1 SATA 500GB HDD

Auxiliary Interface

USB Interface	2

General

Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300mm x 227mm x 53mm

System

Operating System	LINUX

Video & Audio

Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA

Display

Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	Single / Quad
Resolution	1024 x 768, 1280 ×720, 1280 ×1024, 1440 ×900, 1920 ×1080, 1080 x 1440, 3840 x 2160

Recording

Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup

Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices

Network

Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps

Storage

Internal HDD	1 SATA 500GB HDD

Auxiliary Interface

USB Interface	2

General

Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300mm x 227mm x 53mm

- Energy efficient wide screen
- 21.5" LED-Backlit Screen
- VGA, HDMI, BNC input for DVR/ NVR connection
- Audio Input
- 2 X 2W Speakers
- Complete with desktop stand
- VESA Standard wall mount option
- Internal Power Supply
- Operating Temperature 0° - 40°
- Operating Humidity 10%-80%
- HDMI & VGA Cable Included

Size	21.5" LED
Aspect Ratio	16:09
Resolution (H x V)	1920 x 1080
Colours	16.7M
Viewing Angle	H: 178° V: 178°
Contrast Ratio	10000:1 (DCR)
Response Time	8ms
Speakers	2 each (2 watts)
Inputs	BNC, HDMI, VGA, Audio
VESA Wall Hanging	75 x 75mm
Power Supply	AC100-240V~50/60 Hz 1.1A

MON21L
21.5" LED CCTV Monitor

MON284K
28" LED CCTV 4K Monitor

- Energy efficient wide screen
- 23.8" LED-Backlit Screen
- VGA, HDMI, BNC input for DVR/ NVR connection
- Audio Input
- 2 X 2W Speakers
- Complete with desktop stand
- VESA Standard wall mount option
- Internal Power Supply
- Operating Temperature 0° - 40°
- Operating Humidity 10%-80%
- HDMI & VGA Cable Included

Size	23.8" LED
Aspect Ratio	16:09
Resolution (H x V)	1920 x 1080
Colours	16.7M
Viewing Angle	H: 178° V: 178°
Contrast Ratio	10000:1 (DCR)
Response Time	8ms
Speakers	2 each (2 watts)
Inputs	BNC, HDMI, VGA, Audio
VESA Wall Hanging	75 x 75mm
Power Supply	AC100-240V~50/60 Hz 1.1A

MON23L
23.8" LED CCTV Monitor

Size	28" LED
Aspect Ratio	16.9
Resolution (H x V)	3840 x 2160
Colours	16.7M
Viewing Angle	H: 170° V: 160°
Contrast Ratio	1000:01:00
Response Time	5ms
Inputs	2 x HDMI
VESA Wall Hanging	100 x 100mm
Power Input	12V 5amp

- Energy efficient wide screen 28" LED-Backlit Screen
- HDMI input for DVR/ NVR connection
- AudioOutput
- Complete with desktop stand
- VESA Standard wall mount option
- Operating Temperature 0° - 40°
- Operating Humidity 10%-80%
- HDMI Cable Included

DATA CABLE, PRE-TERMINATED WITH RJ45

- CABIP10 - 10m Data Cable
- CABIP20 - 20m Data Cable
- CABIP40 - 40m Data Cable
- CABIP80 - 80m Data Cable

HDVIP1632RRMB
Rack Mount Bracket For Models:
HDVIP16R, HDVIP32R

- Rack Mount Bracket for Models: HDVIP16R, HDVIP32R
- Suitable for Standard 19" Server Rack Mounting

- 1 Channel POE Injector
- 30 Watt
- IEEE802.3 Standards
- 100 Meters Transmission

Power Supply	
Input	AC 100-240V
Voltage Range	DC53V
Output	30 Watts
Network Rate	10/100/1000Mbps
Standards	IEEE802.3af/at
Supply Mode	Mid-span
Dimensions	115 x 62.5 x 31 mm
Weight	150g
Storage Temperature	-30°C+60°C
Operating Temperature	0°C~55°C

IPIN1POE
1 Channel POE Injector

IPCDBW White Camera Deep Base
IPCDBG Grey Camera Deep Base

- IP66 Rated
- Metal Construction
- G3/4 Cable Gland Supplied
- Suitable for IP Range; REKIPC36FBW, REKIPC36FDW, HDVIPC36FBW, HDVIPC36FDW, HDVIPC2812VFBW, HDVIPC2812VFDW, HDVIPC28FDWAV, HDVIPC28FDW
- Dimensions: 146 x 59 mm

IPCDBWAV White Camera Deep Base
IPCDBGAV Grey Camera Deep Base

- IP66 Rated
- Metal Construction
- G3/4 Cable Gland Supplied
- Suitable for IP Range; HDVIPC2812VFDWAV
- Dimensions: 146 x 59 mm

- 4 Channel POE Switch
- 60 Watt
- 1 Channel Uplink
- IEEE802.3 Standards
- 100 Meters Transmission Per Port
- Mounting Brackets Supplied

Power Supply	
External	53VDC/1.25A
Voltage Range	DC48~56V
Output	60 Watts
Downlink RJ-45 Port	4*10/100Mbps
Uplink RJ-45 Port	1*10/100Mbps
Standards	IEEE802.3af/at
Supply Mode	End-span
Dimensions	160x94x27mm
Weight	425g
Storage Temperature	-30°C+60°C
Operating Temperature	0°C~55°C

IPSW4POE
4 Channel POE Switch

- 8 Channel POE Switch
- 120 Watt
- 1 Channel Uplink
- IEEE802.3 Standards
- 100 Meters Transmission Per Port
- Mounting Brackets Supplied

Power Supply	
External	53VDC/2.5A
Voltage Range	DC48~56V
Output	120 Watts
Downlink RJ-45 Port	8*10/100Mbps
Uplink RJ-45 Port	1*10/100Mbps
Standards	IEEE802.3af/at
Supply Mode	End-span
Dimensions	220x105x27mm
Weight	612Kg
Storage Temperature	-30°C+60°C
Operating Temperature	0°C~55°C

IPSW8POE
8 Channel POE Switch

- Plug and play installation
- One Input and one output PoE
- Bandwidth10/100Mbps
- Short Circuit and Overload Protection
- Requires PoE Supply from NVR or Network Switch

Port	One RJ45 port for PoE input, one RJ45 port for PoE output
PoE Power Supply Mode	Powered via PoE input port, support Mid-Span and End-Span
Transmission Media	standard cat5e/6 or above
PoE Power Output	15.4W(max)
Bandwidth	10/100Mbps
Standard Compliance	IEEE802.3 10BASE-T?IEEE802.3u 100BASE-TX/100BASE-FX-?IEEE802.3az?IEEE802.3af
Working Status	PoE Indicator, Link/Act Indicator
Dimensions (L*W*H)	83.0mm x 51.5mm x 24.0mm
Weight	88.6g
Environment	
Working Temperature	-10° ~ 55°C
Storage Temperature	-40° ~ 85°C
Relative Humidity	5% ~ 95% (non-condensing)

IPX100POE
PoE Extender

- Data Cable Coupler with RJ45 Ports

CABIPCOUP
Data Cable Coupler

- For use with IP PTZ Cameras
- Keyboard for Programming and Camera Control
- Integrated LCD Display
- Powered VIA 12V or PoE

Protocol	Onvif
Maximum Supported Devices	999
Supported Decoding Formats	H.265 & H.265
Power Supply	DC12V-2A
PoE Compatible	Yes
Power Consumption	<5W
Operating Temperature	-10°C ~ 55°C
Dimensions	118.7mm x 297mm x 210mm

HDVIPCPTZC
IP Pan, Tilt, and Zoom Controller

CPS4 4 WAY 4 AMP BOXED POWER SUPPLY
CPS9 9 WAY 9 AMP BOXED POWER SUPPLY
CPS16 16 WAY 16 AMP BOXED POWER SUPPLY

- 12VDC power limited output
- Protected outputs
- 100VAC–240VAC (50/60Hz) universal input
- Filtered and electronically regulated output
- Short circuit and thermal overload protection
- AC input and DC output LED indicators
- CPS4 dimensions 182(W) x 260(H) x 66(D)mm
- CPS9 dimensions 322(W) x 322(H) x 86(D)mm
- CPS16 dimensions 322(W) x 322(H) x 86(D)mm

**DUAL FUNCTION,
POWER & BNC CABLES**

- CAB-10 - 10m Power and BNC Video Cable
- CAB-20 - 20m Power and BNC Video Cable
- CAB-40 - 40m Power and BNC Video Cable
- CAB-80 - 80m Power and BNC Video Cable

PSIL-1
CAMERA POWER SUPPLY

- For use with CCTV Cameras
- 12 volt
- 1 amp

TFT-BRA1
Fixed Monitor Bracket

- Closest to wall fit
- Picture style finish
- To fit screens 12-28" (30-71cm)
- Supports 20kg (44lbs)

SHDVCDBG Grey Camera Deep Base
SHDVCDBW White Camera Deep Base

- IP66 Rated
- Metal Construction
- 25mm Cable Entry
- Suitable for HDview 4 Megapixel Range;
  SHDVC36FBG, SHDVC2812VFBG, SHDVC36FDG
- Dimensions: Ø112.5 x 50(H)mm

SHDVCDBLG Large Grey Camera Deep Base
SHDVCDBLW Large White Camera Deep Base

- IP66 Rated
- Metal Construction
- 25mm Cable Entry
- Suitable for HDview 4 Megapixel Range;
  SHDVC622VFBG, SHDVC550VFBG, SHDVC2812VFDG
- Dimensions: 145(W) x 145(H) x 53(D)mm

CAB-BNC
CABLE CONNECTOR

- Connector for use with Power and BNC video cables

TFT-BRA2
Tilt, Pivot & Rotate Monitor Bracket

- 27° tilt 180° swivel
- Close to wall fit
- To fit screens 12-28" (30-71cm)
- Supports 20kg (44lbs)

DVRWLA
Wireless USB Network Adaptor

■ Enables DVR Wi-Fi connection
■ Up to 150mbps wireless transmission
■ 4 types of encryption supported
■ Compact design

PTZCBRKT
PTZ Camera Corner Bracket

■ Compatible with external PTZ range
■ Improves PTZ viewing coverage
■ Metal construction
■ White finish

HDBALUNV
Single Channel HD Passive Balun

■ AHD camera transmission over CAT5 cable
■ Single Channel HD Passive Balun
■ Transmitter and Receiver pack
■ Compatible with AHD and analogue CCTV cameras

HDBALUNVP
Single Channel HD Video & Power Balun

■ AHD camera transmission and power over CAT5 cable
■ Single Channel HD Video & Power Balun
■ Transmitter and Receiver pack
■ Compatible with AHD and analogue CCTV cameras

TMPROSHD
CCTV Test Monitor

■ Compatible with standard definition, 720P, 1080P & 4 Megapixels CCTV cameras
■ Durable design with quality carry case
■ 4" LCD Touchscreen
■ 12vDC 1A power output for Camera
■ Lithium battery rechargeable (7 hrs working time)
■ PTZ Camera control and testing

HDBALUNVPCT
Single Channel HD Video & Power
Transmitter Balun

■ AHD camera transmission and power over CAT5 cable
■ Single Channel HD Video & Power Transmitter Balun
■ Compatible with AHD and analogue CCTV Cameras

WARN1
External Warning Sign

■ External durable use
■ Dimensions 420mm x 300mm
■ Space available to add scheme ownership details

ACCESS CONTROL

A complete and flexible range of superb quality video door entry equipment. Simple installation and high performance in colour – with the option of call points with integral PIN access – means you need look no further to find the ideal video door entry solution.

aperta

Master Bedroom   Bedroom

PSU

AC240V   Lounge   Kitchen
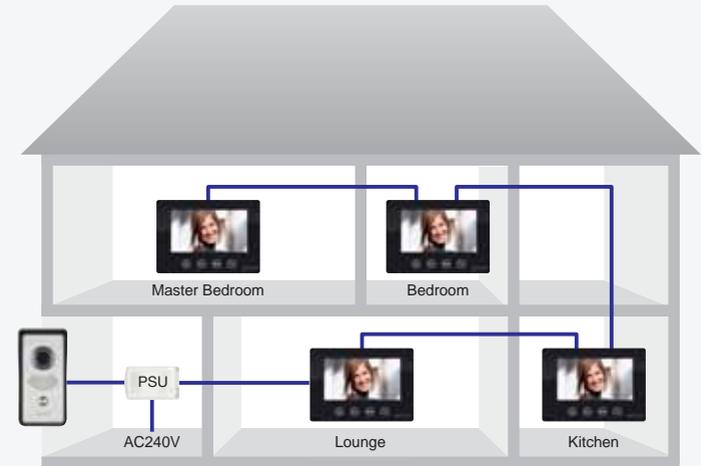
SINGLE WAY SYSTEM EXAMPLE COMPONENTS

APDSSWKP | APDSSW
Door stations

APMONW | APMONB
APMONWG | APMONBG
Colour monitors

APPOWSWDR
Combined Power Supply
& BUS Separator
(Connect up to 5 devices)

A flexible range of superb quality hands-free colour video door entry products specifically for installation in single dwellings. Simplicity of installation is the key to Aperta single way systems, requiring only 2 wires throughout and all outdoor stations and monitors powered by a single power supply.

Introducing the next generation of Access Control products from ESP®. The new Aperta range not only includes proximity reader systems and accessories such as magnetic door locks but also a completely new simplified and easy to install video door entry systems for both single house and multi way apartment applications.

The range includes 2 quick and easy to select base kits with options for combined keypad entry or a stylish but simple bell push outdoor station. Alternatively you can build your own system from 2 outdoor station and 4 monitor options. You really need look no further to find the ideal single way video door entry solution.

- Simple 2 core cable installation

- Single power supply (included) supports all monitors and outdoor stations in a flexible combination of up to 5 devices

- Clear high resolution colour picture on 7" hands free TFT monitor

APKIT   C/W White Monitor
APKITBLK C/W Black Monitor
Colour Video Door Entry System

Station	
Image sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Power	24VDC
Operating Temp.	-20°C ~ +40°C
Dimensions	85mm(W)x 165mm(H)x 53mm(D)
Weight	390g
Monitor	
Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	300mA
Dimensions	215mm(W)x152mm(H)x18mm(D)
Weight	450g

- Simple 2 core cable installation

- Single power supply (included) supports all monitors and outdoor stations in a flexible combination of up to 5 devices

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Lens	3.6mm
Power	24VDC
Operating Temp.	-20°C ~ +40°C
Dimensions	85mm(W)x 165mm(H)x 53mm(D)
Weight	390g
Monitor	
Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	350mA
Dimensions	183mm(W)x185mm(H)x20mm(D)
Weight	550g

C/W White Monitor   **APKITG**
C/W Black Monitor **APKITGBLK**
Colour Video Door Entry System with Record Facility

- Simple 2 core cable installation

- Single power supply (included) supports all monitors and outdoor stations in a flexible combination of up to 5 devices

- Clear high resolution colour picture on 7" hands free TFT monitor

- Outdoor station with built in keypad for code door unlocking

APKITKP   C/W White Monitor
APKITKPBLK C/W Black Monitor
Colour Video Door Entry Keypad System

Station	
Image sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Power	24VDC
Operating Temp.	-20°C ~ +40°C
Dimensions	87mm(W)x 200mm(H)x 53mm(D)
Weight	640g
Monitor	
Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	300mA
Dimensions	215mm(W)x152mm(H)x18mm(D)
Weight	450g

- Simple 2 core cable installation

- Single power supply (included) supports all monitors and outdoor stations in a flexible combination of up to 5 devices

- Clear high resolution colour picture on 7" hands free TFT monitor

- Outdoor station with built in keypad for code door unlocking

Station	
Image sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Power	24VDC
Operating Temp.	-20°C ~ +40°C
Dimensions	87mm(W)x 200mm(H)x 53mm(D)
Weight	640g
Monitor	
Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	350mA
Dimensions	183mm(W)x185mm(H)x20mm(D)
Weight	550g

C/W White Monitor   **APKITKPG**
C/W Black Monitor **APKITKPGBLK**
Colour Video Door Entry Keypad System with Record Facility

- Waterproof IP55 metal outdoor station

- High resolution colour Camera

- Built in keypad for door code unlocking

- Simple 2 core cable installation

Image Sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Viewing Angle	70°
Power	24VDC
Operating Temp.	-20°C ~ +40°C
Dimensions	87mm(W)x 200mm(H)x 53mm(D)
Weight	640g

APDSSWKP
Singleway Video Door Station with Keypad

- Waterproof IP55 outdoor station

- High resolution colour Camera

- Simple 2 core cable installation

Image Sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Viewing Angle	70°
Power	24VDC
Operating Temp.	-20°C ~ +40°C
Dimensions	85mm(W)x 165mm(H)x 53mm(D)
Weight	390g

APDSSW
Singleway Video Door Station

- Flush mount kit for APDSMW, APDSSWKP and APDSPXMW

Bracket

Frame Dimensions	126 (W) x 244 (H)
Mount box Dimensions	101 (W) x 210 (H) x 25 (D)
Weight	230g

APDSKPFMS
Flush Mount Kit

- Single Way system component

- 24VDC/800mA power output

- Dimensions 90mm(W)x60mm(H)x105mm(L)

- Only 1 power supply per system required

APPOWSWDR
Combined Power & Bus Separator Unit
for Singleway System

- Suitable for Single or Multi way installations
- Simple 2 core cable installation
- Clear two-way audio
- Lock release facility
- Magnetic receiver holster
- Durable white gloss casing

Handset

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	200mA
Dimensions	78mm(W)x245mm(H)x50mm(D)
Weight	315g

APAUDH
Door Entry Handset

- Simple 2 core cable installation
- 7" TFT screen with clear high resolution colour picture
- Durable white or black casing

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	300mA
Dimensions	215mm(W)x152mm(H)x18mm(D)
Weight	450g

Black **APMONB**   White **APMONW**
Colour Video Door Entry Monitor

- Suitable for Single or Multi way installations
- Simple 2 core cable installation
- Clear two-way audio
- Lock release facility
- Magnetic receiver holster
- Durable black gloss casing

Handset

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	200mA
Dimensions	78mm(W)x245mm(H)x50mm(D)
Weight	315g

APAUDHBLK
Door Entry Handset

- 7" TFT screen with clear high resolution colour picture
- Simple 2 core cable installation
- On screen menu for simple system set up & customisation
- Optional still or video recording and playback of callers (4GB SD card included)
- Durable white or black casing

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	350mA
Dimensions	183mm(W)x185mm(H)x20mm(D)
Weight	550g

Black **APMONBG**   White **APMONWG**
Colour Video Door Entry Monitor with
Record Facility

MULTI WAY SYSTEM EXAMPLE COMPONENTS
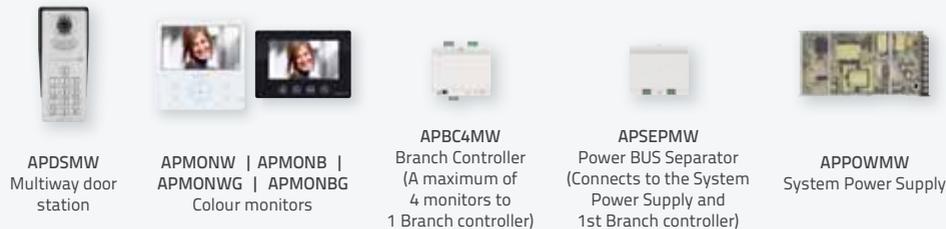
APDSMW
Multiway door station

APMONW | APMONB | APMONWG | APMONBG
Colour monitors

APBC4MW
Branch Controller
(A maximum of 4 monitors to 1 Branch controller)

APSEPMW
Power BUS Separator
(Connects to the System Power Supply and 1st Branch controller)

APPOWMW
System Power Supply

A flexible range of superb quality hands-free colour video door entry products specifically for installation in multiple apartments. Simplicity of installation is the key to Aperta multi way systems, supporting up to 32 apartments in one system and requiring only 2 wires throughout with all outdoor stations and monitors powered by a single power supply. The keypad multi way door station allows both apartment calling plus door unlocking by passcode, no need for 2 separate keypads.

The keypad apartment calling also means that no additional buttons or panels are required, keeping the installation simple, neat and compact. You really need look no further to find the ideal multi way door entry solution.

■ Waterproof IP55 metal multiway outdoor station
■ High resolution colour Camera
■ Built in keypad for door calling and code unlocking
■ Simple 2 core cable installation
■ Supports up to 32 apartments (Address Numbers 1-32)

Image Sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Viewing Angle	70°
Capacity	32 ID
Status Indication	Audio
Relay Operation	NO/NC
Working Temp.	-20°C ~ +40°C
Ingress Protection	IP55
Construction	Aluminium
Voltage	24VDC
Dimensions	87mm(W)x 200mm(H)x 53mm(D)
Weight	640g

APDSKPFMS
Flush Mount Kit

MultiWay Video Door Station   **APDSMW**
MultiWay Video Door Station with Custom Apartment Addresses   **SP1APDSMW**

■ Waterproof IP55 metal multiway outdoor station
■ High resolution colour camera
■ Simple 2 core cable installation
■ Supports up to 32 apartments (Address Numbers 1-32)
■ Capacitive keypad for apartment calling, proximity & code unlocking
■ Complete with 10 pre-registered user tags
■ 10,000 user tags supported

EZT3ST10 Additional Proximity Tags (10 Pack)

Image Sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Viewing Angle	70°
Capacity	32 ID 10,000 Tags
Reader Frequency	125KHz
Effective Distance	<5CM
Status Indication	Audio
Relay Operation	NO/NC
Working Temp.	-20°C ~ +40°C
Ingress Protection	IP55
Construction	Aluminium
Voltage	24VDC
Dimensions	87mm(W)x 200mm(H)x 53mm(D)
Weight	640g

APDSKPFMS
Flush Mount Kit

MultiWay Video Door Station   **APDSPXMW**
MultiWay Video Door Station with Custom Apartment Addresses   **SP1APDSPXMW**

APPOWMW

Power Supply Unit For MultiWay System

■ Multi Way system component

■ 24VDC/4.2A power output

■ Dimensions 100mm(W)x200mm(L)x40mm(D)

■ Only 1 power supply per system required

APSEPMW

Power Bus Separator Unit For MultiWay System

■ Multi Way system component

■ For use with APPOWMW power supply

APBC4MW

4-Way Branch Controller For MultiWay System

■ Multi Way system component

■ 1 unit supports wiring to 4 apartments or 4 outdoor stations (APDSMW)

■ Simple 2 core cable installation

■ 7" TFT screen with clear high resolution colour picture

■ Durable white or black casing

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	300mA
Dimensions	215mm(W)x152mm(H)x18mm(D)
Weight	450g

Black **APMONB** White **APMONW**
Colour Video Door Entry Monitor

■ 7" TFT screen with clear high resolution colour picture

■ Simple 2 core cable installation

■ On screen menu for simple system set up & customisation

■ Optional still or video recording and playback of callers (4GB SD card included)

■ Durable white or black casing

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	350mA
Dimensions	183mm(W)x185mm(H)x20mm(D)
Weight	550g

Black **APMONBG** White **APMONWG**
Colour Video Door Entry Monitor with Record Facility

- Alerts user to visitors via smart-phone APP
- Up to 6 months battery life, based on 2 activations per day
- High Definition colour image and 2-way audio
- Visitor record function, Smart Detection (PIR + Motion Detection)
- No subscription or additional fees required to access recorded files
- Complete with internal hub that houses recorded files for system security and operates as a wire-free door chime
- Contemporary housing
- Infra-red LEDs for low light use
- Weatherproof rating: Ingress protection IP55
- Inbuilt rechargeable battery
- Requires 2.4GHZ Wi-Fi connection

Door Station

Sensor Size	1/2.8"
Lens	Field of View 150°
Resolution	1080p
Audio	Full Duplex
Sensitivity	1Lux
LED	1pcs
LED Distance	3 Meters
Construction	Polycarbonate
Ingress Protection	IP55
Connection	2.4GHz Wi-Fi
System Range	150 Meters to HUB

Power

Battery	Rechargeable 3.7v 5000mAh Li-polymer Battery
Charge Time	4 Hours
Charge Port	Micro USB
Weight	233g
Working Temperature	0°C ~ /50°C
Dimensions	W61 x D26 x H145mm

APWIFIDSBP2
Battery Powered Wi-Fi Door Station with Record Facility

- Alerts user to visitors via smart-phone APP
- High Definition colour image and 2-way audio
- Visitor record function, Smart Detection (Motion Detection)
- No subscription or additional fees required to access recorded files
- Complete with internal wire-free door chime
- Contemporary housing
- Infra-red LEDs for low light use
- Weatherproof rating: Ingress protection IP55
- Optional Ethernet and door lock release connections
- Requires 2.4GHZ Wi-Fi connection and 12vdc Supply

Door Station

Sensor Size	1/2.7"
Lens	Field of View 140°
Resolution	1080p
Audio	Full Duplex
Sensitivity	1Lux
IR LED	5pcs
IR distance	5 Meters
Memory	128GB Max (8GB Supplied)
Construction	Aluminum and Polycarbonate
Ingress Protection	IP55
Connection	2.4GHz Wi-Fi
System Range	150 Meters to RFChime
Interface	Ethernet
Lock Relay	2A/24V
Chime Relay	2A/24V
Power	9~48vDC
Weight	170g
Working Temperature	-10°C ~ 40°C
Dimensions	132mm (H) x 55mm (W) x 24mm (D)

APWIFIDS2
Wired Wi-Fi Door Station with Record Facility

- Alerts user to visitors via smart-phone APP
- Up to 6 months battery life, based on 2 activations per day
- High Definition colour image and 2-way audio
- Visitor record function, Smart Detection (PIR + Motion Detection)
- No subscription or additional fees required to access recorded files
- Complete with internal hub that houses recorded files for system security and operates as a wire-free door chime
- Contemporary housing
- Infra-red LEDs for low light use
- Weatherproof rating: Ingress protection IP55
- Inbuilt rechargeable battery
- Requires 2.4GHZ Wi-Fi connection

Door Station

Sensor Size	1/2.8"
Lens	Field of View 150°
Resolution	1080p
Audio	Full Duplex
Sensitivity	1Lux
LED	1pcs
LED Distance	3 Meters
Construction	Polycarbonate
Ingress Protection	IP55
Connection	2.4GHz Wi-Fi
System Range	150 Meters to HUB

Power

Battery	Rechargeable 3.7v 5000mAh Li-polymer Battery
Charge Time	4 Hours
Charge Port	Micro USB
Weight	233g
Working Temperature	0°C ~ /50°C
Dimensions	W61 x D26 x H145mm

APWIFIDSBLKBP2
Battery Powered Wi-Fi Door Station with Record Facility

- Alerts user to visitors via smart-phone APP
- High Definition colour image and 2-way audio
- Visitor record function, Smart Detection (Motion Detection)
- No subscription or additional fees required to access recorded files
- Complete with internal wire-free door chime
- Contemporary housing
- Infra-red LEDs for low light use
- Weatherproof rating: Ingress protection IP55
- Optional Ethernet and door lock release connections
- Requires 2.4GHZ Wi-Fi connection and 12vdc Supply

Door Station

Sensor Size	1/2.7"
Lens	Field of View 140°
Resolution	1080p
Audio	Full Duplex
Sensitivity	1Lux
IR LED	5pcs
IR distance	5 Meters
Memory	128GB Max (8GB Supplied)
Construction	Aluminum and Polycarbonate
Ingress Protection	IP55
Connection	2.4GHz Wi-Fi
System Range	150 Meters to RFChime
Interface	Ethernet
Lock Relay	2A/24V
Chime Relay	2A/24V
Power	9~48vDC
Weight	170g
Working Temperature	-10°C ~ 40°C
Dimensions	132mm (H) x 55mm (W) x 24mm (D)

APWIFIDSBLK2
Wired Wi-Fi Door Station with Record Facility

- Two-wire connection
- Durable/Weatherproof door station
- Clear 2 Way audio
- Lock release option
- Wiring distance up to 100 meters
- Easy DIY installation

Handset

Input range	DC12V
Output power	<=0.6W
Working current	<=50mA
Dimension	215mm x 85mm x 60mm

Call Point

Input range	DC12V
Output power	<=0.6W
Working current	<=50mA
IP rating	55
Dimension	150mm x 65mm x 50mm

APKITAO
Audio Door Entry System

- Easy install, simple self-contained programming
- Up to 1,010 key tag holders or Pin numbers
- 2 separate user groups
- 2 relay outputs
- Anti tamper option
- Weather/dust proof robust construction IP65
- Complete with 10 tags

EZT3ST10 Additional Proximity Tags (10 Pack)

Capacity	Zone 1 : 1000 Card/ Tag Combination Zone 2 : 10 Card/ Tag Combination
Reader Frequency	125KHz
Effective Distance	<5CM
Status Indication	Red/ Green LED
Relay Operation	NO/NC: 4A@30vDC
Relay Duration	01-99sec
Working Temp.	-10 ~ +55°C
Ingress Protection	IP65
Construction	Aluminium
Voltage	DC: 12V~24V AC: 12V~24V
Working Current	<120mA
Standby Current	<90mA
Dimensions	150(H)x43(W)x23(D)

EZTAG3
Proximity and Keypad Door Entry

APKITAOH
Additional APKITAOH Audio Handset

Handset	
Input range	DC12V
Output power	<=0.6W
Working current	<=50mA
Dimension	215mm x 85mm x 60mm

- Easy install, simple self-contained programming
- Up to 1,010 key tag holders or Pin numbers
- 2 separate user groups
- 2 relay outputs
- Anti tamper option
- Weather/dust proof robust construction IP65
- Complete with 10 tags

EZT3ST10 Additional Proximity Tags (10 Pack)

Capacity	Zone 1 : 1000 Card/ Tag Combination Zone 2 : 10 Card/ Tag Combination
Reader Frequency	125KHz
Effective Distance	<5CM
Status Indication	Red/ Green LED
Relay Operation	NO/NC: 4A@30vDC
Relay Duration	01-99sec
Working Temp.	-10 ~ +55°C
Ingress Protection	IP65
Construction	Aluminium
Voltage	DC: 12V~24V AC: 12V~24V
Working Current	<120mA
Standby Current	<90mA
Dimensions	150(H)x43(W)x23(D)

EZTAG3B
Proximity and Keypad Door Entry

- Complete entry system in one box comprising of:
- EZ-TAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- EVML-250 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EV-EXIT Push to Exit Button
- EV-EBG Emergency Break Glass

- Complete entry system in one box comprising of:
- EZTAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- EV-ML-250 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EVEXITC Contactless Exit Button
- EV-EBG Emergency Break Glass

EZTAG3PRO Silver   **EZTAG3PROB** Black

Proximity and Keypad Door Entry Kit

EZTAG3PROC Silver **EZTAG3PROBC** Black

Proximity Keypad and Contactless
Exit Button Door Entry Kit

- Complete entry system in one box comprising of:
- EZ-TAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- EVML-250 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EVEXITM Push to Exit Mushroom Button
- EV-EBG Emergency Break Glass

- Complete entry system in one box comprising of:
- EZTAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- EV-ML-250 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EVEXITC Contactless Exit Button
- EV-EBG Emergency Break Glass
- EVFOOT Steel Foot-Pull

EZTAG3PROM Silver   **EZTAG3PROMB** Black

Proximity Keypad and Mushroom
Exit Button Door Entry Kit

EZTAG3PROCF Silver   **EZTAG3PROBCF** Black

Proximity Keypad and Contactless Exit
Button Door Entry Kit with Foot-Pull

EZTAG3PROEXT Silver
EZTAG3PROBEXT Black

Proximity Keypad External Door Entry Kit

- Complete entry system in one box comprising of:
- EZ-TAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- EV-ML-500XT IP67 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EVEXITMIP55 IP55 Exit Button
- EVEBGEXT IP67 Emergency Break Glass

EZTAG3PROF Silver
EZTAG3PROBF Black

Proximity Keypad and Door Entry Kit with Foot-Pull

- Complete entry system in one box comprising of:
- EZTAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- EV-ML-250 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EV-EXIT Exit Button
- EV-EBG Emergency Break Glass
- EVFOOT Steel Foot-Pull

EZTAG3PROMF Silver
EZTAG3PROMBF Black

Proximity Keypad and Mushroom Exit Button Door Entry Kit with Foot-Pull

- Complete entry system in one box comprising of:
- EZTAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- EV-ML-250 Electromagnetic Lock
- EVBPSBB Boxed Power Supply
- EVEXITM Exit Button
- EV-EBG Emergency Break Glass
- EVFOOT Steel Foot-Pull

UDTASMBSS
Surface mount Box

EV-EXIT
Push to Exit Release Button

- Exit button
- Normally open contacts
- Clear wording
- Stainless steel fascia (Surface mount box part code: UDTASMBSS)
- 87.5 x 87.5 x 22mm
- 170g

UDTASMBSS
Surface mount Box

EVEXITC
Contactless Exit Button

- Contactless Exit Button
- Normally Open & Closed Contacts
- Worded 'Exit" & 'No Touch"
- DC12V Input
- 12-28V, 3A Rated Contact
- Stainless steel fascia (Surface mount box part code: UDTASMBSS)
- 86mm x 86mm x 29mm
- 0.25kg

UDTASMBSS
Surface mount Box

EVEXITM
Push to Exit Mushroom Release Button

- Large mushroom exit button
- Normally open & closed contacts
- Clear wording
- Stainless steel fascia (Surface mount box part code: UDTASMBSS)
- 87.5 x 87.5 x 35mm
- 173g

EVEXITMIP55
Push to Exit Mushroom Release Button IP55

- Large mushroom exit button
- IP55 Ingress protection
- Normally open & closed contacts
- Clear wording
- Robust housing (Includes surface mount box)
- 85m x 80mm x 85mm
- 200g

EVTR
Trades Button
- Stainless Steel Trades Entrance Button
- IP66 Ingress Protected Push Button
- Normally Open & Closed Contacts (Timer Supplied Separately)
- Clear Wording
- Single Gang Fascia Including Surface Mount Box and Security Screws
- 88 x 88 x 43mm (inc. Surface box)
- 315g

EVTRT
Trades Button with Timer
- Stainless Steel Trades Entrance Button with DIN Timer
- IP66 Ingress Protected Push Button
- DIN Timer (Sangamo part: 71111)
- Normally Open & Closed Contacts
- Clear Wording
- Single Gang Fascia Including Surface Mount Box and Security Screws

ENTERD
Electronic Lock
- Holding force 295kg/650lbs
- 160ma 12vdc input
- For use with Yale type rim locks
- Surface mounting version available
- Fail Secure
- Dimensions - 28.5 x 31 x 160mm
- Requires EVBPSBB power supply

EV-ML-250
Electromagnetic Lock
- Holding force 250kg/550lbs max
- Z & L mounting bracket included
- Dual voltage 12 & 24 VDC
- Fail safe
- Dimensions excl. bracket – 250 x 26 x 41mm
- Requires EVBPSBB power supply

EV-EBG
Emergency Break Glass
- Surface mounted
- Emergency break glass to release door

EV-EBG-KEY Pack of 5 keys for EV-EBG & EV-EBG-EXT
EV-EBG-CVR Pack of 5 plastic covers for EV-EBG

EVEBGEXT
External Emergency Break Glass
- Surface mounted
- Emergency break glass to release door
- IP67 rated weather resistant external lock
- Normally Open and Normally Closed
- 3 x 20mm Threaded Holes
- Dimensions 93mm x 97.5mm x 55mm

ENTERD-YLR
Surface Electronic Lock
- Holding force 295kg/650lbs
- 160ma 12vdc input
- For use with Yale type surface locks
- Flush mounting version available
- Fail Secure
- Requires EVBPSBB power supply

EV-ML-500XT
Electromagnetic Lock
- IP67 rated weather resistant external lock
- Holding force 500kg/1200lbs max
- Z & L mounting bracket included
- Dual voltage 12 & 24 VDC
- Fail safe
- Dimensions excl. bracket – 220 x 42 x 62mm
- Requires EVBPSBB power supply

EVFOOT
Foot Operated Door Pull
- Foot Operated Door Opening Plate
- Brushed Stainless Steel
- Includes Operation Sticker
- Dimensions; 125 x 75 mm

BAT7
12V - 7.0ah SLA Battery
- Back up battery for EVBPSBB, MAG2P, MAG2, MAG4P and MAG4

EV-ML-250ZLB
Electromagnetic Lock
- Spare Z and L bracket for EV-ML-250

EVBPSBB
Boxed Power Supply
- 100-240vAC, 50/60Hz input
- 1.5A /12vDC fail safe/secure output
- 1A 12vDC output
- Backup battery facility (Requires Battery)
- Size: 129 x 73 x 50mm LWD

FIRE PROTECTION

The ESP® fire systems have been created to balance performance, reliability and aesthetics whilst being fully CPR compliant and certified to EN54 standards. The range includes everything required to complete high quality, durable, two wire, conventional and addressable fire alarm installations.

MAGᗡᑌO®   **MAG**fire®   CPR COMPLIANT

FIRE SYSTEM COMMISSIONING

Alongside ESP's extensive range of fire protection systems, a new commissioning service has now been launched to ensure that an installed ESP system operates correctly in accordance with the recommendations of BS5839-1.
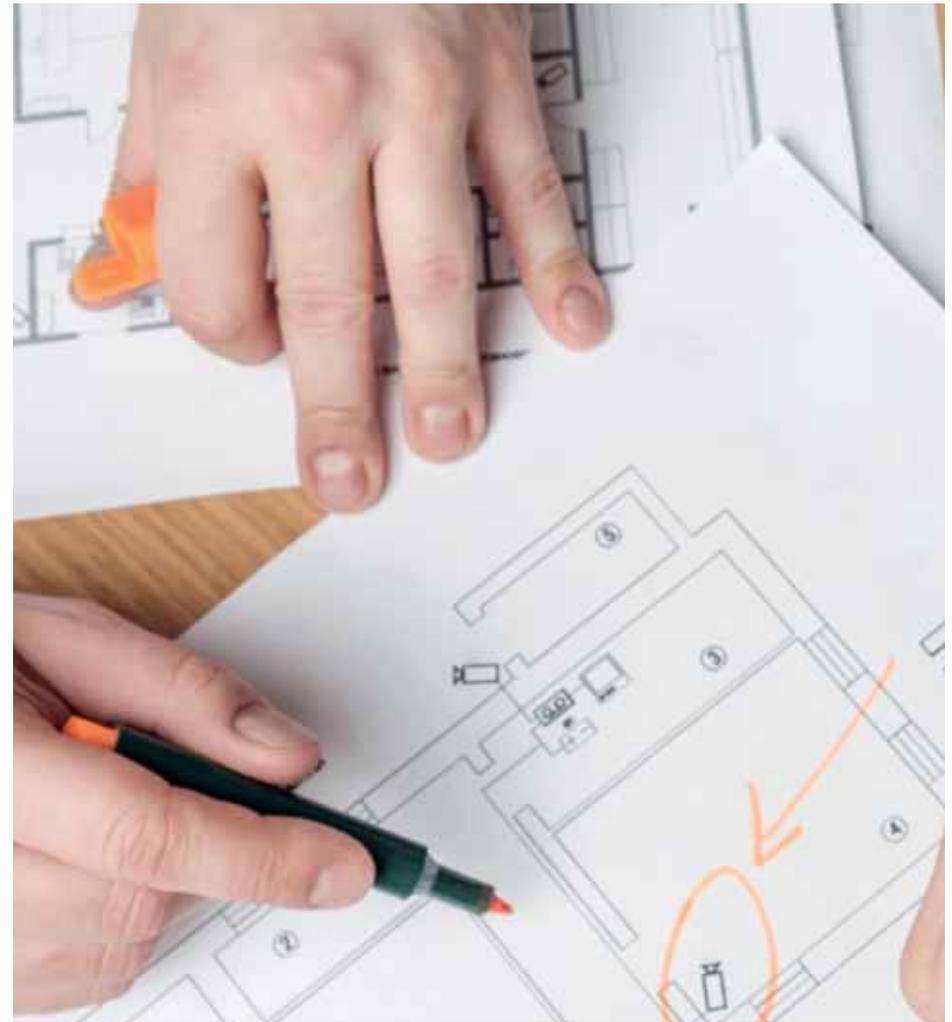
FREE SYSTEM DESIGN

ESP can offer a team of dedicated design engineers who are fully trained & qualified in all of the relevant British Standards.

We are able to provide an in-depth solution to any challenge your building may provide, this is done by visiting sites and studying site drawings.

All of our Computer Aided Design (CAD) is carried out in-house, this enables us to amend our designs as the job progresses.

MAGDUO2BKIT

2 Zone Two Wire
Conventional Fire Alarm Kit

- MAGDUO2B 2 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)

- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included

- 1 x MAGDUOSHDSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included

- 2 x MAGDUOCP Resettable call points

- 1 x MAGDUOSHDRT Head removal tool

MAGDUO2KIT

2 Zone Two Wire
Conventional Fire Alarm Kit

- MAGDUO2 2 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)

- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included

- 1 x MAGDUOSHDSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included

- 2 x MAGDUOCP Resettable call points

- 1 x MAGDUOSHDRT Head removal tool

MAGDUO4BKIT

4 Zone Two Wire
Conventional Fire Alarm Kit

- MAGDUO4B 4 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)

- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included

- 1 x MAGDUOSHDSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included

- 2 x MAGDUOCP Resettable call points

- 1 x MAGDUOSHDRT Head removal tool

MAGDUO4KIT

4 Zone Two Wire
Conventional Fire Alarm Kit

- MAGDUO4 4 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)

- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included

- 1 x MAGDUOSHDSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included

- 2 x MAGDUOCP Resettable call points

- 1 x MAGDUOSHDRT Head removal tool

MAGDUO8BKIT

8 Zone Two Wire
Conventional Fire Alarm Kit

- MAGDUO8B 8 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)

- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included

- 1 x MAGDUOSHDSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included

- 2 x MAGDUOCP Resettable call points

- 1 x MAGDUOSHDRT Head removal tool

MAGDUO8KIT

8 Zone Two Wire
Conventional Fire Alarm Kit

- MAGDUO8 8 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)

- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included

- 1 x MAGDUOSHDSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included

- 2 x MAGDUOCP Resettable call points

- 1 x MAGDUOSHDRT Head removal tool
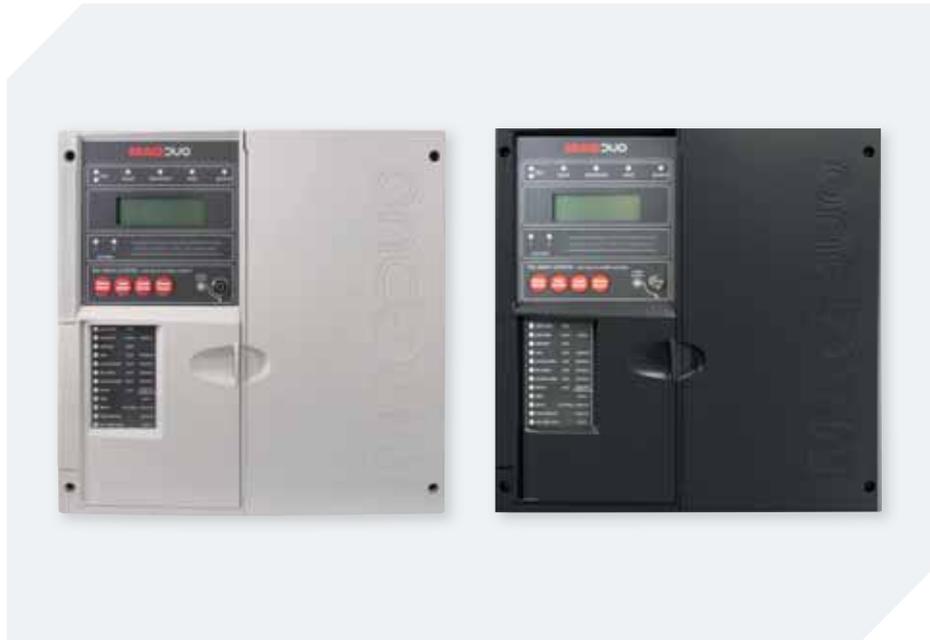
MAGDUO2 Grey   **MAGDUO2B** Black
2 Zone Two Wire Fire Panel

- Two Wire fire alarm system
- Active end of line monitoring and head removal
- Up to 32 devices per zone (Dependent on Device Loading Unit: DLU)
- 4 line x 20 character LCD display
- Ability to differentiate between smoke detector, heat detector or a manual call point alarms
- Alarm confirmation feature
- Event log storing up to 500 events
- 3 enhanced test modes
- Zone can be configured to day/night detection mode
- Delay programming options
- Certified to EN54 2/4 Standards
- Requires 2 x 12V 3.2Ah batteries (BAT32)
- Optional extended battery box with capacity for 2 x 12V 7.0Ah batteries

Inputs

Max Detectors Per Zone	Up to 32 Devices (Dependant on Device Loading Units , 160 per Zone)

Power

Mains Supply	230VAC, +10%, -15%, 50/60Hz
Operating Voltage	24vDC (Range 21-31vDC)
Standby Supply	2 x 12V 3.2Ah S.L.A Battery

Outputs

Zone	Up to 2 (300mA)
Monitored Sounder Circuits	Up to 2 (250 mA)
Monitored Relay Circuits	Up to 2 (250 mA)
Auxiliary Output	24vDC (300mA)

Environment

Working Temperature	5°C to 40°C
Dimensions	333 x 333 x 99mm
Weight	2.25 Kg

MAGDUOBBB
Battery Expansion Box for MAGDUO

MAGDUOPK (Pack of 2)
Two Wire Fire Panel Spare Key

MAGDUOPCPS
MAGDUO Software

MAGDUO4 Grey   **MAGDUO4B** Black
4 Zone Two Wire Fire Panel

- Two Wire fire alarm system
- Active end of line monitoring and head removal
- Up to 32 devices per zone (Dependent on Device Loading Unit: DLU)
- 4 line x 20 character LCD display
- Ability to differentiate between smoke detector, heat detector or a manual call point alarms
- Alarm confirmation feature
- RS485 connection to up to 8 repeater panels
- Event log storing up to 500 events
- 3 enhanced test modes
- Zone can be configured to day/night detection mode
- Delay programming options
- 4 or 8 zone panel can now be configured to accept conventional devices on zones 5 to 8 with the optional conventional zone card
- Certified to EN54 2/4 Standards
- Requires 2 x 12V 3.2Ah batteries (BAT32)
- Optional extended battery box with capacity for 2 x 12V 7.0Ah batteries

Inputs

Max Detectors Per Zone	Up to 32 Devices (Dependant on Device Loading Units , 160 per Zone)

Power

Mains Supply	230VAC, +10%, -15%, 50/60Hz
Operating Voltage	24vDC (Range 21-31vDC)
Standby Supply	2 x 12V 3.2Ah S.L.A Battery

Outputs

Zone	Up to 4 (300mA)
Monitored Sounder Circuits	Up to 2 (250 mA)
Monitored Relay Circuits	Up to 2 (250 mA)
Auxiliary Output	24vDC (300mA)

Environment

Working Temperature	5°C to 40°C
Dimensions	333 x 333 x 99mm
Weight	2.28 Kg

MAGDUOBBB
Battery Expansion Box for MAGDUO

MAGDUOPK (Pack of 2)
Two Wire Fire Panel Spare Key

MAGDUOPCPS
MAGDUO Software
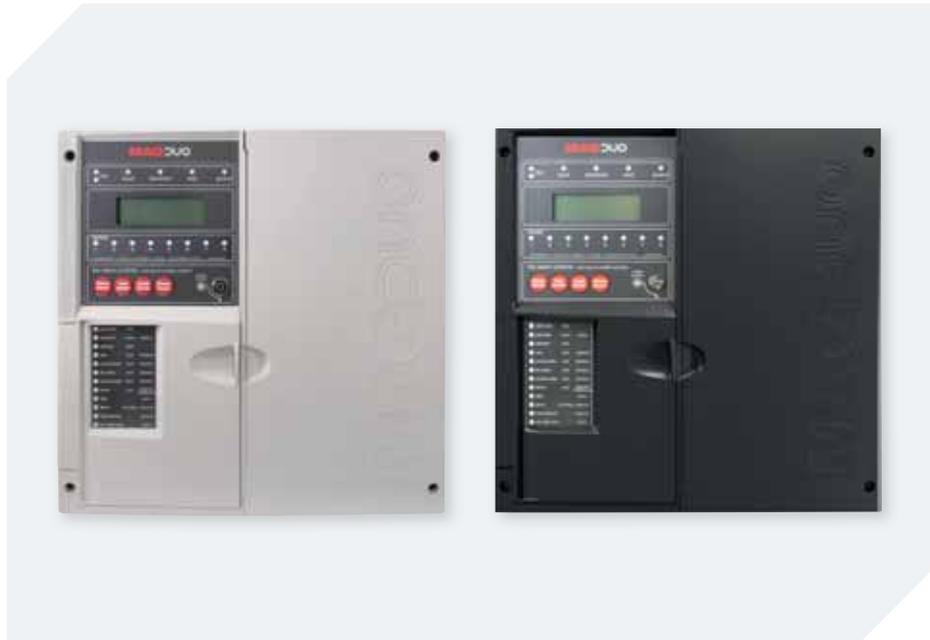
MAGDUO8 Grey   MAGDUO8B Black
8 Zone Two Wire Fire Panel

CPR COMPLIANT   EN54   CE   Made in EU   RoHS COMPLIANT 2002/95/EC

- Two Wire fire alarm system
- Active end of line monitoring and head removal
- Up to 32 devices per zone (Dependent on Device Loading Unit: DLU)
- 4 line x 20 character LCD display
- Ability to differentiate between smoke detector, heat detector or a manual call point alarms
- Alarm confirmation feature
- RS485 connection to up to 8 repeater panels
- Event log storing up to 500 events
- 3 enhanced test modes
- Zone can be configured to day/night detection mode
- Delay programming options
- 4 or 8 zone panel can now be configured to accept conventional devices on zones 5 to 8 with the optional conventional zone card
- Certified to EN54 2/4 Standards
- Requires 2 x 12V 3.2Ah batteries (BAT32)
- Optional extended battery box with capacity for 2 x 12V 7.0Ah batteries

Inputs

Max Detectors Per Zone	Up to 32 Devices (Dependant on Device Loading Units , 160 per Zone)

Power

Mains Supply	230VAC, +10%, -15%, 50/60Hz
Operating Voltage	24vDC (Range 21-31vDC)
Standby Supply	2 x 12V 3.2Ah S.L.A Battery

Outputs

Zone	Up to 8 (300mA)
Monitored Sounder Circuits	Up to 2 (250 mA)
Monitored Relay Circuits	Up to 2 (250 mA)
Auxiliary Output	24vDC (300mA)

Environment

Working Temperature	5°C to 40°C
Dimensions	333 x 333 x 99mm
Weight	2.36 Kg

MAGDUOBBB
Battery Expansion Box for MAGDUO

MAGDUOPK (Pack of 2)
Two Wire Fire Panel Spare Key

MAGDUOPCPS
MAGDUO Software

MAGDUOREP Grey   MAGDUOREPB Black
Conventional Repeater Panel for MAGDUO

EN54   CE   Made in EU   RoHS COMPLIANT 2002/95/EC   CPR COMPLIANT

- Compatible with MAGDUO 4 or 8 zones control panels only
- Reports MAGDUO panel events to a remote location
- Capable of performing system controls (i.e. Silence Alarms, Reset, Sound Alarms & Silence Buzzer)
- Maximum of 8 repeater panels can be connected to a single control panel

Power

Power	24vDC (Range 21-31vDC)

Consumption

Quiescent (Back Light Off)	24vDC @ 16mA
Maximum (Back Light and Controls Enabled)	24vDC @ 50mA

Input

Communication	RS-485
Max. Length Between Panels	500 Meters

Output

Communication	RS-485
Max. Length Between Panels	500 Meters

Technical spec

Max. Number per Panel	8

Environment

Working Temperature	5°C to 50°C
Weight	0.65 Kg
Dimensions	250 x 140 x 85 mm

BPS-1 24V 1 Amp Boxed Power Supply
BPS-2 24V 2 Amp Boxed Power Supply
BPS-5 24V 5 Amp Boxed Power Supply
Nb Boxed power supplies require 2 x 12V batteries (not supplied)

MAGDUOSHD

FlexiPoint Detector for Fire Detection

- 7 modes of fire detection including combined smoke/heat
- Built-in End of Line function
- Self-calibration every 6 hours
- Continuous dust contamination monitoring
- Device wiring base included

MAGDUOSHDS

FlexiPoint Detector with Sounder for Fire Detection

- 7 modes of fire detection including combined smoke/heat
- Complete with 3 sounder modes
- Built-in End of Line function
- Self-calibration every 6 hours
- Device wiring base included
- Continuous dust contamination monitoring

MAGDUOSHDSS

FlexiPoint Detector with Sounder & Strobe for Fire Detection

- 7 modes of fire detection including combined smoke/heat
- Complete with 3 sounder modes and LED strobe
- Built-in End of Line function
- Self-calibration every 6 hours
- Device wiring base included
- Continuous dust contamination monitoring

7 Modes Of Detection

Smoke 1 - Standard optical with high thermal enhancement	Heat 1 - Rate of Rise 58°C, general use in normal, stable environments (Class A1)
Smoke 2 - Standard optical with normal thermal enhancement	Heat 2 - Low fixed 58°C, Domestic kitchens etc (Class A1)
Smoke 3 - Low sensitivity optical with transient rejection	Heat 3 - Hi Fixed 90°C, Commercial kitchens, boiler rooms

Combined - Smoke 2 / Heat 2
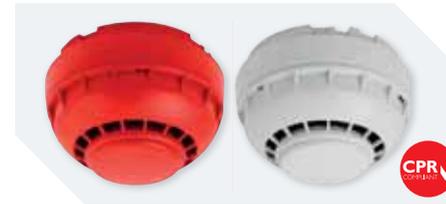
MAGDUOSR Red   **MAGDUOSW** White
Ceiling Sounder for MAGDUO

- Ceiling mount sounder
- Volume level adjustment
- Built-in End of Line function
- Device wiring base included

MAGDUOSRSQ Red   **MAGDUOSWSQ** White
Wall Sounder for MAGDUO

- Wall mount white sounder
- Volume level adjustment
- Built-in End of Line function
- Device base included

MAGDUOSSLP

Sounder Strobe for MAGDUO - Low Profile

- Complete with 3 sounder modes and LED strobe
- Volume level adjustment
- Built-in End of Line function
- Low profile design
- Device wiring base included

MAGDUOSS

Sounder Strobe for MAGDUO - Domed

- Complete with 3 sounder modes and LED strobe
- Volume level adjustment
- Built-in End of Line function
- Domed profile design
- Device wiring base included

MAGDUOSIP55

Strobe for MAGDUO

- IP55 Ingress protection
- LED strobe
- Built-in End of Line function
- Device base included

MAGDUOSRIP55

Sounder for MAGDUO

- IP55 Ingress protection
- Volume level adjustment
- Built-in End of Line function
- Device base included
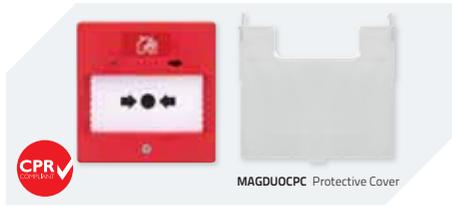
MAGDUOCP   **MAGDUOCPIP65** IP Version
Call Point for MAGDUO
- ■ Resettable manual call point
- ■ Built-in End of Line function
- ■ Device base included

MAGDUOCPK
Spare Call Point Key for MAGDUO

MAGDUOCPC Protective Cover

MAGDUOIOR
Module for MAGDUO
- ■ Configure as an input for reporting from other systems or devices
- ■ Configure as an output to control external systems
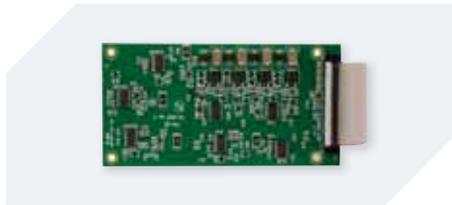- ■ Built-in End of Line function

MAGDUOBBB
Battery Expansion Box for MAGDUO
- ■ Includes; conduit bushes, coupling and battery leads

MAGDUOSHDDB
Deep Base for MAGDUO Devices
- ■ For use with; FlexiPoint devices, internal ceiling sounders & strobes

MAGDUOZC4
MAGDUO4 Zone Expansion Card
- ■ Expands a 4 zone MAGDUO4 to an 8 zone panel

MAGDUOCC4
MAGDUO4 Zone Conventional Card
- ■ Expands a 4 zone MAGDUO4 to include 4 zones for conventional detectors and call points

MAGDUOSHDRT
MAGDUO Head Removal Tool
- ■ Required to remove the chamber from the MAGDUO FlexiPoint detectors, sounders and strobes
- ■ The head removal tool may be attached to an extendable pole

MAGDUOSHDSS   MAGDUOSW   MAGDUOSHD

Zone 1

MAGDUOCP

Zone 2

MAGDUOSHDSS   MAGDUOSW   MAGDUOSHD
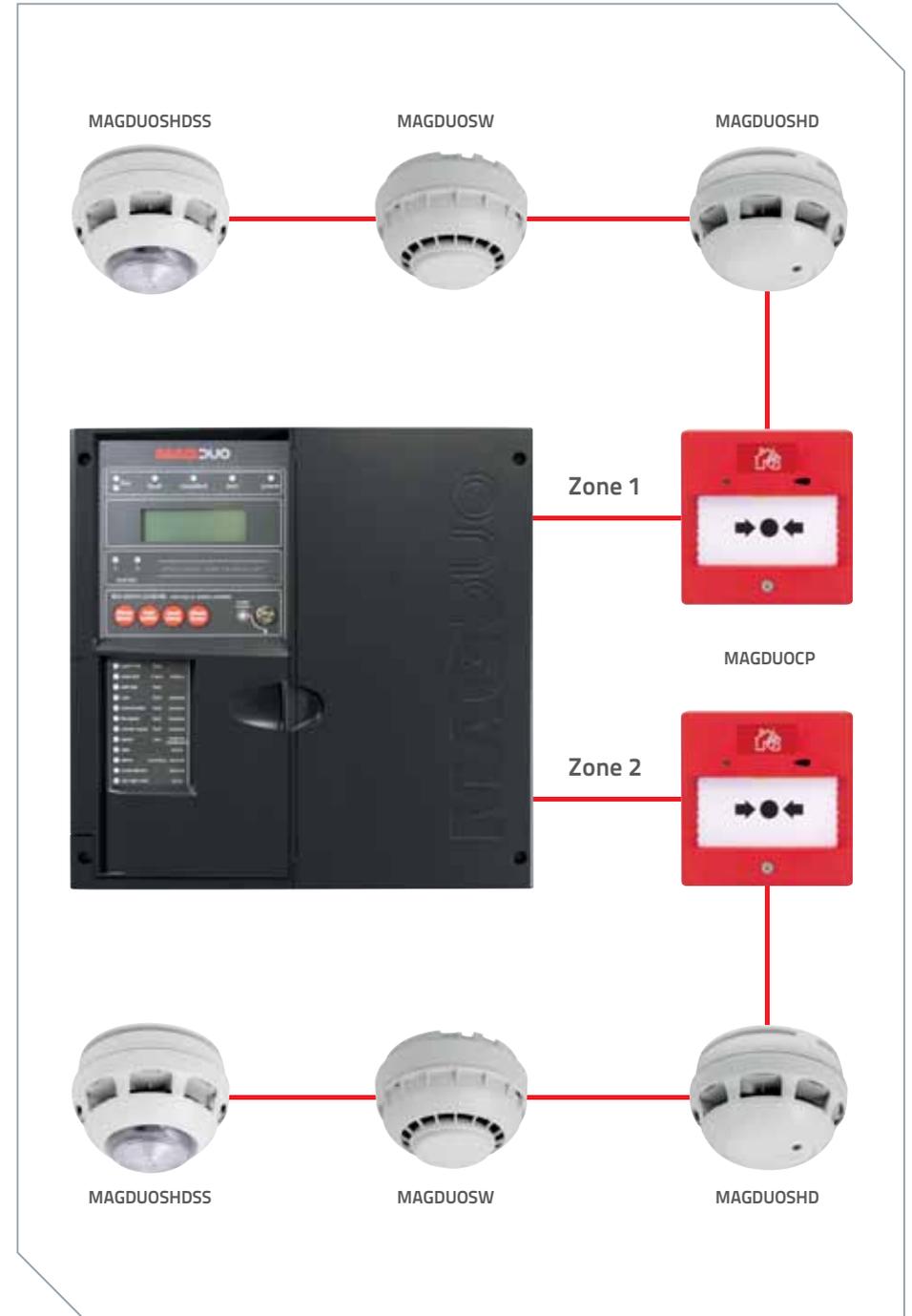
MAGPRO16 White MAGPRO16G Grey
Addressable 16 Zone Fire Panel

- 16 Zones
- Maximum 250 devices per loop
- Memory Log: 10,000 events
- Networkable up to 32 Panels
- Class change function
- 4 x 40 character LCD display
- Free programming software (On completion of training – UK)
- Micro USB port for PC connection
- Loop & battery calculator software included
- Certified to EN54–2/4

16 zone addressable fire alarm panel supplied with 1 loop. Expandable to 2 loops using MAGPRO16-L250.
A maximum of 250 devices can be connected to each loop.

Inputs

Loops	1 expandable to 2
Devices Per Loop	250
Protocol	MAGPRO

Power

Mains Fail Consumption	125mA DC – 1 LOOP 213mA DC – 2 LOOP
Mains Supply	230V AC + 10%/ –15%
Max Loop Current	500mA DC
Backup	1x12V 18Ah

Outputs

2 Sounders	24v DC @ 500mA
4 Programmable Relays	24v DC @ 15A
3 Monitored Outputs	24v DC @ 100mA
3 Monitored Inputs	Volt free contacts

Environment

Working Temperature	–5°C TO +40°C
Storage	-10°C TO 60°C
Humidity	0 - 95%
Weight	4.2KG (Without Battery)
Dimensions	320 x 220 x 80mm

MAGPRO16-L250
Single Loop Expander for 250 Devices

MAGPRO-PROG Programming Tool
For more info see page 121

MAGPRO96 White MAGPRO96G Grey
Addressable 96 Zone Fire Panel

- 96 Zones
- Maximum 250 devices per loop
- Memory Log: 10,000 events
- Networkable up to 32 Panels
- 320 x 240 pixel touch screen display
- Free programming software (On completion of training – UK)
- Micro USB port for PC connection
- Loop & battery calculator software included
- Certified to EN54–2/4

96 zone addressable fire alarm panel supplied with 1 loop. Expandable to 4 loops using additional MAGPRO-L250's.
A maximum of 250 devices can be connected to each loop.

Inputs

Loops	1 expandable to 4
Devices Per Loop	250
Protocol	MAGPRO

Power

Mains Fail Consumption	285mA DC - 1 LOOP 360mA DC - 2 LOOP 435mA DC - 3 LOOP 510mA DC - 4 LOOP
Mains Supply	230V AC + 10%/ –15%
Max Loop Current	500mA DC
Backup	1x12V 18Ah

Outputs

1 Sounder	24v DC @ 300mA
4 Programmable Relays	24v DC @ 15A
2 Monitored Outputs	24v DC @ 300mA
1 Auxillary Output	24v DC @ 300mA
1 Fault Output	24v DC @ 300mA

Environment

Working Temperature	–5°C TO +40°C
Storage	-10°C TO 60°C
Humidity	0 - 95%
Weight	6KG (Without Battery)
Dimensions	456 x 350 x 125mm

MAGPRO96-L250
Single Loop Expander
for 250 Devices

MAGPRO96GBB
Battery Expansion Box
for MAGPRO96G

- Certified according to EN 54-4
- Supports 2x 12V/18Ah

MAGPRO-PROG Programming Tool
For more info see page 121

*Recommend a Boxed Power Supply with battery backup

MAGPRO-REP
Addressable Repeater Panel

- Wall-mount design
- Only compatible with MAGPRO16 Ver2.8 and higher
- Compatible with MAGPRO96
- Requires 24VDC External Power Supply
- Max consumption of 0.11A (110mA)
- Each panel in network will require a MAGPRO-NIC
- Maximum of 32 panels in the network
- 1000m distance from MAGPRO-REP to MAGPRO Panel
- Dimensions 200 x 330 x 48mm
- Ring type network
- 10,000 event log within the repeater

Power	
From a MAGPRO Panel	AUX / GND
External*	24VDC +/-4 VDC
Consumption	110mA
Input	
Communication	RS485
Max Length Between Panels	1000m
Output	
Communication	RS485
Max Length Between Panels	1000m
Technical spec	
Memory LOG	10,000 events
Network type	Ring
MAGPRO16 Firmware Compatibility	Ver 2.8 or higher
MAGPRO96 Firmware Compatibility	Ver 4.2 or higher
Max number of panels	32
Connection to MAGRO Panel	Via MAGPRO-NIC
Environment	
Working Temperature	-10°C to +50°C
Humidity	95%
Weight	770g
Dimension	200 x 330 x 48mm

MAGPRO-NIC NETWORK INTERFACE CARD

- Networks between MAGPRO16/96 & REP Panels
- MAGPRO16 Firmware REV 2.8 or higher Required
- MAGPRO96 Firmware REV 4.2 or higher Required
- RS-485 Communication protocol
- On-board LED indication
- Power supply from the panel
- Programming from the panel
- 1000m transmission distance between modules

MAGPRO-SD1
Addressable Smoke Detector

- Sensitivity level selectable from the control panel High/Normal/Middle/Low
- Protected area - 120m2
- Installation height - up to 16m
- Day/Night mode
- Low profile design
- LED indication with 360° visibility
- Certified to EN54-7
- Base ordered separately see MAGPRO-DB, MAGPRO-DBS and MAGPRO-DBS

MAGPRO-HD1
Addressable Heat Detector

- Can work as a fixed temperature or rate of rise detector
- Class A1R, A2S, BS selectable from the control panel
- Day/Night mode
- Protected area - up to 35m2
- Installation height - up to 7.5m
- Low profile design
- LED indication with 360° visibility
- Certified to EN54-5
- Base ordered separately see MAGPRO-DB, MAGPRO-DBS and MAGPRO-DBS

MAGPRO-HSD1
Combined Smoke & Heat Detector

- Sensitivity selectable from the control panel -High/Normal/Middle/Low
- Class A1R temperature sensor (according to EN54-5)
- Protected area - up to 120m2
- Installation height - up to 16m
- Day/Night mode
- Low profile design
- LED indication with 360° visibility
- Certified to EN54-5/7
- Base ordered separately see MAGPRO-DB, MAGPRO-DBS and MAGPRO-DBSS

MAGPRO-DB
Detector Base

MAGPRO-DBS
Sounder Base

MAGPRO-DBSS
Sounder Strobe Base

MAGPRO-DBSC
Detector Base Cover Blank Plate

MAGPRO-WS
ADDRESSABLE SOUNDER

- Piezo sounder
- Adjustable sound level – 92dB/100 dB
- 32 sound types selectable from the panel
- Loop synchronization & powered
- Certified to EN54-3
- Base MAGPRO-DB ordered separately

MAGPRO-WSS
SOUNDER STROBE

- Piezo sounder
- Adjustable sound level – 92dB/100 dB
- 32 sound types selectable from the panel
- Loop synchronization & powered
- Certified to EN54-3
- Base MAGPRO-DB ordered separately

MAGPRO-CPIP67
IP67 RATED MANUAL CALL POINT

- Resettable call point
- Certified to EN54-11-A
- Built in isolator
- IP67 Rated

MAGPRO-CP
MANUAL CALL POINT

- Resettable call point
- Certified to EN54-11-A
- Built in isolator
- IP40 Rated
- Optional protective plastic cover **MAGPRO-CPC**

MAGPRO-WSS23
SOUNDER STROBE

- Certified to EN54-23
- Piezo sounder
- Adjustable sound level – 92dB/100 dB
- 32 sound types selectable from the panel
- Loop synchronization & powered
- Base MAGPRO-DB ordered separately

MAGPRO-WSBIP65
Addressable Fire Alarm Sounder IP65 Base

- Waterproof deep base for MAGPRO addressable sounders
- Only for use with models; MAGPRO-WS, WSS and WSS23
- Robust IP65 Waterproof base suitable for wall mounting in aggressive outdoor environments
- Includes 2x IP65 cable glands, O-ring & gasket for secure installation

MAGPRO-CPC
Plastic Cover for MAGPRO-CP (Pack of 5)

MAGPRO-PROG
PROGRAMMING TOOL

For reading/writing addresses to Callpoints, detectors,sounders and modules.

- Built in MAGPRO-DB standard base
- Mains or battery powered (4 x 1.5V not included)
- Programming cable included

MAGPRO-IM

LOOP ISOLATOR MODULE

- Protection against short circuit
- Auto reset after short circuit
- 4 x cable entry points
- A maximum of 30 devices between two isolators
- Certified to EN54-17

BAT18

12V – 17.0AH SLA BATTERY

- 12V 17ah SLA back up battery

MAGPRO-MINI

1 INPUT MODULE

- Single volt free contact
- Compact size – 58mm x 25mm x 12mm
- Example applications – Integration of third party control devices
- Compliant to EN54-18
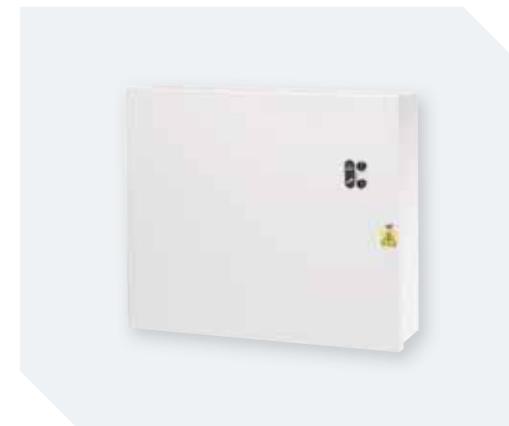
24V BOXED POWER SUPPLIES

BPS-1 24V 1 Amp Boxed Power Supply

BPS-2 24V 2 Amp Boxed Power Supply

BPS-5 24V 5 Amp Boxed Power Supply

Nb Boxed power supplies require 2 x 12V batteries (not supplied)

ZRL2

LED INDICATOR PLATE

- Flash rate - permanent
- Current - 28 mA Max
- Operating Voltage Range – 5-28V DC

DOOR HOLDERS

DR916-24 24V DC Door Holder

DR916-240 240V AC Door Holder

DR916-FMB Floor Mounting Bracket

DR916-KP Spare Keeper Plate

MAGPRO-R MAINS RELAY OUTPUT MODULE WITH ISOLATOR

- Suitable for control of 240VAC voltage circuits up to 5A
- Loop powered
- Built in isolator
- Compliant to EN54-18
- Example application – AC 240V door magnet override

MAGPRO-0i4O 4 OUTPUT MODULE WITH ISOLATOR

- 4 Relay outputs
- Loop powered
- Built in isolator
- Certified to EN5-18
- Example applications – Shutdown of ventilation equipment and door override

MAGPRO-4i0O 4 INPUT MODULE WITH ISOLATOR

- 4 Monitored Inputs
- Loop powered
- Built in isolator
- Certified to EN54-18
- Example applications – Input from external equipment, extinguishing/sprinkler panel

MAGPRO-2i2O 2 INPUT 2 OUTPUT MODULE WITH ISOLATOR

- 2 Monitored Inputs
- 2 Outputs
- Loop powered
- Built in isolator
- Certified to EN54-18
- Example application – Link to monitoring station signalling devices

MAGPRO-1OSi CONVENTIONAL SOUNDER MODULE WITH ISOLATOR

- Integrate conventional sounders into an addressable system
- Loop powered
- Built in isolator
- Requires 24V PSU
- Compliant to EN54-18

MAGPRO-CZM CONVENTIONAL ZONE MODULE WITH ISOLATOR

- Integrate conventional detectors into an addressable system
- Max number of detectors in one zone – 32
- Loop powered
- Built in isolator
- Certified to EN54-18
- Example applications – Integrate conventional equipment i.e. beam detectors

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- MAG2P 2 zone fire panel
- 6 x PSD-2 Optical smoke detectors complete with bases
- 2 x SCP-2R Resettable call points
- 2 x BA-2R Banshee sounders
- 1 x BAT7 12v 7.0ah SLA battery

FLK2P
2 Zone Conventional Fire Alarm Kit

- MAG4P 4 zone fire panel
- 5 x PSD-2 Optical smoke detectors complete with bases
- 1 x FHD-2 Fixed temperature heat detector complete with base
- 2 x SCP-2R Resettable call points
- 2 x BA-2R Banshee sounders
- 1 x BAT7 12v 7.0ah SLA battery

FLK4PH
4 Zone Conventional Fire Alarm Kit

MAG2P
2 Zone Fire Panel

CPR COMPLIANT · EN54 · CE · Made in EU · RoHS COMPLIANT 2002/95/EC

- 2 programmable zones
- Active end of line monitoring and head removal
- 30 fire detectors per zone
- Unlimited number of call points per zone
- Integral sound alarm button
- 'Class change' facility
- Enable/disable security key
- One man walk test facility
- Volt free fire change over relay
- Volt free fault change over relay
- Individual sounder circuit fault ID
- Individual zone/sounder isolate
- CE certified to EN54 P2/4
- Requires only 1x12v battery
- MAG2P - ABS casing

Inputs	
Max Detectors Per Zone	30
Thresholds for Zone Conditions	0 - 2 mA (Fault condition) 2 - 6 mA (Normal condition) 6 - 110 mA (Fire condition) 110 mA - Short (Fault condition)
Power	
Mains Fail Consumption	50mA
Mains Supply	230 VAC ± 10%
Standby Supply	1 x 7ah 12V S.L.A. Battery
Power Availability	0.7 amps
Outputs	
Sounder 1	24V (max 300mA fused)
Sounder 2	24V (max 300mA fused)
Fault/Fire Relay	Volt free 500mA @ 24V (max load)
Auxiliary Output	24VDC (300mA fused)
Environment	
Working Temperature	0 to 40°C
Storage Temperature	-20 to 60°C
Humidity	0 - 95%
Dimensions MAG2P	340 x 290 x 100mm
Dimensions MAG2	200 x 290 x 80mm
Weight	MAG2P - 2.1Kg MAG2 - 2.7Kg

MAG2
2 Zone Fire Panel - Metal Casing

MAGBAR2/4
Spare Barrel & key for use with MAG 2 & 4

EN54 · CE · Made in EU · RoHS COMPLIANT 2002/95/EC · CPR COMPLIANT

MAG4P
4 Zone Fire Panel

- 4 programmable zones
- Active end of line monitoring and head removal
- 30 fire detectors per zone
- Unlimited number of call points per zone
- Integral sound alarm button
- 'Class change' facility
- Enable/disable security key
- One man walk test facility
- Volt free fire change over relay
- Volt free fault change over relay
- Individual sounder circuit fault ID
- Individual zone/sounder isolate
- CE certified to EN54 P2/4
- Requires only 1x12v battery
- MAG4P - ABS casing

Inputs	
Max Detectors per Zone	30
Thresholds for Zone Conditions	0 - 2 mA (Fault condition) 2 - 6 mA (Normal condition) 6 - 110 mA (Fire condition) 110 mA - Short (Fault condition)
Power	
Mains Fail Consumption	50mA
Mains Supply	230 VAC ± 10%
Standby Supply	1 x 7ah 12V S.L.A. Battery
Power Availability	0.7 amps
Outputs	
Sounder 1	24V (max 300mA fused)
Sounder 2	24V (max 300mA fused)
Fault/Fire Relay	Volt free 500mA @ 24V (max load)
Auxiliary Output	24VDC (300mA fused)
Environment	
Working Temperature	0 to 40°C
Storage Temperature	-20 to 60°C
Humidity	0 - 95%
Dimensions MAG4P	340 x 290 x 100mm
Dimensions MAG4	320 x 220 x 80mm
Weight	MAG4P - 2.5Kg MAG4 - 3.5Kg

MAG4
4 Zone Fire Panel - Metal Casing

MAGBAR2/4
Spare Barrel & key for use with MAG 2 & 4

MAGZC-816
4 Zone Expander Card

MAGSC-816
4 Zone Sounder Expander Card

MAGFMK
Flush Mount Kit for MAG816

MAGBAR816
Spare Barrel & Key

MAG816
8 Zone Fire Panel Expandable to 16 Zones

- Up to 16 programmable zones
- Up to 16 sounder circuits
- Active end of line monitoring and head removal
- Up to 32 fire detectors per zone
- Unlimited number of call points per zone
- Integral sound alarm button
- Repeater facility and 'Class change' facility
- Enable/disable security key
- One man walk test facility
- Volt free fire/fault change over relay
- Individual sounder circuit fault ID
- Individual zone/sounder isolate
- Alarm delay options
- CE certified to EN54 P2/4
- Requires 1 x 12V battery
- ABS casing

Inputs

Max. Detectors per Zone	32
Thresholds for Zone Conditions	0 - 2 mA (Fault condition) 2 - 10 mA (Normal condition) 10 - 110 mA (Fire condition) 110mA - + Short (Fault condition)

Power

Mains Fail Consumption	130mA (1 zone expander) 260mA (4 zone expanders)
Mains Supply	230 VAC ± 10%
Standby Supply	1 x 18ah 12V S.L.A. Batteries
Power Availability	0.7 amps

Outputs

On Board Sounder Circuits (4)	300mA @ 24V fuse resettable (PTC)
Sounder Expander Cards (4)	150mA @ 24V fuse resettable (PTC)
Fault/Fire Relay	Volt free 500mA @ 24V (max load)
Auxiliary Output	24VDC (300mA fused)

Environment

Working Temperature	0 to 40°C
Storage Temperature	-20 to 60°C
Humidity	0 to 93%
Dimensions (mm)	456 x 350 x 125mm
Weight	4.2 KG

FIRE ZONE / SOUNDER OUTPUT MATRIX

Number of zone cards fitted	2	3	4	2	3	1	2	1
Number of sounder cards fitted	0	0	0	1	1	2	2	3
Number of zones	8	12	16	8	12	4	8	4
Number of sounder outputs	4	4	4	8	8	12	12	16

NB The MAG816 features 4 sounder circuits. Space is provided for up to 4 extra expansion cards of any combination. Sounder cards carry 4 sounder circuits, Zone cards carry 4 fire zones. The MAG816 is supplied as standard with 8 fire zones and 4 sounder circuits.

CSD2
Combined Optical Smoke & Fixed Heat Detector

Type	Conventional
Approval	EN54-7, EN54-5
Class	A1R
Operating Voltage	9 - 30VDC
Standby Current @ 24v	< 60µA
Alarm Current @ 24v	49mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Simulated Smoke/ Heat

FHD2
Fixed Temperature Heat Detector

Type	Conventional
Approval	EN54-5
Class	A2S
Operating Voltage	9 - 30VDC
Standby Current @ 24v	< 60µA
Alarm Current @ 24v	49mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Heat Source

These MAGfire detectors have been developed to provide a perfect compliment to the MAGfire MAG panels. All detectors are supplied with a diode base. Fully compliant with CPR and approved to EN54 standards.

PSD2
Optical Smoke Detector

Type	Conventional
Approval	EN54-7
Class	N/A
Operating Voltage	9 - 30VDC
Standby Current @ 24v	< 60µA
Alarm Current @ 24v	49mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Simulated Smoke

RHD2
Rate of Rise Heat Detector

Type	Conventional
Approval	EN54-5
Class	A1R
Operating Voltage	9 - 30VDC
Standby Current @ 24v	< 60µA
Alarm Current @ 24v	49mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Heat Source

CSD212
Combined Optical Smoke & Fixed Heat Detector

Type	Conventional
Approval	EN54-7, EN54-5
Class	A1R
Operating Voltage	9 - 30VDC
Standby Current @ 12v	< 50µA
Alarm Current @ 12v	29mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Simulated Smoke/ Heat

FHD212
Fixed Temperature Heat Detector

Type	Conventional
Approval	EN54-5
Class	A2S
Operating Voltage	9 - 30VDC
Standby Current @ 12v	< 50µA
Alarm Current @ 12v	29mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Heat Source

The new range of MAGfire detectors have been developed to provide a perfect compliment to 12V hardwire intruder alarm systems. All detectors are supplied with a relay base. Fully compliant with CPR and approved to EN54 standards.

PSD212
Optical Smoke Detector

Type	Conventional
Approval	EN54-7
Class	N/A
Operating Voltage	9 - 30VDC
Standby Current @ 12v	< 50µA
Alarm Current @ 12v	29mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Simulated Smoke

RHD212
Rate of Rise Heat Detector

Type	Conventional
Approval	EN54-5
Class	A1R
Operating Voltage	9 - 30VDC
Standby Current @ 12v	< 50µA
Alarm Current @ 12v	29mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Heat Source

- Up to 50m range
- Expandable to 120m with the BD1LRK
- Integral laser alignment
- Auto Align automatic beam alignment
- 24v DC 35mA max current draw
- EN 54-12 approved

BD1
50m Beam Detector expandable up to 120m

- Kit for extending BD1 range up to 120m

BD1LRK
BD1 Reflective Long Range Kit

SCP2R
Resettable Call Point

- Surface or flush mounting
- Complete with surface back box
- Spare cover available – SCP2R-CVR

SCP2R-CVR
Plastic Cover for SCP2R (Pack of 5)

ZRL2
LED Indicator Plate

- Flash rate – permanent
- Current – 28 mA Max
- Operating Voltage Range – 5-28V DC

BA-2W
White Banshee Sounder

- Sound Output @ 1m 89 – 110 dBA
- Current – 3-39 mA
- IP Rating – IP45

SCP2RIP67
IP67 Rated Manual Call Point

- Resettable call point
- Certified to EN54-11-A
- IP67 Rated

SCP2RK
Reset Key

Spare Keys for MAGPRO-CP,MAGPRO-CPIP67, SCP2R & SCP2RIP67 (Pack of 5)

BA-2R
Red Banshee Sounder

- Sound Output @ 1m 89 – 110 dBA
- Current – 3-39 mA
- IP Rating – IP45

CB-1R
Banshee Sounder and Strobe

- Sound Output – 89-110 dBA
- Flash rate – 60/minute
- Current – 40 mA plus sounder
- IP Rating – IP45

CB-1RIP66
Waterproof Sounder and Strobe

- Sound Output - 89-110 dBA
- Flash rate - 60/minute
- Current - 40 mA plus sounder
- IP Rating – IP66

FS1L
LED strobe

- Flash rate - 60/minute
- 12V & 24V (80mA & 30mA)
- IP Rating - IP65

MAGSWS
White Surface Sounder

- Sound Output @ 1m 86 - 96 dBA
- Current - 6mA @ 24VDC
- IP Rating - IP21

MAGSRS
Red Surface Sounder

- Sound Output @ 1m 86 - 96 dBA
- Current - 6mA @ 24VDC
- IP Rating - IP21

MAGBSW
White Bedhead Sounder

- Sound Output @ 1m 86 - 96 dBA
- Current - 6mA @ 24VDC
- IP Rating - IP21

MAGBSR
Red Bedhead Sounder

- Sound Output @ 1m 86 - 96 dBA
- Current - 6mA @ 24VDC
- IP Rating - IP21

MAGSSTRWS
White Surface Sounder with Strobe

- Sound Output @ 1m 86 - 96 dBA
- Flash Rate – 40/Minute
- Current - 14mA @ 24VDC
- IP Rating - IP21

MAGSSTRRS
Red Surface Sounder with Strobe

- Sound Output @ 1m 86 - 96 dBA
- Flash Rate – 40/Minute
- Current - 14mA @ 24VDC
- IP Rating - IP21

IFB
Internal Fire Bell

- Sound Output – 95 dBA
- Current – 11 mA
- 6" diameter
- IP Rating – IP21C

SD-DB
Detector Deep Base

- Allows for mounting in surface cable entry application or on a rough, uneven surface
- Can be used as an adaptor plate for addressable sounder base
- Compatible with: MAGPRO-DB, MAGPRO-DBS, MAGPRO-DBSS, PSD2, CSD2, PSD212, CSD212

DBS-1
Detector Base Sounder

- Sound Output @ 1m – 93 dBA
- Current - 18 mA

24V BOXED POWER SUPPLIES

BPS-1 24V 1 Amp Boxed Power Supply

BPS-2 24V 2 Amp Boxed Power Supply

BPS-5 24V 5 Amp Boxed Power Supply

Nb Boxed power supplies require 2 x 12V batteries (not supplied)

WFB-1
Weatherproof Fire Bell

- Sound Output – 95 dBA
- Current – 25 mA
- 8" diameter
- IP Rating – IP55

BA-DB
Base for sounder BA-2R, BA-2W and CB-1R to make IP Rated

BASE FOR SOUNDER BA-2R, BA-2W AND CB-1R TO MAKE IP RATED

BAT32
12V – 3.2AH SLA BATTERY

- 12V 3.2ah SLA back up battery

BAT7
12V – 7.0AH SLA BATTERY

- Back up battery for EVBPSBB, MAG2P, MAG2, MAG4P and MAG4

BAT18
12V – 17.0AH SLA BATTERY

- 12V 17ah SLA back up battery

MAGLB
FIRE SAFETY LOG BOOK

- Ensure system records are maintained in accordance with BS5839-1
- Contains test procedures, frequencies of service & maintenance requirements
- Clear data tables for evidence of system services, tests and inspections
- A4

MAGR
8 ZONE RELAY MODULE MAG816

- Expander module providing 8 relay switches for zone activation
- Separate zone (max. 8) activation in fire condition
- N.O & N.C options

MAGAUXISORP
AUXILIARY ISOLATION SWITCH (RED)

- Suitable for mains switching up to 8 amp
- Secure key switch enables safety for maintenance and offers protection against tamper
- External trigger option
- Programmable internal buzzer for activation
- Clear operation LED indication
- Surface or recess mount

MAGAUXISOWP
AUXILIARY ISOLATION SWITCH (WHITE)

- Suitable for mains switching up to 8 amp
- Secure key switch enables safety for maintenance and offers protection against tamper
- External trigger option
- Programmable internal buzzer for activation
- Clear operation LED indication
- Surface or recess mount

DOOR HOLDERS

| DR916-24 | 24V DC Door Holder |
| DR916-240 | 240V AC Door Holder |

DR916-KP   Spare Keeper Plate
- For use with DR916-24 and DR916-240

DR916-FMB
FLOOR MOUNTING BRACKET

- For use with DR916-24 and DR916-240

MAGISORP
FIRE ISOLATION SWITCH (RED)

- Complies with BS5839 Part1
- Isolates the mains voltage supply to the fire system
- Enables safety for maintenance and offers protection against tamper
- Both the live and neutral supply is switched

MAGISOWP
FIRE ISOLATION SWITCH (WHITE)

- Complies with BS5839 Part1
- Isolates the mains voltage supply to the fire system
- Enables safety for maintenance and offers protection against tamper
- Both the live and neutral supply is switched

MAGEOL
ZONE MODULE

- End of line zone module (Pack of 5)
- For conventional panels

MAGEOL-S
SOUNDER MODULE

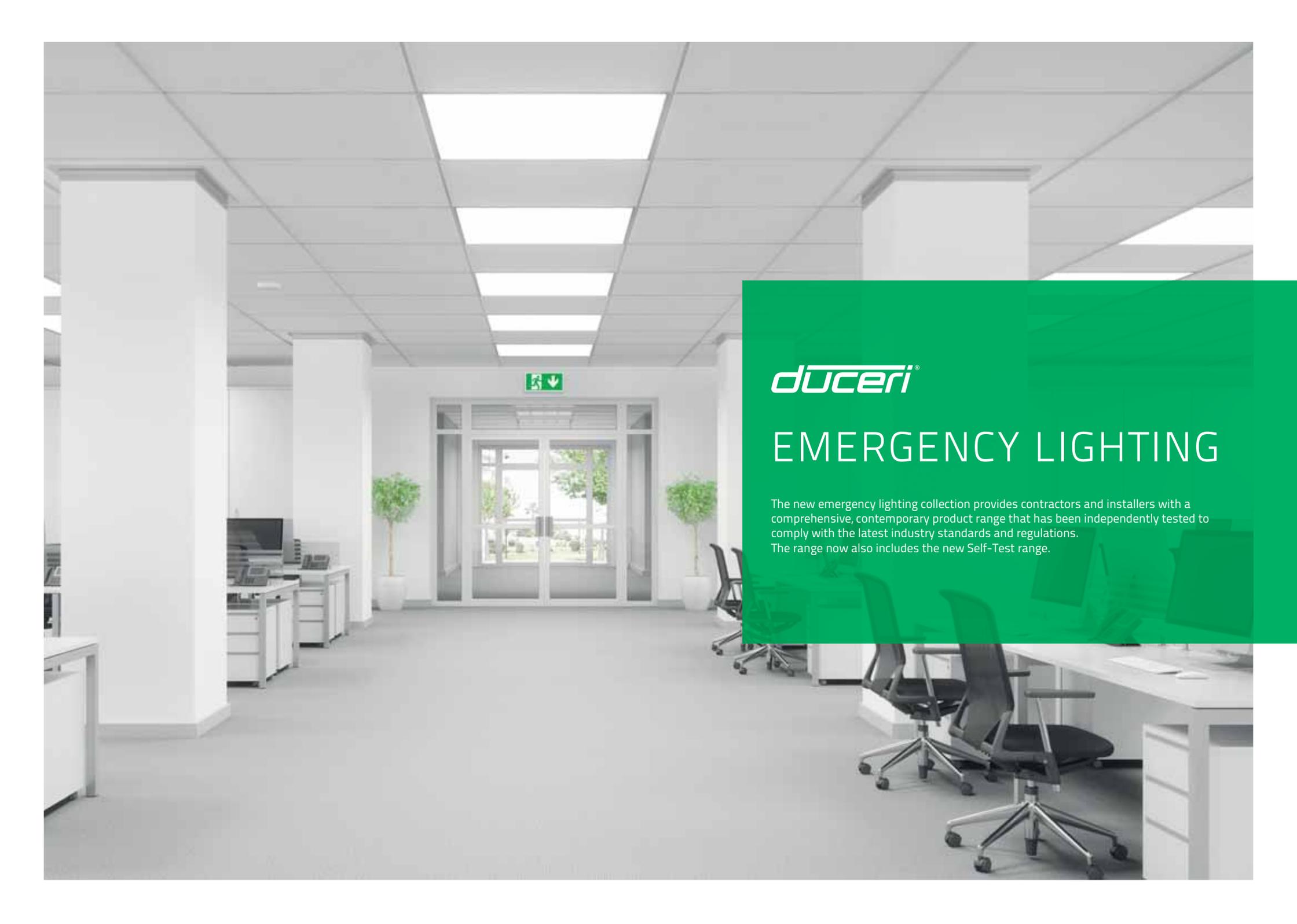- End of line sounder module (Pack of 5)
- For conventional panels

MAGISOPFUSE
FIRE ISOLATION SWITCH SPARE FUSES

- Spare fuses for MAGISORP - Fire Isolator Switch

MAGISORPK
FIRE/AUXILIARY ISOLATION SWITCH SPARE KEY

- Spare key for MAGISORP & MAGAUXISORP

duceri®

EMERGENCY LIGHTING

The new emergency lighting collection provides contractors and installers with a comprehensive, contemporary product range that has been independently tested to comply with the latest industry standards and regulations.
The range now also includes the new Self-Test range.

SELF TEST ✓

- Self Test Emergency Light
- 5500K Colour Temperature
- Viewing Distance - 25m
- SMD 2835 LED lamp
- Steel housing – White Finish
- Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd battery
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Dimensions - 390 x 190 x 60mm
- Weight - 1.3Kg

EMBAT3.6V1500
3.6V 1500mAH Battery

EMSTLED3WMEXBOX
3W LED Maintained Emergency Sign

EMSTLED3WMEXBOXU
3W LED Maintained
Emergency Sign UP

EMSTLED3WMEXBOXD
3W LED Maintained
Emergency Sign DOWN

EMSTLED3WMEXBOXL
3W LED Maintained
Emergency Sign LEFT

EMSTLED3WMEXBOXR
3W LED Maintained
Emergency Sign RIGHT

SELF TEST ✓

- Self Test Emergency Light
- Interchangeable Open & Corridor Lens
- 5500K Colour Temperature
- High Power 3W LED
- Maintained & Non–Maintained Operation
- Polycarbonate Housing
- Ceiling or Wall Mounted - flush kit available
- Charge and Discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1800mAH NI–CAD Battery
- IP44 Ingress Protection Rating
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Emergency Light Output -147 Lumens (Open lens)
- Emergency Light Output -138 Lumens (Corridor lens)
- Weight- 0.4Kg

INTERCHANGEABLE
LENS INCLUDED

EMSTSDLFLUSH
EMST3WMSDL Flush kit

EMST3WMSDL
LED 3W Emergency Open and Corridor Lens Downlight

EMBAT3.6V1800SER
3.6V 1800mAH Battery

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	Open 2.4, Corridor 0.9	Open 7.9, Corridor 5.8	Open 7.9, Corridor 7.9	Open 7.9, Corridor 10.0	Open 2.4, Corridor 4.6
2.5m	Open 2.5, Corridor 0.5	Open 6.7, Corridor 2.4	Open 7.0, Corridor 7.1	Open 7.4, Corridor 11.9	Open 2.6, Corridor 5.4
3.0m	Open 1.0, Corridor 0.5	Open 6.8, Corridor 2.4	Open 6.9, Corridor 8.1	Open 6.9, Corridor 13.7	Open 2.8, Corridor 6.1

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

SELF TEST ✓

- Self Test Emergency Light
- 5500K Colour Temperature
- Maintained & Non-Maintained Operation
- SMD 2835 LED Lamp
- Polycarbonate Housing
- Ceiling or Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAH NI–CAD Battery
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Mains Light Output - 121 Lumens
- Emergency light Output -119 Lumens
- Dimensions - 345 x 110 x 60mm
- Weight - 0.6Kg

EMBULKLGD Emergency Bulkhead Legend
EMBULK2FLUSH Bulkhead Flush Kit
EMBAT3.6V1500SER 3.6V 1500mAH Battery

EMSTLED3WMBULK
3W LED IP65 Maintained Emergency Bulkhead

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	3.1	7.4	6.5	5.6	2.4
2.5m	3.3	8.3	7.3	6.3	2.6
3.0m	3.4	9.0	8.0	6.9	2.7

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

SELF TEST ✓

- Self Test Emergency Light
- 5500K Colour Temperature
- High Power 3W LED
- Aluminium Bezel
- Recessed Mounting
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1800mAH NI–CAD Battery
- IP20 Rating
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Emergency Light Output -138 Lumens
- Weight- 0.4Kg

35MM CUTOUT

EMBAT3.6V1800SER
3.6V 1800mAH Battery

EMST3WNMDLK
LED 3W Emergency Open Lens Downlight

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	2.9	7.2	7.1	7.2	2.8
2.5m	3.1	7.7	7.6	7.7	2.9
3.0m	3.1	8.1	8.0	8.0	3.0

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

■ 5500K colour temperature
■ 2 x 2W 3 SMD 2835 LED Lamps
■ Polycarbonate Housing & Heads
■ Wall mounted
■ Charge and Discharge Protection
■ Green LED Indicator
■ 3 Hours Emergency Duration
■ 3.6V 1800mAh Ni-Cd Battery
■ BS EN 60598-2-22 Standards
■ Emergency light output – 272 Lumens
■ IP20 Ingress Protection
■ Dimensions – 273mm x 260mm x 60mm
■ Weight – 1.35kg

EMBAT3.6V1800SER
3.6V 1800mAH Battery

EMNMIP20SPOT
LED IP20 Non Maintained Emergency Twin Spot

■ 5500K colour temperature
■ 2 x 6 SMD 2835 LED Lamps
■ Polycarbonate housing & heads
■ Ceiling or wall mounted
■ Charge and discharge protection
■ Green LED Indicator
■ 3 Hours Emergency Duration
■ 3.6V 3000mAH NI-CAD Battery
■ BS EN 60598-2-22 Standards
■ Emergency light output – 309 Lumens
■ Dimensions – 305 x 280 x 85mm
■ Weight – 1.85Kg

EMBAT3.6V3000
3.6V 3000mAH Battery

EMNMIP40SPOT
LED IP40 Non Maintained Emergency Twin Spot

■ 5500K colour temperature
■ 2 x 2W 3 SMD 2835 LED Lamps
■ Polycarbonate Housing & Heads
■ Wall mounted
■ Charge and Discharge Protection
■ Green LED Indicator
■ 3 Hours Emergency Duration
■ 3.6V 1800mAh Ni-Cd Battery
■ BS EN 60598-2-22 Standards
■ Emergency light output – 272 Lumens
■ IP20 Ingress Protection
■ Dimensions – 273mm x 260mm x 60mm
■ Weight – 1.35kg

EMBAT3.6V1800SER
3.6V 1800mAH Battery

EMNMIP20BSPOT
LED IP20 Non Maintained Emergency Twin Spot – Black

■ 5500K colour temperature
■ 2 x 6 SMD 2835 LED Lamps
■ Polycarbonate housing & heads
■ Ceiling or wall mounted
■ Charge and discharge protection
■ Green LED Indicator
■ 3 Hours Emergency Duration
■ 3.6V 3000mAH NI-CAD Battery
■ BS EN 60598-2-22 Standards
■ Emergency light output – 309 Lumens
■ Dimensions – 305 x 280 x 85mm
■ Weight – 1.85Kg

EMBAT3.6V3000
3.6V 3000mAH Battery

EMNMIP40BSPOT
LED IP40 Non Maintained Emergency Twin Spot

■ Self Test Emergency Light
■ 5500k Colour Temperature
■ 2 x 15 SMD 2835 LED Lamps
■ Polycarbonate Housing & Heads
■ Wall Mounted
■ Charge and Discharge Protection
■ Green LED Indicator
■ 3 Hours Emergency Duration
■ 9.6V 2200mAH NI-CAD Battery
■ BS EN 60598-2-22 Standards
■ BS EN 62034 Standards
■ Emergency Light Output – 535 Lumens
■ Dimensions – 305 x 306 x 70mm
■ Weight – 1.85Kg

EMBAT9.6V2200
9.6V 2200mAH Battery

■ 5500K colour temperature
■ 2 x 3W 6 SMD 2835 LED Lamps
■ Polycarbonate Housing & Heads
■ Wall mounted
■ Charge and Discharge Protection
■ Green LED Indicator
■ 3 Hours Emergency Duration
■ 3.6V 3500mAh Ni-Cd Battery
■ BS EN 60598-2-22 Standards
■ Emergency light output – 380 Lumens
■ IP65 Ingress Protection
■ Dimensions – 301mm x 280mm x 90mm
■ Weight – 1.65kg

EMBAT3.6V3000
3.6V 3000mAH Battery

EMST9WNMSPOT
LED IP65 Non Maintained Emergency Twin Spot

EMNMIP65SPOT
LED IP65 Non Maintained Emergency Twin Spot

■ 5500K Colour Temperature
■ 2 x 15 SMD 2835 LED Lamp
■ Polycarbonate housing & heads
■ Ceiling or wall mounted
■ Charge and discharge protection
■ Green LED Indicator
■ 3 Hours Emergency Duration
■ 9.6V 2200mAH NI-CAD Battery
■ BS EN 60598-2-22 Standards
■ Emergency light output – 535 Lumens
■ Dimensions – 305 x 280 x 85mm
■ Weight – 1.85Kg

EMBAT9.6V2200
9.6V 2200mAH Battery

■ 5500K colour temperature
■ 2 x 3W 6 SMD 2835 LED Lamps
■ Polycarbonate Housing & Heads
■ Wall mounted
■ Charge and Discharge Protection
■ Green LED Indicator
■ 3 Hours Emergency Duration
■ 3.6V 3500mAh Ni-Cd Battery
■ BS EN 60598-2-22 Standards
■ Emergency light output – 380 Lumens
■ IP65 Ingress Protection
■ Dimensions – 301mm x 280mm x 90mm
■ Weight – 1.65kg

EMBAT3.6V3000
3.6V 3000mAH Battery

EMD9WNMSPOT2
LED IP65 Non Maintained Emergency Twin Spot

EMNMIP65BSPOT
LED IP65 Non Maintained Emergency Twin Spot – Black

- Hinged Lid to Assist Installation
- 5500K Colour Temperature
- Maintained & Non-Maintained Operation
- SMD 2835 LED Lamp
- Polycarbonate Housing
- Ceiling or Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- Legend Included
- 3.6V 900mAH NI-CAD Battery
- BS EN 60598-2-22 Standards
- Mains Light Output - 151 Lumens
- Emergency Light Output -107 Lumens
- Dimensions - 225 x 105 x 50mm
- Weight - 0.5Kg

EMLED3WMHBULK2

3W LED IP65 Maintained Emergency Bulkhead

EMBAT3.6V900SER   3.6V 900mAH Battery

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	2.2	6.0	6.0	6.0	2.1
2.5m	2.3	6.3	6.0	5.6	2.4
3.0m	2.2	6.4	6.3	6.2	2.5

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

- 5500K Colour Temperature
- SMD 2835 LED Lamp
- Maintained & Non-Maintained Operation
- Polycarbonate housing
- Ceiling or wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- Legend Included
- 3.6V 1200mAH NI-CAD Battery
- BS EN 60598-2-22 Standards
- Mains light output - 120 Lumens
- Emergency light output - 100 Lumens
- Dimensions - 345 x 110 x 60mm
- Weight - 0.6Kg

EMBULKLGD Emergency Bulkhead Legend
EMBULK2FLUSH Bulkhead Flush Kit
EMBAT3.6V1200SER 3.6V 1200mAH Battery

EMDLED3WMBULK2

3W LED IP65 Maintained Emergency Bulkhead

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	3	7	6	5.5	2
2.5m	3	8	7	6	2.5
3.0m	3.2	8.8	7.8	6.8	2.6

Illuminance values based on a maintenance factor of 0.8

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

- 5500K colour temperature
- 30 SMD 2835 LED Lamp
- Maintained & Non-Maintained Operation
- Polycarbonate Housing
- Recessed mounting
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd batteries
- BS EN 60598-2-22 Standards
- Mains light output - 131 Lumens
- Emergency light output -105 Lumens
- IP20 Ingress Protection
- Dimensions; 389 x 126 x 80mm
- Cut out dimensions; 340 x 90mm
- Weight - 0.8Kg

EMDLEDWMFLUSH

4W LED Maintained Emergency Flush Bulkhead

EMBAT3.6V1500   3.6V 1500mAH Battery

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	2.4	6.3	6.3	6.3	2.4
2.5m	2.5	6.7	6.7	6.7	2.5
3.0m	2.5	6.9	6.9	6.9	2.4

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

- 5500K Colour Temperature
- Maintained & Non Maintained Operation
- SMD 2835 LED Lamp
- Polycarbonate Housing
- Ceiling or Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1800mAH NI-CAD Battery
- BS EN 60598-2-22 Standards
- Mains Light Output - 208 Lumen
- Emergency light Output -190 Lumen
- IP65 Ingress Protection
- Dimensions - 350 x 110 x 60mm
- Weight - 0.8Kg

EMBULKLGD Emergency Bulkhead Legend
EMBULK2FLUSH Bulkhead Flush Kit
EMBAT3.6V1800SER 3.6V 1800mAH Battery

EMDLED5WMBULK

5W LED IP65 Maintained Emergency Bulkhead

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	3.1	8.1	7.3	6.4	2.6
2.5m	3.2	8.6	7.8	7.0	2.7
3.0m	3.3	8.9	8.2	7.5	2.8

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

■ 5500k Colour Temperature
■ 84 SMD 2835 LED Lamp
■ Maintained & Non-Maintained Operation
■ Polycarbonate Housing White finish
■ Wall or Ceiling Mounted
■ 1207 Lumen mains output
■ 285 Lumen emergency output
■ Charge and Discharge Protection
■ Green LED indicator
■ 3 Hours Emergency Duration
■ 6V 1800mAH Battery
■ IP65 Rating
■ BS EN 60598-2-22
■ Dimensions - 330 x 330 x 110mm
■ Weight-2.3Kg

EM14WMCBULK
LED 14W Emergency Circular Bulkhead

EMBAT6V1800 6V 1800mAH Battery

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	5.7	13.9	13.9	13.9	5.7
2.5m	6.2	15.3	15.3	15.3	6.2
3.0m	6.7	16.3	16.4	16.4	6.7

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

■ 5500K Colour Temperature
■ 84 SMD 2835 LED Lamp
■ Polycarbonate Housing
■ White finish
■ Wall or Ceiling Mounted
■ 1207 Lumen mains output
■ Green LED indicator
■ IP65 Rating
■ BS EN 60598-1
■ Dimensions - 330 x 330 x 110mm
■ Weight - 2.06Kg

EM14WMAINSCBULK
LED 14W Mains Only Circular Bulkhead

■ 5500K Colour Temperature
■ 84 SMD 2835 LED Lamp
■ Maintained & Non-Maintained Operation
■ Microwave 160° Sensor
■ Microwave LUX Setting; 0-30 Lux
■ Microwave Duration Setting; 6 Seconds to 30 Minutes
■ Microwave Sensitivity Setting; 1-10 Meters
■ Polycarbonate Housing
■ White finish
■ Wall or Ceiling Mounted
■ 1207 Lumen mains output
■ 285 Lumen emergency output
■ Charge and Discharge Protection
■ Green LED indicator
■ 3 Hours Emergency Duration
■ 6V 1800mAH Battery
■ IP65 Rating
■ BS EN 60598-2-22
■ Dimensions - 330 x 330 x 110mm
■ Weight-2.4Kg

EMBAT6V1800
6V 1800mAH Battery

EM14WMCBULKMW
LED 14W Emergency Circular Bulkhead
W/ Microwave Sensor

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	5.7	13.9	13.9	13.9	5.7
2.5m	6.2	15.3	15.3	15.3	6.2
3.0m	6.7	16.3	16.4	16.4	6.7

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

■ 5500K Colour Temperature
■ 84 SMD 2835 LED Lamp
■ Microwave 160° Sensor
■ Microwave LUX Setting; 0-30 Lux
■ Microwave Duration Setting; 6 Seconds to 30 Minutes
■ Microwave Sensitivity Setting; 1-10 Meters
■ Polycarbonate Housing
■ White finish
■ Wall or Ceiling Mounted
■ 1207 Lumen mains output
■ IP65 Rating
■ BS EN 60598-1
■ Dimensions - 330 x 330 x 110mm
■ Weight-2.16Kg

EM14WMAINSCBULKMW
LED 14W Mains Only Circular Bulkhead
W/ Microwave Sensor

- 5500K Colour Temperature
- Viewing distance - 25m
- SMT 2835 LED Lamp
- Steel housing
- Wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAH NI-CAD Battery
- BS EN 60598-2-22 Standards
- Dimensions - 390 x 190 x 60mm
- Weight - 1.3Kg

- 5500K colour temperature
- Viewing distance - 25m
- SMD 2835 LED Lamp
- Steel housing
- Wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAH NI-CAD Battery
- BS EN 60598-2-22 Standards
- Dimensions - 390 x 190 x 60mm
- Weight - 1.3Kg

EMBAT3.6V1500
3.6V 1500mAH Battery

EMDLED3WMEXBOX
3W LED Maintained Emergency Sign

EMBAT3.6V1500
3.6V 1500mAH Battery

EMLED3WMEXBOXBR
3W LED Maintained Emergency Brass Sign

EMDLED3WMEXBOXU
3W LED Maintained
Emergency Sign UP

EMDLED3WMEXBOXD
3W LED Maintained
Emergency Sign DOWN

EMDLED3WMEXBOXL
3W LED Maintained
Emergency Sign LEFT

EMDLED3WMEXBOXR
3W LED Maintained
Emergency Sign RIGHT

EMLED3WMEXBOXBRU
3W LED Maintained
Emergency Brass Sign UP

EMLED3WMEXBOXBRD
3W LED Maintained
Emergency Brass Sign DOWN

EMLED3WMEXBOXBRL
3W LED Maintained
Emergency Brass Sign LEFT

EMLED3WMEXBOXBRR
3W LED Maintained
Emergency Brass Sign RIGHT

- 5500K colour temperature
- Viewing distance - 25m
- SMD 2835 LED Lamp
- Steel housing
- Wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAH NI-CAD Battery
- BS EN 60598-2-22 Standards
- Dimensions - 390 x 190 x 60mm
- Weight - 1.3Kg

- 5500K colour temperature
- Viewing distance - 25m
- SMD 2835 LED Lamp
- Steel housing
- Wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAH NI-CAD Battery
- BS EN 60598-2-22 Standards
- Dimensions - 390 x 190 x 60mm
- Weight - 1.3Kg

EMLED3WMEXBOXCH
3W LED Maintained Emergency Chrome Sign

EMBAT3.6V1500
3.6V 1500mAH Battery

EMBAT3.6V1500
3.6V 1500mAH Battery

EMLED3WMEXBOXBK
3W LED Maintained Emergency Black Sign

EMLED3WMEXBOXCHU
3W LED Maintained Emergency
Chrome Sign UP

EMLED3WMEXBOXCHD
3W LED Maintained Emergency
Chrome Sign DOWN

EMLED3WMEXBOXCHL
3W LED Maintained Emergency
Chrome Sign LEFT

EMLED3WMEXBOXCHR
3W LED Maintained Emergency
Chrome Sign RIGHT

EMLED3WMEXBOXBKU
3W LED Maintained Emergency
Black Sign UP

EMLED3WMEXBOXBKD
3W LED Maintained Emergency
Black Sign DOWN

EMLED3WMEXBOXBKL
3W LED Maintained Emergency
Black Sign LEFT

EMLED3WMEXBOXBKR
3W LED Maintained Emergency
Black Sign RIGHT

- 5500K Colour Temperature
- 16 SMD 2835 LED Lamp
- Polycarbonate Frame, Acrylic Legend
- Ceiling Mounted
- 60 Lumen mains output
- 44 Lumen emergency output
- 24m Viewing Distance
- Charge and Discharge Protection
- 3 Hours Emergency Duration
- 3.6V 900mAH NI-CAD Battery
- IP20 Rating
- BS EN 60598-2-2
- Legend Dimensions - 190x 300mm
- Legend adjustable up to 650mm
- Weight-1.2Kg

EMWMBEXHSIGN Hanging Sign Wall Bracket

EMBAT3.6V900 3.6V 900mAH Battery

EMD2WMEXHSIGN
LED 2W Hanging Exit Sign Legend

EMD2WMEXHSIGNU
LED 2W Maintained
Hanging Exit Sign
Legend Up

EMD2WMEXHSIGND
LED 2W Maintained
Hanging Exit Sign
Legend Down

EMD2WMEXHSIGNL
LED 2W Maintained
Hanging Exit Sign
Legend Left

EMD2WMEXHSIGNR
LED 2W Maintained
Hanging Exit Sign
Legend Right

EMD3WMSLEXBOXUDLR
3W LED Maintained Emergency
Sign Complete with All Legends

- 6500K Colour Temperature
- 3W 20 SMD 3014 LED + 5 SMD 2835 LED
- Polycarbonate Frame, PVC legends
- Wall Mounted
- 45 Lumen Mains Output
- 34 Lumen Emergency Output
- 29m Viewing Distance
- Charge and Discharge Protection
- 3 Hours Emergency Duration
- 3.6V 800mAH Ni-Cd Battery
- IP20 Ingress Protection
- BS EN 60598-2-22
- Legend Dimensions – 320 x 185 x 26mm
- Weight-0.6Kg

EMBAT3.6V1800SER 3.6V 1800mAH Battery

EMLED5WMBULKEX
LED 5W Maintained Exit Sign Complete
with All Legends

- 5500K Colour Temperature
- SMD 2835 LED Lamp
- 28m Viewing Distance
- Polycarbonate Housing
- Ceiling Mounted
- Charge and Discharge Protection
- 3 Hours Emergency Duration
- Double Sided
- Legends Included
- 3.6V 1800mAH NI-CAD Battery
- BS EN 60598-2-22 Standards
- Dimensions - 345 x 110 x 190 mm
- Weight - 1Kg

- 5500K Colour Temperature
- Viewing distance – 24m
- SMD 3528 Lamp
- Polycarbonate frame with legend
- Ceiling or wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 900mAH Battery
- BS EN 60598-2-22 Standards
- Legend Dimensions - 190x 300mm
- Weight - 0.8Kg

EMBAT3.6V900
3.6V 900mAH Battery

EMWMBEXHSIGN
Hanging Sign Wall Bracket

EMD2WMEXSIGN
LED 2W Maintained Exit Sign Legend

EMD2WMEXSIGNU
LED 2W Maintained
Exit Sign Legend UP

EMD2WMEXSIGND
LED 2W Maintained
Exit Sign Legend DOWN

EMD2WMEXSIGNL
LED 2W Maintained
Exit Sign Legend LEFT

EMD2WMEXSIGNR
LED 2W Maintained
Exit Sign Legend RIGHT

EMBAT3.6V900 3.6V 900mAH Battery

EMD2WMEXSIGNUDLR
LED 3W Maintained Exit Sign
Legend Up, Down, Left and Right

- 5500K Colour Temperature
- Viewing Distance - 24m
- 3W 16 SMD 2835 LED Lamp
- Polycarbonate Frame, Double Sided PVC Legend
- Ceiling or Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 900mAh Ni-Cd
- BS EN 60598-2-22
- Dimensions - 305mm x 225mm x 160mm
- Legend Dimensions - 190mm x 300mm
- Weight - 0.8kg

EMBAT3.6V900 3.6V 900mAH Battery

EMD2WMEXHSIGNUDLR
LED 3W Maintained Hanging Exit Sign
Legend Up, Down, Left and Right

- 5500K Colour Temperature
- Viewing Distance - 24m
- 3W 16 SMD 2835 LED Lamp
- Polycarbonate Frame, Double Sided PVC Legend
- Ceiling Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 900mAh Ni-Cd
- BS EN 60598-2-22
- Dimensions - 305mm x 225mm x 160mm
- Legend Dimensions - 190mm x 300mm
- Weight - 1.5kg

EM5WNMCDLK
LED 5W Emergency Corridor Lens Downlight

- 5500K Colour Temperature
- High Power 5W LED
- Aluminium bezel
- Recessed Mounted
- Emergency light output - 214 Lumen output
- Charge and Discharge Protection
- Green LED indicator
- 3 Hours Emergency Duration
- 4.8V 3500mAH Battery
- IP20 Rating
- BS EN 60598-2-22
- Weight- 0.9Kg

EMBAT4.8V3500SER
4.8V 3500mAH Battery

48MM CUTOUT

Mounting Height	Axial/Wall	Axial/Axial	Transverse/Axial	Transverse/Transverse	Transverse/Wall
2.0m	3.6	8.4	7.4	6.3	2.4
2.5m	4.2	9.5	8.0	6.5	2.6
3.0m	4.7	10.7	8.8	6.9	2.7

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

EM3WNMCDLK
LED 3W Emergency Corridor Lens Downlight

- 5500K Colour Temperature
- High Power 3W LED
- Aluminium bezel
- Recessed Mounted
- Charge and Discharge Protection
- Green LED indicator
- 3 Hours Emergency Duration
- Emergency light output - 105 Lumen output
- 3.6V 1800mAH Battery
- IP20 Rating
- BS EN 60598-2-22
- Weight- 0.4Kg

35MM CUTOUT

EMBAT3.6V1800SER
3.6V 1800mAH Battery

Mounting Height	Axial/Wall	Axial/Axial	Transverse/Axial	Transverse/Transverse	Transverse/Wall
2.0m	1.5	7.6	8.4	9.1	4.1
2.5m	1.6	4.3	7.5	10.6	4.8
3.0m	1.8	4.2	8.2	12.2	5.3

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

EM5WNMDLK
LED 5W Emergency Open Lens Downlight

- 5500K Colour Temperature
- High Power 5W LED
- Aluminium bezel
- Recessed Mounted
- Emergency light output - 263 Lumen output
- Charge and Discharge Protection
- Green LED indicator
- 3 Hours Emergency Duration
- 4.8V 3500mAH Battery
- IP20 Rating
- BS EN 60598-2-22
- Weight- 0.9Kg

EMBAT4.8V3500SER
4.8V 3500mAH Battery

48MM CUTOUT

Mounting Height	Axial/Wall	Axial/Axial	Transverse/Axial	Transverse/Transverse	Transverse/Wall
2.0m	3.2	7.3	7.2	7.2	3.2
2.5m	3.7	8.4	8.4	8.4	3.7
3.0m	4.2	9.4	9.4	9.4	4.1

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

EMD3WNMDLK
LED 3W Emergency Open Lens Downlight

- 5500K Colour Temperature
- High Power 3W LED
- Aluminium bezel
- Recessed mounting
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- Emergency light output - 138 Lumens
- 3.6V 1800mAH NI-CAD Battery
- IP20 Rating
- BS EN 60598-2-22
- Weight- 0.4Kg

Includes silver & Black bezel options

35MM CUTOUT

EMBAT3.6V1800SER
3.6V 1800mAH Battery

Mounting Height	Axial/Wall	Axial/Axial	Transverse/Axial	Transverse/Transverse	Transverse/Wall
2.0m	2.9	7.2	7.1	7.2	2.8
2.5m	3.1	7.7	7.6	7.7	2.9
3.0m	3.1	8.1	8.0	8.0	3.0

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

MINUTES

EMERGENCY LIGHTING
TEST SWITCH

SELECT TIMING PERIOD BY TURNING KEY

EMTSK Emergency Light Test Switch Spare Keys

EMTSLCD
Emergency Light Test Switch with Digital Display

- Assists the testing of emergency lighting in accordance with BS5266
- Key activated with 4 pre-programmed test intervals;10 minutes, 30 minutes, 60 minutes & 180 minutes
- Clear LED digital display indication for duration test
- Optional audio buzzer alert for completion of duration test
- Compact design manufactured from antimicrobial material urea
- Operating Voltage: 220-240vac; 4A LED, 10A Incandescent, 6A Fluorescent

4 PRE-PROGRAMMED TEST INTERVALS:

(10 MINUTES) (30 MINUTES) (60 MINUTES) (180 MINUTES)
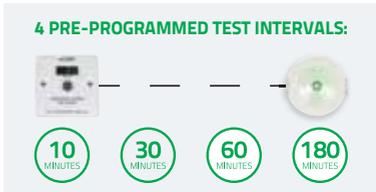
Power Supply	220~240vAC, 50/60Hz
Programming	10, 30, 60, 180 minutes
Display	LED Light Tube
Mounting	Optional Flush or Surface
Current Rating	16A
Switching Capacity	4 amp LED, 10 amp Incandescent, 6 amp Fluorescent
Dimensions	86 x 86 x 33mm

MINUTES

EMERGENCY LIGHTING
TEST SWITCH

SELECT TIMING PERIOD BY TURNING KEY

EMTSK Emergency Light Test Switch Spare Keys

EMTS
Emergency Light Test Switch

- Assists the testing of emergency lighting in accordance with BS5266
- Key activated with 4 pre-programmed test intervals; 10 minutes, 30 minutes, 60 minutes & 180 minutes
- Clear LED indication for duration test
- Optional audio buzzer alert for completion of duration test
- Compact design manufactured from antimicrobial material urea
- 220-240vac Operation; 4A LED, 10A Incandescent, 6A Fluorescent

4 PRE-PROGRAMMED TEST INTERVALS:

(10 MINUTES) (30 MINUTES) (60 MINUTES) (180 MINUTES)
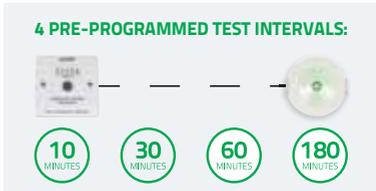
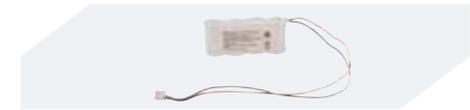|	
Power Supply	220~240vAC, 50/60Hz
Programming	10, 30, 60, 180 minutes
Display	LED
Mounting	Optional Flush or Surface
Current Rating	16A
Switching Capacity	4 amp LED, 10 amp Incandescent, 6 amp Fluorescent
Dimensions	86 x 86 x 33mm

EMBAT3.6V900
3.6V 900mAH Battery
- Replacement battery for Duceri Emergency Lighting; EMD2WMEXHSIGN, EMD2WMEXSIGN

EMBAT3.6V1200SER
3.6V 1200mAH Battery
- Replacement battery for Duceri Emergency Lighting; EMDLED3WMBULK2

EMBAT3.6V1500
3.6V 1500mAH Battery
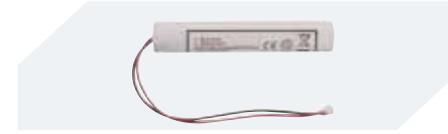- Replacement battery for Duceri Emergency Lighting; EMLED5WMFLUSH, EMLEDWMFLUSH, EMDLED3WMEXBOX

EMBAT3.6V1500SER
3.6V 1500mAH Battery
- Replacement battery for Duceri Emergency Lighting; EMLED3WMBULK2

EMBAT3.6V1800SER
3.6V 1800mAH Battery
- Replacement battery for Duceri Emergency Lighting; EMLED3WMBULK, EMLED5WMBULK, EM3WNMDLK, EM3WNMCDLK, EMD3WNMDLK

EMBAT3.6V3000
3.6V 3000mAH Battery
- Replacement battery for Duceri Emergency Lighting; EMNMIP40SPOT, EMNMIP40BSPOT

EMBAT4.8V600
4.8V 600mAH Battery
- Replacement battery for Duceri Emergency Lighting; EM2WMEXSIGN

EMBAT3.6V900SER
3.6V 900mAH Battery
- Replacement battery for Duceri Emergency Lighting; EMLED3WMHBULK

EMBAT4.8V3500SER
4.8V 3500mAH Battery
- Replacement battery for Duceri Emergency Lighting; EM5WNMCDLK, EM5WNMDLK

EMBAT6V1800
6V 1800mAH Battery
- Replacement battery for Duceri Emergency Lighting; EM14WMCBULK, EM14WMCBULKMW

EMBAT9.6V2200
9.6V 2200mAH Battery
- Replacement battery for Duceri Emergency Lighting; EM9WNMSPOT2, EMD9WNMSPOT2

THE ESSENTIAL RANGE

The new Essentials product group is just that - ESSENTIAL. Now featuring the new Assistance Alarm Kit.

MAGLB FIRE SAFETY LOG BOOK

DOCBOX

A4 Document Box

- A4 Document Box
- Wall Mountable
- Coated Finish
- Lockable door, 2 keys supplied
- Suitable for fire & emergency lighting system documents
- Suitable for CCTV documents
- Dimensions: 310 x 250 x 80 mm
- Weight: 2 KG

UDTAKIT

Assistance Alarm Kit

- Simple install, 3 part kit - Indication Module, Pull cord module & Reset Module
- Complete with battery back-up function (Battery Included)
- Meets Part M building regulations and BS8300
- Antimicrobial properties
- Alarm to raise alert for assistance
- Compact design to suit many interiors
- Supplied with disabled persons sign
- All modules supplied with single gang back box
- System is expandable to include additional indication and pull cord modules if required

UDTALBM

Light and Buzzer Module

- For use with UDTA Kit
- Clear alarm LED alert
- 80db distinctive audible alert
- Antimicrobial properties
- Compete with surface back box

Input Voltage	12VDC
Power Consumption	0.9W max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 × (L) 87 × (H) 41mm

UDTAPCM

Pull Cord Module

- For use with UDTA Kit
- Clear alarm LED alert
- Distinctive red 10ft pull cord
- Pull cord complete with anti–ligature mechanism
- 2 Pull handles supplied
- Antimicrobial properties
- Compete with surface back box

Input Voltage	12VDC
Power Consumption	0.3W max.
Indicator	LED illuminate in red when system triggered
Pull Cord Length	3 meters, with two triangular bangles
Dimensions	Single Gang / (W) 87 × (L) 87 × (H) 41mm

UDTASPC Replacement Pull Cord

UDTAPLBM

Power, Light and Buzzer Module

- For use with UDTA Kit
- Clear alarm LED alert
- 80db distinctive audible alert
- 240vac Input for system power
- Complete with battery back-up function (Battery Included)
- Antimicrobial properties
- Compete with surface back box

Input Voltage	AC100 – 240V / 50Hz – 60Hz / 0.2A
Rated Output	DC12V / 500mA max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 × (L) 87 × (H) 41mm

UDTAREM

Reset Module

- For use with UDTA Kit
- Clear alarm LED alert
- Distinctive audible alert
- Reset system function
- Antimicrobial properties
- Compete with surface back box

Input Voltage	12VDC
Power Consumption	0.9W max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 × (L) 87 × (H) 41mm

UDTAKITSS

Assistance Alarm Kit

- Simple install, 3 part kit - Indication Module, Pull cord module & Reset Module
- Complete in a stainless steel finish
- Complete with battery back-up function (Battery Included)
- Meets Part M building regulations and BS8300
- Alarm to raise alert for assistance
- Compact design to suit many interiors
- Disabled persons stainless steel door sign
- System is expandable to include additional indication and pull cord modules

UDTAPLBMSS

Power, Light and Buzzer Module

- For use with UDTAKITSS
- Clear alarm LED alert
- 80db distinctive audible alert
- 240vAC Input for system power
- Complete with battery back-up function (Battery Included)
- Stainless steel finish

Input Voltage	AC100 – 240V / 50Hz – 60Hz / 0.2A
Rated Output	DC12V / 500mA max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 × (L) 87 × (H) 41mm

UDTALBMSS

Light and Buzzer Module

- For use with UDTAKITSS
- Clear alarm LED alert
- 80db distinctive audible alert
- Stainless steel finish

Input Voltage	12VDC
Power Consumption	0.9W max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 × (L) 87 × (H) 41mm

UDTAREMSS

Reset Module

- For use with UDTAKITSS
- Clear alarm LED alert
- Distinctive audible alert
- Reset system function
- Stainless steel finish

Input Voltage	12VDC
Power Consumption	0.9W max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 × (L) 87 × (H) 41mm

UDTAPCMSS

Pull Cord Module

- For use with UDTAKITSS
- Clear alarm LED alert
- Distinctive red 10ft pull cord
- Pull cord complete with anti-ligature mechanism
- 2 Pull handles supplied
- Stainless steel finish

Input Voltage	12VDC
Power Consumption	0.3W max.
Indicator	LED illuminate in red when system triggered
Pull Cord Length	3 meters, with two triangular bangles
Dimensions	Single Gang / (W) 87 × (L) 87 × (H) 41mm

UDTASPC Replacement Pull Cord

UDTASMBSS

Surface mount Box

- For use with UDTAKITSS Modules

- Wi-Fi Security Light for Remote Viewing
- Full 1080p HD Live View & Recording
- Notifications via APP
- Wide Angle Camera View
- Clear Two–Way Audio
- 3000K LED Lamp
- 800 Lumen Output
- Remotely Dim or Turn On/Off The LED Lamp
- Motion Activated Video Record
- Manual Alarm Feature
- IP55 Rated
- Robust Metal Housing
- 8GB Memory Storage Provided (Up to 200 events)
- No subscription or additional fees required
- Requires 2.4GHZ Wi-Fi or LAN network connection

Supply Voltage	80-260VAC
LED Output	800 Lumens
PIR Detection Angle	100°
PIR Detection Range	10< metres
Camera Angle	120°
Camera White Balance	Automatic
micro SD Card Format	FAT Maximum 64GB (Class10)
IP Rating	IP55
Wi-Fi	2.4GHZ (IEEE 802.11 b/g/n)
Housing	Metal
Dimensions (mm)	Body, 70(W) x 180(H) x 65(D) mm, Bracket:95(W)x110(H) x110(D)mm
Weight	1KG

GUARDCAMDECO
Combined WI-FI Security Camera LED Light System

- Wi-Fi Security light for remote viewing & recording
- High Definition digital camera
- Receive smartphone push notifications for motion activations
- 16 SMD High quality LED security lamp
- 5000k colour light with 1500 lumen output
- Time & Lux adjustment for LED security lamp
- Active PIR with 180° x 10 meter coverage
- 16GB Micro SD card for recording video clips
- Up to 400 video clips stored onto supplied 16GB storage (Expandable up to 128GB)
- IP55 Rated robust housing for external applications
- Requires 2.4GHZ Wi-Fi

Supply Voltage	100-240VAC
Current Drain (activated)	0.4amp
Current Drain (quiescent)	0.005amp
LED Output	1500 Lumens
PIR Detection Angle	180 deg
PIR Detection Range	10 metres
Camera Exposure Control	Automatic
Camera White Balance	Automatic
Camera Sharpness	Automatic
SD Card Format	FAT/FAT32 Maximum 128GB
Image Format	MP4
IP Rating	IP55
Dimensions (mm)	290 x 160 x 140mm
Weight	1.206KG

GUARDCAMLEDWIFI
Combined WI-FI Security Camera LED Light System

- Wi-Fi Security Light for Remote Viewing
- Full 1080p HD Live View & Recording
- Notifications via APP
- Wide Angle Camera View
- Clear Two–Way Audio
- 3000K LED Lamp
- 800 Lumen Output
- Remotely Dim or Turn On/Off The LED Lamp
- Motion Activated Video Record
- Manual Alarm Feature
- IP55 Rated
- Robust Metal Housing
- 8GB Memory Storage Provided (Up to 200 events)
- No subscription or additional fees required
- Requires 2.4GHZ Wi-Fi or LAN network connection

| Supply Voltage	80-260VAC
LED Output	800 Lumens
PIR Detection Angle	100°
PIR Detection Range	10< metres
Camera Angle	120°
Camera White Balance	Automatic
micro SD Card Format	FAT Maximum 64GB (Class10)
IP Rating	IP55
Wi-Fi	2.4GHZ (IEEE 802.11 b/g/n)
Housing	Metal
Dimensions (mm)	Body, 70(W) x 180(H) x 65(D) mm, Bracket:95(W)x110(H) x110(D)mm
Weight	1KG

GUARDCAMDECOBLK
Combined WI-FI Security Camera LED Light System

- Detect the intruder, floodlight the area and initiate HD recording
- High Definition Camera
- 1500 Lumen LED lamp output
- Deliver a pre-recorded audible warning
- Capture up to 200 twenty second video clips with 8GB card supplied
- Maximum card capacity is 32GB

GuardCam LED is a complete all-in-one PIR floodlight, Camera, speaker and DVR system. Simply connect to mains power, fix to wall, set the time and date and switch on !

Supply Voltage	220-240VAC
Current Drain (activated)	0.4amp
Current Drain (quiescent)	0.005amp
LED Output	1500 Lumens
PIR Detection Angle	160 deg
PIR Detection Range	12 metres
Camera Exposure Control	Automatic
Camera White Balance	Automatic
Camera Sharpness	Automatic
SD Card Format	FAT/FAT32 Maximum 32GB
Image Format	AVI
IP Rating	IP44
Dimensions (mm)	180 x 190 x 315mm
Weight	1.206KG
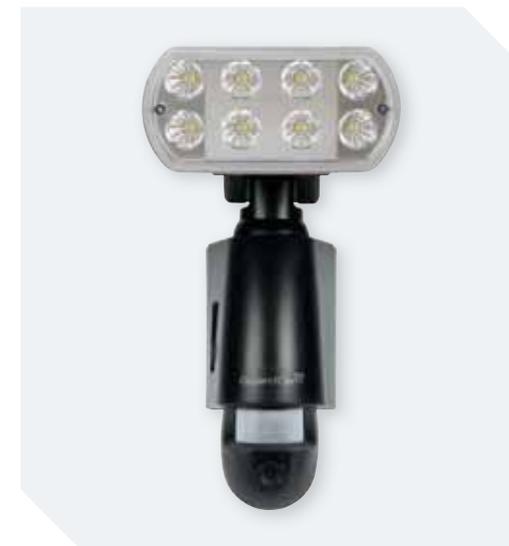
GUARD-CAM-LED
Combined Security LED Floodlight

- LED floodlight – 1500 lumen output
- 40,000 hours LED life
- Low energy 16.5w max. power consumption
- 160 degree PIR detector
- Wide spread illumination up to 120°
- Adjustable on time of 5 secs to 5 mins
- Adjustable lux – dusk to dark
- Adjustable floodlight and PIR direction – Horizontal and vertical axis
- Additional switching capability – 50W LED – 500W halogen
- Ideal for use with up to four NH150LED floodlights
- Weather proof, suitable for external use

Power Source	220 - 240VAC/50Hz
Power Consumption	16.5w (operational)
Detection Method	Passive Infrared Sensor
Detector Range	10M x 160 degrees
Light Output	1500 Lumens
Illumination Angle	120 degrees
Colour	5000K cool white
Time Adjustment	5 seconds to 5 minutes
Maximum Additional Load	LED 50W - Halogen 500W
IP Rating	IP55

NIGHTHAWK
Low Energy LED Security Light

- 10W LED Flood Light in White or Black
- 4000K Colour Temperature
- 800 Lumen Output
- Built-in PIR: 110° Detection Angle, 8m Range with Pre-set 150 Seconds Activation Period
- Auto Lux Control
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Manual Override Function
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 110mm H x 99 W x 27 D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	10w
Detection Method	Passive Infrared Sensor
Detection Range	8M x 110 degrees
Light Output	800 Lumen
Colour	4000K
Time Adjustment	Pre-set 150 Seconds
IP Rating	IP65

Black **NH10BS**   White **NH10WS**
LED Security Light with Sensor 10W

- LED floodlight – 1500 lumen output
- Wide spread illumination up to 120°
- Low energy 16w maximum power consumption
- Adjustable floodlight direction – Horizontal and vertical axis
- Ideal for use with the NightHawk security light with the capability to switch up to 4 extra NH150 units
- Weather proof, suitable for external use

Power Source	220 - 240VAC/50Hz
Power Consumption	16w (operational)
Light Output	1500 Lumens
Illumination Angle	120 degrees
LED Light Output Colour	5600K cool white
Time Adjustment	5 seconds to 5 minutes
Maximum Additional Load	LED 50W - Halogen 500W
IP Rating	IP55

NH150
Low Energy LED Flood Light

- 20W LED Flood Light in White or Black
- 4000K Colour Temperature
- 1600 Lumen Output
- Built-in PIR: 110° Detection Angle, 8m Range with Pre-set 150 Seconds Activation Period
- Auto Lux Control
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Manual Override Function
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 117mm H x 101mm W x 24 D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	20w
Detection Method	Passive Infrared Sensor
Detection Range	8M x 110 degrees
Light Output	1600 Lumen
Colour	4000K
Time Adjustment	Pre-set 150 Seconds
IP Rating	IP65

Black **NH20BS**   White **NH20WS**
LED Security Light with Sensor 20W

- 30W LED Flood Light in White or Black
- 4000K Colour Temperature
- 2400 Lumen Output
- Built-in PIR: 110° Detection Angle, 8m Range with Pre-set 150 Seconds Activation Period
- Auto Lux Control
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Manual Override Function
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 143mm H x 123mm W x 24mm D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	30w
Detection Method	Passive Infrared Sensor
Detection Range	8M x 110 degrees
Light Output	2400 Lumen
Colour	4000K
Time Adjustment	Pre-set 150 Seconds
IP Rating	IP65

NH30WS White   **NH30BS** Black
LED Security Light with Sensor 30W

- 10W LED Flood Light in White or Black
- 4000K Colour Temperature
- 800 Lumen Output
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 110mm H x 99 W x 27 D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	10w
Light Output	800 Lumen
Colour	4000K
IP Rating	IP65

Black   **NH10B**   White   **NH10W**
LED Security Light 10W

- 50W LED Flood Light in White or Black
- 4000K Colour Temperature
- 4000 Lumen Output
- Built-in PIR: 110° Detection Angle, 8m Range with Pre-set 150 Seconds Activation Period
- Auto Lux Control
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Manual Override Function
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 216mm H x 186mm W x 24mm D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	50w
Detection Method	Passive Infrared Sensor
Detection Range	8M x 110 degrees
Light Output	4000 Lumen
Colour	4000K
Time Adjustment	Pre-set 150 Seconds
IP Rating	IP65

NH50WS White   **NH50BS** Black
LED Security Light with Sensor 50W

- 20W LED Flood Light in White or Black
- 4000K Colour Temperature
- 1600 Lumen Output
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 117mm H x 101mm W x 24 D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	20w
Light Output	1600 Lumen
Colour	4000K
IP Rating	IP65

Black   **NH20B**   White   **NH20W**
LED Security Light 20W

■ 30W LED Flood Light in White or Black

■ 4000K Colour Temperature

■ 2400 Lumen Output

■ 1 Meter Power Cord

■ IP65 Ingress Protection for Exterior Use

■ Robust Construction

■ Textured Diffuser

■ Adjustable Bracket

■ Dimensions: 143mm H x 123mm W x 24mm D (Ex. Bracket)

■ Includes Fixing Accessories

■ 50W LED Flood Light in White or Black

■ 4000K Colour Temperature

■ 4000 Lumen Output

■ 1 Meter Power Cord

■ IP65 Ingress Protection for Exterior Use

■ Robust Construction

■ Textured Diffuser

■ Adjustable Bracket

■ Dimensions: 216mm H x 186mm W x 24mm D (Ex. Bracket)

■ Includes Fixing Accessories

NH30W
LED Security Light 30W

Power Source	220 - 240VAC/50Hz
Power Consumption	30w
Light Output	2400 Lumen
Colour	4000K
IP Rating	IP65

NH50W
LED Security Light 50W

Power Source	220 - 240VAC/50Hz
Power Consumption	50w
Light Output	4000 Lumen
Colour	4000K
IP Rating	IP65

■ 30W LED Flood Light in Black or White

■ 4000K Colour Temperature

■ 2400 Lumen Output

■ 1 Meter Power Cord

■ IP65 Ingress Protection for Exterior Use

■ Robust Construction

■ Textured Diffuser

■ Adjustable Bracket

■ Dimensions: 143mm H x 123mm W x 24mm D (Ex. Bracket)

■ Includes Fixing Accessories

■ 50W LED Flood Light in Black or White

■ 4000K Colour Temperature

■ 4000 Lumen Output

■ 1 Meter Power Cord

■ IP65 Ingress Protection for Exterior Use

■ Robust Construction

■ Textured Diffuser

■ Adjustable Bracket

■ Dimensions: 216mm H x 186mm W x 24mm D (Ex. Bracket)

■ Includes Fixing Accessories

NH30B
LED Security Light 30W

Power Source	220 - 240VAC/50Hz
Power Consumption	30w
Light Output	2400 Lumen
Colour	4000K
IP Rating	IP65

NH50B
LED Security Light 50W

Power Source	220 - 240VAC/50Hz
Power Consumption	50w
Light Output	4000 Lumen
Colour	4000K
IP Rating	IP65

- Extends HDMI signal up to 15 meters wire free in open field range
- Connect a DVR or NVR HDMI output to a monitor
- Supports up to 1080p Full High Definition Resolution
- Multiple applications for HDMI devices
- 5GHz operation frequency

Power Source	TX/RX: DC5V/1A
Power Consumption	TX:<2.5W RX: <2W
HDMI Compliance	1.3
HDCP Compliance	1.2
Resolution	480p@60Hz, 576p@50Hz, 720p@50/60Hz, 1080p@50/60Hz
Audio	Stereo
HDMI Input	TX:1
HDMI Output	RX:1
Transmission	5GHz
Distance (Open Field)	15 Meters
Working Temperature	0~40°C
Dimensions	TX/RX 78x38x13 mm

HDMIXWF15D

WIRELESS HDMI SENDER KIT HD 1080P 15M

- Extends HDMI signal up to 50 meters wire free in open field range
- Connect a DVR or NVR HDMI output to a monitor
- Supports up to 1080p Full High Definition Resolution
- Multiple applications for HDMI devices
- Supports IR pass through
- 5GHz operation frequency

Power Source	TX/RX: DC5V/2A
Power Consumption	TX:<7W RX: <5W
HDMI Compliance	1.3
HDCP Compliance	1.2
Resolution	480p@60Hz,720p@50/60Hz, 1080p@50/60Hz
Audio	Stereo
IR Frequency	20~60KHz
HDMI Input	TX:1
HDMI Output	RX:1
Transmission	5GHz
Distance (Open Field)	50 Meters
Working Temperature	0~50°C
Dimensions	TX/RX: 94x78x20mm

HDMIXWF50

WIRELESS HDMI SENDER KIT HD 1080P 50M

- Extends HDMI signal up to 50 meters wire free in open field range
- Connect a DVR or NVR HDMI output to a monitor
- Supports up to 1080p Full High Definition Resolution
- Multiple applications for HDMI devices
- Supports IR pass through
- 5GHz operation frequency

Power Source	TX:DC5V/1A RX: DC5V/2A
Power Consumption	TX:<3W RX: <5W
HDMI Compliance	1.3
HDCP Compliance	1.2
Resolution	480p@60Hz, 480i@60Hz, 576p@50Hz, 576i@50Hz, 720p@50/60Hz, 1080p@50/60Hz, 1080i@50/60Hz
Audio	Stereo
IR Frequency	20~60KHz
HDMI Input	TX:1
HDMI Output	RX:1
Transmission	5GHz
Distance (Open Field)	50 Meters
Working Temperature	0~40°C
Dimensions	TX: 78x38x13mm RX: 94x78x20mm

HDMIXWF50D

WIRELESS HDMI SENDER DONGLE KIT HD 1080P 50M

- Extends HDMI signal up to 50 meters wire free in open field range
- Connect a DVR or NVR HDMI output to a monitor
- Includes KVM function for mouse control connection to enable access to DVR or NVR menu
- Supports up to 1080p Full High Definition Resolution
- Multiple applications for HDMI devices
- 5GHz operation frequency

Power Source	TX/RX: DC5V/2A
Power Consumption	TX:<7W RX: <5W
HDMI Compliance	1.3
HDCP Compliance	1.2
Resolution	480p@60Hz,720p@50/60Hz, 1080p@50/60Hz
Audio	Stereo
HDMI Input	TX:1
HDMI Output	RX:1 TX:1
Transmission	5GHz
Distance (Open Field)	50 Meters
Working Temperature	0~50°C
Dimensions	TX/RX: 150x78x23mm

HDMIXWF50KVM

WIRELESS HDMI SENDER KIT HD 1080P 50M with KVM

HDMIXWF100
WIRELESS HDMI SENDER KIT HD 1080P 100M

- Extends HDMI signal up to 100 meters wire free in open field range
- Connect a DVR or NVR HDMI output to a monitor
- Supports up to 1080p Full High Definition Resolution
- Multiple applications for HDMI devices
- Supports IR pass through
- 5GHz operation frequency

Power Source	TX/RX: DC5V/2A
Power Consumption	TX:<7W RX: <5W
HDMI Compliance	1.3
HDCP Compliance	1.2
Resolution	480p@60Hz,720p@50/60Hz, 1080p@50/60Hz
Audio	Stereo
IR Frequency	20-60KHz
HDMI Input	TX:1
HDMI Output	RX:1 TX:1
Transmission	5GHz
Distance (Open Field)	100 Meters
Working Temperature	0~50°C
Dimensions	TX/RX: 130x78x23mm

HDMIX120KVM
HDMI SENDER KIT HD 1080P 120M with KVM

- Extends HDMI signal up to 120 meters via network cable
- Connect a DVR or NVR HDMI output to a monitor
- Includes KVM function for mouse control connection to enable access to DVR or NVR menu
- Supports up to 1080p Full High Definition Resolution
- CAT5 (80 meters), CAT5e (100meters), CAT6 (120 meters) recommended
- Multiple applications for HDMI devices (Audio Supported)

Power Source	TX/RX: DC5V/1A
Power Consumption	TX:<3.5W RX: <3.5W
HDMI Compliance	1.3
HDCP Compliance	1.2
Resolution	480p@60Hz,720p@50/60Hz, 1080p@50/60Hz
Audio	PCM
HDMI Input	TX:1
HDMI Output	RX:1
LAN	RJ45
Bandwidth	<70 Mbps
Maximum Distance	120 Meters
Working Temperature	0~50°C
Dimensions	TX/RX: 140x89x25mm

PLA
Powerline Adapter

- 1 Port per unit
- 100Mbps
- Plug and Play installation

Power Supply	220 - 240VAC/50Hz
Power Consumption	4.6W (Maximum)
Encryption	128-bit AES Encryption
Interface	1*10/100Mbps Ethernet Port
Range	Up to 300 meters/1000 feet over existing electrical wiring
LED Indicator	PWR, PLC, ETH
Certification	CE, FCC, RoHS

Simple Home Installation

Plug Sender into media box

SKY Box/Now TV/DVD etc

HD

Plug Receiver into TV/Projector

Simple Office Installation

Plug Sender into Laptop

Laptop

HD

Plug Receiver into TV/Projector

KVM Function- Keyboard/Mouse Pass Through

Plug Sender into PC/NVR

PC/NVR/Sky Box/Now TV etc

Room 1

50M

HD

Plug Receiver into TV/Projector

Room 2

TIME SWITCHES & HEATING CONTROLS

Sangamo offer a wide range of time switches and heating controls for domestic, commercial and industrial use. Our reputation for quality and reliability is unrivalled.

SANGAMO

CHOICE PLUS PROGRAMMERS

For certain properties a simple programmer to activate the heating or hot water is all that is required. A Choice+ Programmer allows the occupant to specify when a call for heat is made in order to match their lifestyle and ensuring energy efficiency.

There is an option of 1 to 3 channel programmers in order to suit the system application; from single channel control suitable for combi boilers, to double control for independent heating and hot water, and finally a 3-channel option for when 2 heating zones are required.

In addition, each Choice+ Programmer has a selectable Service Interval function, which assists with compliance to the Gas Safety Regulations requiring landlords to carry out annual gas safety checks on appliances in rented properties.

■ 24 Hour, 5/2 Day and 7 Day Programmable
■ 2 or 3 ON/OFF Periods
■ 1, 2 or 3 Hour Boost
■ Holiday Mode
■ Pre-Programmed Schedule Ready for Use
■ Summer/Winter Time Change
■ Backlit Display
■ Suitable for pumped and gravity systems
■ With/without Service Interval Function
■ 2A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Battery Type	Lithium Cell CR1225
Enclosure Protection	IP30
Materials	ABS
Wiring	Fixed wiring only
Service Interval Function	Programmable
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Selection	On, Off, Auto, All Day
Heating System	Pumped or Gravity
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHPPR2
2 Channel Programmer

SERVICE INTERVAL FUNCTION   BACKLIT DISPLAY

■ 24 Hour, 5/2 Day and 7 Day Programmable
■ 2 or 3 ON/OFF Periods
■ 1, 2 or 3 Hour Boost
■ Holiday Mode
■ Pre-Programmed Schedule Ready for Use
■ Summer/Winter Time Change
■ Backlit Display
■ Suitable for Pumped Systems
■ With/without Service Interval Function
■ 2A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A
Battery Type	Lithium Cell CR1225
Enclosure Protection	IP30
Materials	ABS
Wiring	Fixed wiring only
Service Interval Function	Programmable
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Selection	On, Off, Auto, All Day
Heating System	Pumped
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHPPR1
1 Channel Programmer

SERVICE INTERVAL FUNCTION   BACKLIT DISPLAY

■ 24 Hour, 5/2 Day and 7 Day Programmable
■ 2 or 3 ON/OFF Periods
■ 1, 2 or 3 Hour Boost
■ Holiday Mode
■ Pre-Programmed Schedule Ready for Use
■ Summer/Winter Time Change
■ Backlit Display
■ Suitable for pumped and gravity systems
■ With/without Service Interval Function
■ 2A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Battery Type	Lithium Cell CR1225
Enclosure Protection	IP30
Materials	ABS
Wiring	Fixed wiring only
Service Interval Function	Programmable
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Selection	On, Off, Auto, All Day
Heating System	Pumped or Gravity
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHPPR3
3 Channel Programmer

SERVICE INTERVAL FUNCTION   BACKLIT DISPLAY
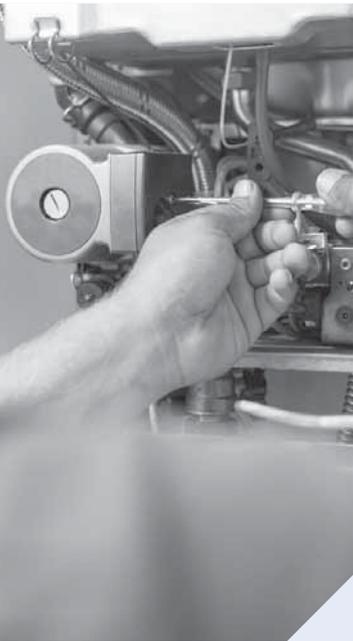
CHOICE PROGRAMMERS

Programmers are a key component of heating control systems. Since many homes are unoccupied for parts of the day, there is little point in heating them if no one is there to benefit. A programmer allows the occupant to specify when the heating comes on to match their lifestyle and their heating requirements.

For many people in the UK, this simply means firing up the heating in the winter months for a couple of hours in the morning, so the house is warm when they wake up, and then firing the heating up again in the evening so the house is warm when they get home until they go to bed.

■ 24 hour, 5/2 day and 7 day selectable
■ 2 or 3 ON/OFF periods selectable
■ 1, 2 or 3 hour boost
■ Advance to next programmed event
■ Automatic Summer/Winter time change
■ Standard wall plate – simple plug in and replace
■ Pumped or gravity system selectable

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Contact Type	1B , Micro-Disconnection
Battery Type	Lithium Cell CR2032
Enclosure Protection	IP30
Plastics	Thermoplastic, flame retardant
Insulation Class	Double
Wiring	Fixed wiring only
Backplate	Industry standard
Dimensions	140mm x 87mm x 37mm
Clock	12 hour am/pm, 1 minute resolution, accuracy +/– 1.5 sec/day
Program Resolution	10mins
Program Selection	Auto, On all day, On constant, off
Heating System	Pumped or Gravity
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

2 channel programmer. Designed for separate control of heating and stored hot water. This programmer can also be used with gravity systems.

CHOICE PR2n
2 Channel Programmer

Also available: **CHOICE PR2SI**
(as above with Service Interval feature)

BACKLIT DISPLAY

3 YEAR GUARANTEE

■ 24 hour, 5/2 day and 7 day selectable
■ 2 or 3 ON/OFF periods selectable
■ 1, 2 or 3 hour boost
■ Advance to next programmed event
■ Automatic Summer/Winter time change
■ Standard wall plate – simple plug in and replace
■ Pumped

1 channel programmer. Ideal for use with combi boilers with only one heating zone. This programmer has volt free contacts.

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A
Contact Type	1B , Micro-Disconnection (Voltage Free)
Battery Type	Lithium Cell CR2032
Enclosure Protection	IP30
Plastics	Thermoplastic, flame retardant
Insulation Class	Double
Wiring	Fixed wiring only
Backplate	Industry standard
Dimensions	140mm x 87mm x 37mm
Clock	12 hour am/pm, 1 minute resolution, accuracy +/– 1.5 sec/day
Program Resolution	10mins
Program Selection	Auto, On all day, On constant, off
Heating System	Pumped
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHOICE PR1n
1 Channel Programmer

3 YEAR GUARANTEE

BACKLIT DISPLAY

Also available: **CHOICE PR1SI**
(as above with Service Interval feature)

■ 24 hour, 5/2 day and 7 day selectable
■ 2 or 3 ON/OFF periods selectable
■ 1, 2 or 3 hour boost
■ Advance to next programmed event
■ Automatic Summer/Winter time change
■ Standard wall plate – simple plug in and replace
■ Pumped system
■ Comply with Part L of the Building Regulations

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Contact Type	1B , Micro-Disconnection
Battery Type	Lithium Cell CR2032
Enclosure Protection	IP30
Plastics	Thermoplastic, flame retardant
Insulation Class	Double
Wiring	Fixed wiring only
Backplate	Industry standard
Dimensions	140mm x 87mm x 37mm
Clock	12 hour am/pm, 1 minute resolution, accuracy +/– 1.5 sec/day
Program Resolution	10mins
Program Selection	Auto, On all day, On constant, off
Heating System	Pumped
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

3 channel programmer offers 1 hot water channel and 2 separate heating zones, dependant on the homes plumbing but normally split upstairs & downstairs. This programmer meets the requirements of the building regulations for homes over 150m².

CHOICE PR3n
3 Channel Programmer

Also available: **CHOICE PR3SI**
(as above with Service Interval feature)

BACKLIT DISPLAY

3 YEAR GUARANTEE

CHOICE PLUS THERMOSTATS

A Choice+ room thermostat regulates and maintains a desirable temperature throughout the home by calling for heat as the temperature varies throughout the day.

Choice+ thermostats include TPI feature to ensure a maintained temperature by analysis of the heating and cooling periods. Choice+ programmable thermostats include Optimum Start and Delayed Stop for additional efficiency, heating and cooling for the time programmed.

These features combine to offer the best in heating comfort and energy efficiency when compared to traditional On/Off thermostats.

For installation convenience Choice+ wireless thermostats are available if a hardwired connection is not available in the intended location.

- Large Temperature Adjustment Dial
- Tamper Resistance Cover with Security Torx Screw
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- 5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- 10A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	-5°C to 50°C
Current Rating	10A
Temperature Swing Adjustment	0.5°C and 1°C
Set Temperature Range	5°C to 30°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Call for Heat Indication LED	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Tamper Resistant	Yes; Tamper Resistance Cover with Security Torx Screw
Dimensions	86mm x 88mm x 38mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHPRSTATT
Tamperproof Electronic Thermostat

TPI | ErP Class 4 +2%

- Large Temperature Adjustment Dial
- Call for Heat Indication LED
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- 5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- 10A Switch Rating 240vAC

CHPRSTAT
Electronic Room Thermostat

Power Supply	230V AC, 50Hz
Operating Temperature	-5°C to 50°C
Current Rating	10A
Temperature Swing Adjustment	0.5°C and 1°C
Set Temperature Range	5°C to 30°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Call for Heat Indication LED	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Dimensions	86 mm x 88 mm x 38 mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

TPI | ErP Class 4 +2%

- Electronic Sensor for Accurate and Responsive Performance
- Tamper Resistance Cover with Security Torx Screw
- -5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- 10A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	-5°C to 50°C
Current Rating	10A
Temperature Swing Adjustment	0.5°C and 1°C
Set Temperature Range	-5°C to 30°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Call for Heat Indication LED	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Tamper Resistant	Yes; Tamper Resistance Cover with Security Torx Screw
Dimensions	86mm x 88mm x 38mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHPRSTATF
Electronic Frost Thermostat

ErP Class 4 +2%

CHPRSTATD
Electronic Thermostat with Digital Display

- Large Dial with Digital Display
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional &Integral) Control for Heating Efficiency
- Comfort/Economy or ON/OFF Modes
- Battery Powered with Low Indication Status (Batteries Supplied)
- 5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- Frost Protection
- 3A Contact Rating (Volt Free)

Power Supply	2 x AA Batteries
Operating Temperature	0°C to 50°C
Current Rating	3A
Switching Differential	1°C
Set Temperature Range	5°C to 30°C
Temperature Frost Protection	5°C
Temperature Display Range	3°C to 51°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Dimensions	86mm x 88mm x 38mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC
	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

TPI | ErP Class 4 +2%

CHPRSTATDRF
Wireless Thermostat with Digital Display

- Large Dial with Digital Display
- Wireless Communication Between Thermostat and Receiver
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Comfort/Economy or ON/OFF Modes
- Battery Powered with Low Indication Status (Batteries Supplied)
- 5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- Frost Protection
- Transmission frequency: 433 Mhz (80m Open Field, 30m Indoor Transmission)
- 16A Receiver Contact Rating(Volt Free)

Power Supply	2 x AA Batteries (Transmitter) & 240VAC, 50hz (Receiver)
Operating Temperature	0°C to 50°C
Current Rating	16A
Switching Differential	1°C
Set Temperature Range	5°C to 30°C
Temperature Frost Protection	5°C
Temperature Display Range	3°C to 51°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Transmission Distance	80m open, 30m indoors
Transmission Frequency	433 Mhz
Dimensions	86 mm x 88 mm x 38 mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

TPI | ErP Class 4 +2% | RF WIRELESS

CHPRSTATDP
Programmable Room Thermostat

- 24 or 7 Day Programmable
- 6 Time/Temperature Events per Day
- Permanent, Timed and Temporary Override Features
- Pre-Programmed Schedule Ready for Use
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Optimum Start/ Delay Start and Delayed Stop for Additional Efficiency

Power Supply	4 x AAA Batteries
Operating Temperature	0°C to 50°C
Current Rating	3A
Switching Differential	+/-0.5°C or +/-1.0°C selectable
Set Temperature Range	5°C to 35°C
Temperature Accuracy	+/-1°C
Temperature Display Range	0°C to 50°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Optimum Start/ Delay Start and Optimum Stop for Additional Efficiency	Yes
Programming Schedule	24 Hour or 7 Days
Available Operations	Up to 6 per Day
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

BACKLIT DISPLAY | Optimisation | TPI | ErP Class 4 +2%

CHPRSTATDPRF
Wireless Programmable Room Thermostat

- Wireless Communication Between Thermostat and Receiver
- 24 or 7 Day Programmable
- 6 Time/Temperature Events per Day
- Permanent, Timed and Temporary Override Features
- Pre- Programmed Schedule Ready for Use
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Optimum Start/ Delay Start and
- Delayed Stop for Additional Efficiency
- Battery Powered with Low Indication Status (Batteries Supplied)

Power Supply	4 x AAA Batteries & 240VAC, 50hz (Receiver)
Operating Temperature	0°C to 50°C
Current Rating	16A
Switching Differential	+/-0.5°C or +/-1.0°C selectable
Set Temperature Range	5°C to 35°C
Temperature Accuracy	+/-1°C
Temperature Display Range	0°C to 50°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Optimum Start/ Delay Start and Optimum Stop for Additional Efficiency	Yes
Programming Schedule	24 Hour or 7 Days
Available Operations	Up to 6 per Day
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Transmission Distance	80m open, 30m indoors
Transmission Frequency	433 Mhz
Dimensions	88mm x 88mm x 39.4mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

RF WIRELESS | BACKLIT DISPLAY | Optimisation | TPI | ErP Class 4 +2%

CHOICE THERMOSTATS

A room thermostat is used to regulate and maintain a desirable temperature throughout the home. It works by switching the heating system on and off as the temperature varies throughout the day.

For example, if the temperature drops below a certain level, a sensor in the room thermostat can be made to trigger the switch for the boiler and pump which will heat the radiators and in turn, the rooms in the home. If the room rises above a certain temperature, the thermostat will then turn off the central heating system so that your house will cool down to its desired temperature once more.

- Dual diaphragm temperature sensing element
- Suitable for surface or pattress box mounting
- 10 to 30°C Set point range
- 2 Wire Installation
- Three terminal heating/cooling changeover
- Complete with tamperproof cover

Power Supply	230V AC, 50Hz
Operating Temperature	10°C to 30°C
Current Rating	10(3) A
Temperature Differential	Approx 4°C
Operating Temperature Range	0°C to 40°C
Dimensions	L83 x H83 x D37
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHOICE RSTAT1T
Tamperproof Mechanical Thermostat

ErP Class 1 +1%

- Dual diaphragm temperature sensing element
- Suitable for surface or pattress box mounting
- 10 to 30°C Set point range
- 2 Wire Installation
- Three terminal heating/cooling changeover

Power Supply	230V AC, 50Hz
Operating Temperature	10°C to 30°C
Current Rating	10(3) A
Temperature Differential	Approx 4°C
Operating Temperature Range	0°C to 40°C
Dimensions	L83 x H83 x D37
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHOICE RSTAT1
Mechanical Thermostat

ErP Class 1 +1%

- LCD showing room temperature
- Comfort/Economy or ON/OFF modes
- Frost protection
- Battery Powered (with battery low indication)
- 2 wire installation
- 5-30°C set point range

Power Supply	2 Alkaline batteries 1.5V (type AA)
Contact Rating	3A, 250V AC, (Volt free contact)
Power reserve	1 year
Temperature adjustment range	5-30°C
Temperature frost protection	5°C (Non adjustable)
Temperature display range, scale	3 to 51°C, 1°C
Operating Temperature	0 to 50°C
Storage Temperature	10-60°C
Switching Differential	+/- 1°C
Protection Rating	IP21
Wire Size	0.5-1.5mm2
Dimensions	86mm x 86mm x 32mm
Complies with	EN60730-1, EN60730-2-9, EMC directive 2004/108/EC, LVD directive 2006/95/EC

CHOICE RSTAT3
Digital Thermostat

ErP Class 1 +1%

CHOICE RSTAT3RF
Wireless Digital Thermostat

- 30 meters range to the Receiver
- Comfort/Economy or On/Off modes
- Unique RF address to avoid interference
- Clear LCD display showing room temperature
- Large control dial
- Frost protection
- 5-30°C set point range

Transmitter

Power Supply	2xAA 1.5V batteries
Battery Lifespan	1 year
Temperature Adjustment Range	5-30°C
Temperature Display Range, Scale	3-51°C, 1°C
Temperature Frost Protection	5°C (non adjustable)
Switching Differential	+/- 1°C
Dimensions	86 x 86 x 32mm
Transmission Frequency	433Mhz
Transmission Distance	80m open, 30m indoors
Mounting Method	Wall/Surface

Receiver

Power Supply	230Vac, 50Hz
Contact Rating	16A, 250Vac (Volt Free contact)
Insulation class	2
Flexible Wire Size	1.5mm2
Rigid Wire Size	1.5mm2
Dimensions	86 x 86 x 55, when mounted
Mounting	Wall using supplied backbox

Transmitter and Receiver

Operating Temperature	0-50°C
Storage Temperature	10-60°C
Protection Rating	IP21

E/P Class 1 +1% RF WIRELESS

CHOICE RSTAT5RF
Wireless Digital Programmable Thermostat

- 30 meters range to the Receiver
- Economy and Comfort Operation
- Unique RF address to avoid interference
- 24 hour or 7 day programmable
- 6 programmable events per day
- Button press back-lit operation
- Frost protection
- 5-35°C set point range

Transmitter

Power Supply	4xAAA 1.5V Alkaline batteries
Battery lifespan	1 year
Temperature display range	5-35°C (increment 0.1)
Temperature control range	0- 50°C (increment 0.5)
Program time increment	10 minutes
Temperature accuracy	+/- 1°C
Switching Differential	+/-05°C or +0/-0.1°C selectable
Operating Temperature	0 – 50°C
Clock Accuracy	<1sec / day
Protection Rating	IP30
Dimensions	110 x 104 x 21.5mm
Transmission Frequency	868Mhz
Transmission Distance	80m open, 30m indoors
Mounting	Wall or free standing using table stand

Receiver

Power supply	230Vac, 50Hz
Contact rating	16A, 250Vac (Volt Free contact)
Insulation class	2
Flexible Wire Size	0.5-1.5mm
Rigid Wire Size	0.5-2.5mm
Dimensions	88 x 88 x 39.4mm
Wall mounting	Industry standard
Complies with	EN60730-1, EN60730-2-7, EN60730-11

E/P Class 1 +1% RF WIRELESS BACKLIT DISPLAY

CHOICE FSTAT1
Frost Thermostat

- Bi-Metallic temperature sensing element
- Suitable for surface or switch box mounting
- –5 to 25°C set point range
- Tamper resistant cover fitted with accelerator heater

Power Supply	230 Vac, 50 Hz
Temperature control range	-5 to 25°C
Load rating (1–3)	10A / 250 Vac
Ambient Max	T50
Protection Rating	IP20
Dimensions	78mm x 78mm x 36mm

CHOICE CSTAT
Cylinder Thermostat

- Easy fixing to all hot water cylinders
- Suitable for use on uninsulated and foam lagged cylinders
- Cylinder strap and hooks provided
- Pipe mounting attachment included

Switch Action	SPPT Type 1CL
Switch Rating	16(4) A, 230 Vac
Sensing Element	Bi-metal
Temperature setting Range	0°C to 90°C
Differential	4°C +2°C
Max Surface Temperature	110°C
Protection	IP40
Fixing	Plastic coated spring wire (1800mm) with hooks

WI-FI THERMOSTATS

Sangamo's Wi-Fi Thermostat adds smart functionality to your home, ensuring comfortable heating at the right time.

Benefit from energy efficient programming and remote access via APP allowing constant monitoring and control at your fingertips.

The large LCD display and simplified APP has been designed to assist with straight forward installation and operation; suitable for electric, gas or oil systems.

CHOICE RSTATWIFIBLK

Receiver

100 meter range

Set Temperature
You can set the temperature from anywhere, even if you're not at home.

Analyse Usage
Track your energy usage from an easy-to-read report. This can highlight periods where heating is wasted, saving you energy.

Program Schedules
Create heating schedules from anywhere, so that your heating is on at the times you want.

- Room thermostat controlled through APP
- Free 'SANGAMO CHOICE' APP with no subscription fees
- Monitor room temperature and thermostat activity
- 100-meter open field range from thermostat to receiver (868mHz)
- 7 day programmable, 6 programmable events per day
- Large LCD display
- 5-35°C set point range
- Frost protection
- Wi-Fi function requires 2.4GHZ network and thermostat to be powered with a mains supply or MicroUSB

Thermostat

Power Supply	240vAC or microUSB and 4x AAA Alkaline batteries
Temperature operating range	0-50°C
Temperature control range	5-35°C
Temperature accuracy	0.1°C
Protection Rating	IP21
Transmission Frequency	868mHz
Transmission Distance	100 Meter (Open Field)
Wi-Fi Frequency	2.412GHZ-2.484GHZ
Mounting	Wall or Stand
Dimensions	124x88x21mm

Receiver

Power Supply	240vAC
Switch Rating	16A@250vAC
Transmission Frequency	868mHz
Transmission Distance	100 Meter (Open Field)
Dimensions	85x85x24mm

CHOICE RSTATWIFI
Wi-Fi Thermostat

SANGAMO CHOICE APP | ErP Class 1 +1% | WIRELESS

- Room thermostat controlled through APP
- Free 'SANGAMO CHOICE' APP with no subscription fees
- Monitor room temperature and thermostat activity
- 100-meter open field range from thermostat to receiver (868mHz)
- 7 day programmable, 6 programmable events per day
- Large LCD display
- 5-35°C set point range
- Frost protection
- Wi-Fi function requires 2.4GHZ network and thermostat to be powered with a mains supply or MicroUSB

Thermostat

Power Supply	240vAC or microUSB and 4x AAA Alkaline batteries
Temperature operating range	0-50°C
Temperature control range	5-35°C
Temperature accuracy	0.1°C
Protection Rating	IP21
Transmission Frequency	868mHz
Transmission Distance	100 Meter (Open Field)
Wi-Fi Frequency	2.412GHZ-2.484GHZ
Mounting	Wall or Stand
Dimensions	124x88x21mm

Receiver

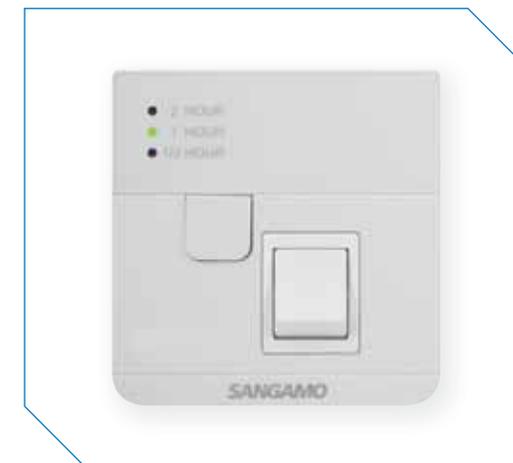|	
Power Supply	240vAC
Switch Rating	16A@250vAC
Transmission Frequency	868mHz
Transmission Distance	100 Meter (Open Field)
Dimensions	85x85x24mm

CHOICE RSTATWIFIBLK
Wi-Fi Thermostat

SANGAMO CHOICE APP | ErP Class 1 +1% | WIRELESS

- 30 Mins, 1 Hour and 2 Hour Boost Function
- Clear Indication LEDs
- Single Gang Surface (Mount Box Included) or Flush Mounting
- Supplied with Replaceable BS1362 13A Fuse
- 13A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	13A Resistive AC240V
Boost Durations	30 Minutes, 1 Hour or 2 hours
Fixing	Single Pattress – Surface and Flush Mounting
IEC Protection Class	Class II
Temperature Rating	T40
Material	ABS
Operation Temperature	-10°C to 40°C
Fuse Rating	BS1362 13A Fuse
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730 BS EN60730

PSPBF
Powersaver Plus Boost w/ Fuse Protection

FUSE PROTECTED

POWERSAVER PLUS TIMERS

The primary application for the POWERSAVER+ is to control immersion heaters. In a typical UK household nearly 20% of a home's energy cost is spent on heating hot water. Leaving an immersion heater on all the time can be a significant waste of energy that can drive this figure up to 25% or higher. The automatic control of a POWERSAVER+ can save on fuel expenditure and energy wastage when the user may forget.

Amongst a wide range of applications, the POWERSAVER+ models are also suitable for combi boilers, panel heaters, lighting including LED and towel rails.

The range includes a double pole switched fused option to incorporate an extra isolation feature which separates the live and neutral wires, adding additional safety for high loads.

- 30 Mins, 1 Hour and 2 Hour Boost Function
- Clear Indication LEDs
- Single Gang Surface (Mount Box Included) or Flush Mounting
- 16A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive 240VAC 2A LED Lighting 240VAC
Boost Durations	30 Minutes, 1 Hour or 2 hours
Fixing	Single Pattress – Surface and Flush Mounting
IEC Protection Class	Class II
Temperature Rating	T40
Material	ABS
Operating Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730

PSPB
Powersaver Plus Boost

- 24 Hour, 5/2 Day & 7 Day Cycles
- 10 On/Off Programs per Day
- Permanent Memory Reserve
- 15 mins, 30 mins, 1 Hour, 2 Hour, 4 Hour and 6 Hour Boost Function
- Clear Indication Display
- Button Lock Feature
- Summer / Winter time Change
- Single Gang Surface (Mount Box Included) or Flush Mounting
- 16A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive 240VAC 2A LED Lighting 240VAC
Boost Durations	15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, or 6 Hours
Memory Reserve	Permanently Reserves Settings
Terminals	Suitable for max. 2.5 mm² flexible and 4.0 mm² fixed cabling
IEC Protection Class	Class II
Temperature Rating	T40
Display	LCD
Material	ABS
Operation Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730

PSPS

Powersaver Plus Select

- 24 Hour, 5/2 Day & 7 Day Programming
- 10 On/Off Programs per Day
- Permanent Memory Reserve
- 15 mins, 30 mins, 1 Hour, 2 Hour, 4 Hour and 6 Hour Boost Function
- Clear Indication Display
- Button Lock Feature
- Summer / Winter time Change
- Single Gang Surface (Mount Box Included) or Flush Mounting
- Supplied with Replaceable BS1362 13A Fuse
- 13A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	13A Resistive (3kW) 750W Incandescent, Halogen lighting 500W Fluorescent lighting 200W LED lighting 100W Compact Fluorescent lighting
Boost Durations	15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, or 6 Hours
Memory Reserve	Permanently Reserves Settings
Terminals	Suitable for max. 2.5 mm² flexible and 4.0 mm² fixed cabling
IEC Protection Class	Class II
Temperature Rating	T40
Display	LCD
Material	ABS
Operation Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730

PSPSF247

Powersaver Plus Select 24/7 Timer w/ Fuse

FUSE PROTECTED

- 24 Hour Programming
- 10 On/Off Programs per Day
- Permanent Memory Reserve
- 15 mins, 30 mins, 1 Hour, 2 Hour, 4 Hour and 6 Hour Boost Function
- Clear Indication Display
- Button Lock Feature
- Summer / Winter time Change
- Single Gang Surface (Mount Box Included) or Flush Mounting
- Supplied with Replaceable BS1362 13A Fuse
- 13A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	13A Resistive (3kW) 750W Incandescent, Halogen lighting 500W Fluorescent lighting 200W LED lighting 100W Compact Fluorescent lighting
Boost Durations	15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, or 6 Hours
Memory Reserve	Permanently Reserves Settings
Terminals	Suitable for max. 2.5 mm² flexible and 4.0 mm² fixed cabling
IEC Protection Class	Class II
Temperature Rating	T40
Display	LCD
Material	ABS
Operation Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730

PSPSF24

Powersaver Plus Select 24 Hour Timer w/ Fuse

FUSE PROTECTED

- Spare Fuses for PSPSF4 & PSPSF247
- Packs of 5
- BS1362 13A Fuse

PSPFUSE

Powersaver Plus Spare Fuses

POWERSAVER CONTROLLERS

The primary application for the Powersaver range is to control immersion heaters. In a typical UK household nearly 20% of a home's energy cost is spent on heating hot water. Leaving an immersion heater on all the time can be a significant waste of energy that can drive this figure up to 25% or higher.

Immersion heaters are often rated at 3kw which, if left on permanently, can cost around 13p per hour/ £1.56 per day/ £9 per week/ £450 per year, so it is best to have control of your heating patterns.

Fitting a Sangamo immersion heater controller can reduce these costs by up to 50%, even more if the property can take advantage of a dual tariff electricity and controlled by the Powersaver Dual Flexi.

The Powersaver Boost and Select models are also suitable for LED lighting and towel rails.

- 24 hour, 5/2 day & 7 day selectable
- 10 On/Off Programs per Day
- 30 min, 1 hour & 2 hour multi-press boost function
- Fits directly into a single gang surface box
- Button lock feature
- Summer/winter time change

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive AC240V 2A LED Lighting AC240V
Fixing	Surface and Flush Mounting
Resolution of Programs	10 Minutes
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP00
Shock Protection	Class II
Case Material	ABS
Action Type	1B
Temperature Rating	T35
Operation Temperature	-10°C to 40°C
Memory Reserve	Permanent reserve setting
Display	LCD
Dimensions	87mm x 87mm x 35mm
Complies with	BS EN60730

PSS2
Powersaver Select

400W LED | LCD DISPLAY

- 30 mins, 1 hour and 2 hour boost periods
- Switches appliance off automatically after boost period
- Fits directly onto a single gang pattress box

PSB2
Powersaver Boost

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive AC240V 2A LED Lighting AC240V
Fixing	Single Pattress – Surface and Flush Mounting
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP00
Shock Protection	Class II
Case Material	ABS
Action Type	1B
Temperature Rating	T35
Operation Temperature	0°C to 40°C
Dimensions	87mm x 87mm x 35mm
Complies with	BS EN60730

400W LED | LED DISPLAY

- Suitable for single, dual and twin immersion elements
- Pre-set adjustable (ie minimise or cancel) programs for use with low rate tariffs (Economy 7, Economy 10 & Eco20:20)
- Direct upgrade to Horstmann E7 & E7Q and Sangamo Q7 controllers
- 24 hour electronic timer
- Automatic summer/winter time change
- Programmable boost function - 2 hours max

Power Supply	230V +10% / -15%
Frequency	50/60Hz
Power Consumption	1.2W
Contact Rating	13A Resistive 230V Suitable for immersion heaters up to 3kW
Contact Type	Micro-disconnection on control. Disconnection to immersion heater(s) via double pole rocker switch
Memory Reserve	3 years
Timing Accuracy	+/- 0.5 sec per day at +23°C
Operation Temperature	0°C to 35°C
Shock Protection	Class 1
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP30
Dimensions	169mm wide, 114mm hight, 60mm deep (excluding rocker switch & buttons)
Complies with	BS EN60730

PSDF2
Powersaver Dual Flexi 2

BACKLIT DISPLAY

ROUND PATTERN TIME SWITCHES

Sangamo have manufactured the renowned RPTS from our Port Glasgow factory since 1951, having sold over 11 million switches and counting. These 20A switches are famous for their high capacity, quality and reliability.

We often hear from customers who have had switches installed for over 5 decades and often on their second use, having outlived the equipment they were being utilised for.

S250 STANDARD RANGE

The original RPTS model for those that need simple on & off switching of up to 20A. The dial is 24 hour but contains a Day Omit device which skips the ON operation on selected days of the week. These switches come with either 2 or 3 sets of ON & OFF arms. To set the switch you simply loosen the centre screw, move the arms around the dial to match up with the switching times and re-tighten.

3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.

S250 STANDARD RANGE

S254.2 Standard 3 Pin Time Switch, 2 On/Offs

S255.2 Standard 4 Pin Time Switch, 2 On/Offs

S254.3 Standard 3 Pin Time Switch, 3 On/Offs

S255.3 Standard 4 Pin Time Switch, 3 On/Offs

Power Supply	230V AC, 50/60Hz
Programming	24 hour programme with ON/OFF operations
Current Rating	20A resistive. More Switching Capacity info on request
Display	24 hour dial
Mounting	Surface
Day Omission	Selectable
Temp Override Facility	Selectable
Cable Size	6.0mm2
Timing Accuracy	5 mins/year
Power Consumption	0.6W at 230V
Temperature Range	0°C to 50°C
Live Parts Protection	Enclosure Protection
Type of Protection	IP20
Shock Protection	Class 1 (Product must be earthed)
Dial Calibration	15 min divisions
Setting Accuracy	+/- 3 minutes
Period Between unlike Operations	15 minutes minimum
Period Between like Operations	105 minutes minimum
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)
Complies with	BS EN60730

■ Programming: 24 hour with on/off operations

■ Current Rating: 20A

■ Battery Reserve: None

■ Day Omit Dial: Yes (Omits the 'ON' operation)

■ Temporary override (manual button)

5 YEAR GUARANTEE   3600W LED

ROUND PATTERN TIME SWITCHES

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Q550 STANDARD RANGE

The 'red dial' time switch. Sangamo RPTS with red print on the dial contain a 100 hour battery reserve. These switches offer a wider range of variations and options than the S250 Range.

3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.

■ Temporary override (manual button)
■ Programming: 24 hour with on/off operations
■ Current Rating: 20A
■ Battery Reserve: 100 hours
■ Day omit dial

5 YEAR GUARANTEE   **3600W LED**

Power Supply	230V AC, 50/60Hz
Programming	24 hour programme with ON/OFF operations
Display	24 Hour dial
Mounting	Surface
Current Rating	20A resistive. More Switching Capacity info on request
Reserve	100 hrs (providing battery has been charged for 300 hrs)
Day Omission	Selectable
Temp Override Facility	Selectable
Cable Size	6.0mm2
Timing Accuracy	5 mins/year
Temperature Range	0°C to 50°C
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP20
Shock Protection	Class 1 (Product must be earthed)
Dial Calibration	15 min divisions
Setting Accuracy	+/- 3 minutes
Period Between unlike Operations	15 minutes minimum
Period Between like Operations	105 minutes minimum
Day Omit Skips On Operation	Q554, Q555, Q559, Q563, Q586
Day Omit Skips Off Operation	Q557
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)
Complies with	BS EN60730

Q550 STANDARD RANGE

Q554.2	Standard 3 Pin Time Switch, 2 on/offs
Q554.3	Standard 3 Pin Time Switch, 3 on/offs
Q555.2	Standard 4 Pin Time Switch, 2 on/offs
Q555.3	Standard 4 Pin Time Switch, 3 on/offs
Q555.2110V	110v Standard 4 Pin Time Switch, 2 on/offs
Q557.2	Standard 4 Pin Time Switch, 2 on/offs, omit off operation
Q557.3	Standard 4 Pin Time Switch, 3 on/offs, omit off operation
Q559.2	Standard 4 Pin Time Switch, 2 on/offs, early off on 1 day/week
Q563.2	Standard 4 Pin Time Switch, 2 on/off Changeover Operations
Q563.3	Standard 4 Pin Time Switch, 3 on/off Changeover Operations
Q586.2	Standard 4 Pin Time Switch, 2 on/off Changeover Operations, early on 1 day/week

ROUND PATTERN TIME SWITCHES

Sangamo have manufactured the renowned RPTS from our Port Glasgow factory since 1951, having sold over 11 million switches and counting. These 20A switches are famous for their high capacity, quality and reliability.

We often hear from customers who have had switches installed for over 5 decades and often on their second use, having outlived the equipment they were being utilised for.

E850 STANDARD RANGE

Digital RPTS' combine the high capacity and reliability of the electro-mechanical models but provide full 7 day programming, allowing for more complex fixed time program schedules.
The unit is easy & intuitive to program by painting in and wiping out segments on the dial face.

3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.

E850 STANDARD RANGE

E854	Digital 3 Pin Time Switch, 96 Operations

E855	Digital 4 Pin Time Switch, 96 Operations

Power Supply	230V AC, 50/60Hz
Programming	96 Operations
Display	LCD
Mounting	Surface
Current Rating	20A resistive. More Switching Capacity info on request
Reserve	20 days (Rechargeable Battery)
Temp Override Facility	2hr Override On. Advance to Off.
Cable Size	6.0mm2
Timing Accuracy	5 mins/year
Holiday Mode	Suspends programs for 14 days, or indefinitely
BST/GMT Changeover	Automatic
Temperature Range	35°C
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP20
Shock Protection	Class 11 (functional and supplementary insulation)
Period Between ON/OFF Operations	15 mins
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)

- Programming: 7 day programme
- Up to 48 on and 48 off (96 operations per day)
- Each day can be programmed independently
- Holiday mode
- Auto BST/GMT changeover
- Current Rating: 20A
- Battery Reserve: 20 days
- Temporary override (manual button)

5 YEAR GUARANTEE   400W LED

Zone 4
56N

Zone 3
54N

Zone 2
52N

Zone 1
50N
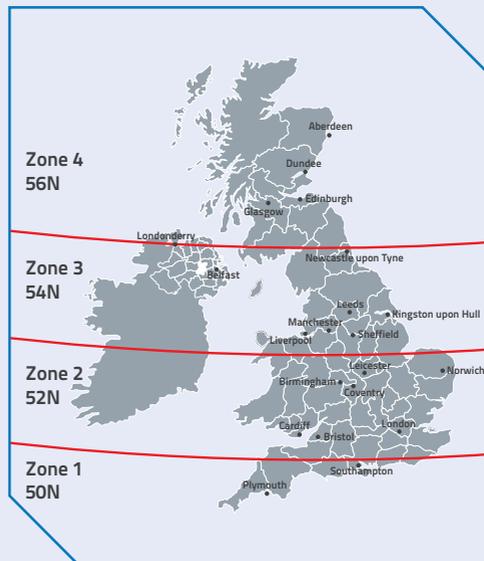
Q550 ASTRO/SUNTRACKER

Astro/Suntracker switches automatically adjust themselves to follow Sunrise/Sunset times throughout the year. This makes them ideal for controlling external and internal lighting loads up to 20A or 3,600W of LED lighting with no need for a sensor.

As these switches track the motion of the sun & not the time it should be set to GMT & left all year, so there's no need to worry about summer & winter clock changes, the switch does it all itself. The month dial controls the brass sunset/sunrise arms automatically to keep the lights switching at the right time each day.

Sunset & Sunrise times vary through the length of the British Isles by as much as 40 minutes at certain times of year. Our RPTS Astro models come in 4 zone variations to make the switching times more accurate. Additionally, users can alter the longitude setting away from the 0° longitude line to focus the accuracy in further, if required.

2 on/off models have a second set of fixed time operating arms, allowing you to set your lighting to go off for a set period overnight while still benefiting from the sunset and sunrise programming.

All models also contain a 100 hour battery reserve.

3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.

Q550 ASTRO/SUNTRACKER

■ Programming: 24 hour with on/off operations

■ Current Rating: 20A

■ Battery Reserve: 100 hours

Power Supply	230V AC, 50/60Hz
Programming	24 hour programme with ON/OFF operations
Display	Solar dial
Mounting	Surface
Current Rating	20A resistive. More Switching Capacity info on request
Reserve	100 hrs (providing battery has been charged for 300 hrs)
Temp Override Facility	Selectable
Cable Size	6.0mm2
Timing Accuracy	5 mins/year
Temperature Range	0°C to 50°C
Live Parts Protection	Enclosure Protection
Type of Protection	IP20
Shock Protection	Class 1 (Product must be earthed)
Dial Calibration	15 min divisions
Setting Accuracy	+/- 3 minutes
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)
Complies with	BS EN60730

Q550.13.11	Astro Zone 1, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation
Q550.13.12	Astro Zone 2, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation
Q550.13.13	Astro Zone 3, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation
Q550.13.14	Astro Zone 4, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation
Q551.13.11	Astro Zone 1, 3 Pin Time Switch, 1 On/Off & optional early off
Q551.13.12	Astro Zone 2, 3 Pin Time Switch, 1 On/Off & optional early off
Q551.13.13	Astro Zone 3, 3 Pin Time Switch, 1 On/Off & optional early off
Q551.13.14	Astro Zone 4, 3 Pin Time Switch, 1 On/Off & optional early off
Q551.14.11	Astro Zone 1, 3 Pin Time Switch, 2 On/Offs
Q551.14.12	Astro Zone 2, 3 Pin Time Switch, 2 On/Offs
Q551.14.13	Astro Zone 3, 3 Pin Time Switch, 2 On/Offs
Q551.14.14	Astro Zone 4, 3 Pin Time Switch, 2 On/Offs
Q553.13.11	Astro Zone 1, 4 Pin Time Switch, 1 On/Off & optional early off
Q553.13.12	Astro Zone 2, 4 Pin Time Switch, 1 On/Off & optional early off
Q553.13.13	Astro Zone 3, 4 Pin Time Switch, 1 On/Off & optional early off
Q553.13.14	Astro Zone 4, 4 Pin Time Switch, 1 On/Off & optional early off
Q553.14.11	Astro Zone 1, 4 Pin Time Switch, 2 On/Offs
Q553.14.12	Astro Zone 2, 4 Pin Time Switch, 2 On/Offs
Q553.14.13	Astro Zone 3, 4 Pin Time Switch, 2 On/Offs
Q553.14.14	Astro Zone 4, 4 Pin Time Switch, 2 On/Offs

5 YEAR GUARANTEE

3600W LED

BLUETOOTH DIN RAIL TIME SWITCHES

Bluetooth is a wireless communication protocol that allows programming of the switch using the free APP available on Android and IOS smart phones and tablets. This works the same way as contactless bank cards, oyster travel cards and mobile payment systems. The program is setup on the APP and transfers to the switch when the smart device is held in close proximity.

- Daily and Weekly programming
- Astro (sunrise, sunset) program
- Switching capacity 16A per channel
- Zero-crossing, LED up to 600W
- Programmable via App (iOS and Android)
- 10 years battery reserve

Power Supply	230V AC, 50/60Hz
Programming	100 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 3,000W Halogen lamp 3,000W Fluorescent lamp uncompensated 2,600W Fluorescent lamp series compensated 2,600W Fluorescent lamp parallel compensated 1,300W Compact Fluorescent lamp 600W LED 230V AC 600W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF, Extra On/Off, Permanent On/Off
Offset Astro Switching Time	+/- 90 min.
Memory Locations	100
Minimum Interval	1 min
Program Security	unlimited
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm

SC2813PRO4

Astro Bluetooth 2 Module 1 Channel, 7 day Timer, 100 Operations

600W LED | BACKLIT DISPLAY | ASTRO SUNTRACKER | Bluetooth

- Daily and Weekly programming
- Switching capacity 16A per channel
- Zero-crossing, LED up to 600W
- Programmable via App (iOS and Android)
- 10 years battery reserve

Power Supply	230V AC, 50/60Hz
Programming	100 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 3,000W Halogen lamp 3,000W Fluorescent lamp uncompensated 2,600W Fluorescent lamp series compensated 2,600W Fluorescent lamp parallel compensated 1,300W Compact Fluorescent lamp 600W LED 230V AC 600W
Reserve	10 years
Switching Functions	ON/OFF, Pulse, Cycle, Random, Extra On/Off, Permanent On/Off
Memory Locations	100
Minimum Interval	1 min
Program Security	unlimited
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm

SC2811PRO4

Standard Bluetooth 2 Module 1 Channel, 7 day Timer, 100 Operations
Also available: **SC2821PRO4** (as above with 2 channels)

600W LED | BACKLIT DISPLAY | ASTRO SUNTRACKER | Bluetooth

- Daily and Weekly programming
- Astro (sunrise, sunset) program
- Switching capacity 16A per channel
- Zero-crossing, LED up to 600W
- Programmable via App (iOS and Android)
- 10 years battery reserve

Power Supply	230V AC, 50/60Hz
Programming	100 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 3,000W Halogen lamp 3,000W Fluorescent lamp uncompensated 2,600W Fluorescent lamp series compensated 2,600W Fluorescent lamp parallel compensated 1,300W Compact Fluorescent lamp 600W LED 230V AC 600W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF
Offset Astro Switching Time	+/- 90 min.
Memory Locations	100
Minimum Interval	1 min
Program Security	unlimited
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm

SC2823PRO4

Astro Bluetooth 2 Module 2 Channel, 7 day Timer, 100 Operations

600W LED | BACKLIT DISPLAY | ASTRO SUNTRACKER | Bluetooth

NFC DIN RAIL TIME SWITCHES

NFC (Near Field Communication) is a wireless communication protocol that allows you to program the switch using the free Sangamo Connect app on an Android NFC Smart phone.

This works the same way as contactless bank cards, oyster travel cards and mobile payment systems.

You set the program up on the app and hold the phone next to the switch to read, write or transfer programming times.

■ Volt-free 16A changeover contact
■ 4 memory locations
■ Basic Astro programming
■ Works with Android NFC phones for programming
■ Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	4 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 1,000W Fluorescent lamp parallel compensated 550W Compact Fluorescent lamp 200W LED 230V AC 200W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF
Offset Astro Switching Time	+/– 90 min.
Memory Locations	4
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	–30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm

72102NFC

Astro NFC 1 Module 1 Channel, 24 hr Timer, 4 Operations

200W LED   BACKLIT DISPLAY   ASTRO SUNTRACKER   NFC

■ Volt-free 16A changeover contact
■ 56 memory locations
■ Standard programming
■ Works with Android NFC phones for programming
■ Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	56 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 1,000W Fluorescent lamp parallel compensated 550W Compact Fluorescent lamp 200W LED 230V AC 200W
Reserve	10 years
Switching Functions	ON/OFF, Pulse, Extra On/Off, Permanent On/Off
Memory Locations	56
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	–30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm

72113NFC

Standard NFC 2 Module 1 Channel, 7 day Timer, 56 Operations
Also available: **72213NFC** (as above with 2 channels)

200W LED   NFC   BACKLIT DISPLAY

■ Volt-free 16A changeover contact
■ 56 memory locations
■ Astro programming
■ Works with Android NFC phones for programming
■ Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	56 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 1,000W Fluorescent lamp parallel compensated 550W Compact Fluorescent lamp 200W LED 230V AC 200W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF, Extra On/Off, Permanent On/Off
Offset Astro Switching Time	+/– 90 min.
Memory Locations	56
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	–30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm

72103NFC

Astro NFC 2 Module 1 Channel, 7 day Timer, 56 Operations
Also available: **72203NFC** (as above with 2 channels)

200W LED   BACKLIT DISPLAY   ASTRO SUNTRACKER   NFC

DIN RAIL TIME SWITCHES

All Sangamo's DIN Rail mountable time switches are designed for 35mm 'Top Hat' rail. Switches come in 1, 2 or 4 modules, each module is 17.5mm wide, which fits the required width in the DIN enclosure.

Using the 25195 USB Hub and Easy Vue software or 25196 USB Hub with bluetooth and connect app programs can be transferred to a 25193 data key and then to one or multiple switches. 1 module switches do not require a Data Key as the fascia can be removed and slotted into the Hub directly.

Pulse Programming

Short term switching at fixed times. Ideal for school bells, sirens, churches, etc. A burst from 1 second up to 59m 59s can be programmed into the unit. This feature appears on all standard switches.

- ■ Volt-free 16A changeover contact
- ■ 46 memory locations
- ■ Module timer
- ■ Standard programming
- ■ Works with key programming & EasyVUE connect (Key & hub are optional extras)
- ■ Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	46 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	6A Inductive@0.6pf Filament lamp 1,000 W Halogen lamp 1,000W Fluorescent lamp with electronic lamp ballast 500W Fluorescent lamp conventional lamp ballast 400W Compact Fluorescent lamp 300W LED 230V AC 300W
Reserve	10 years
Switching Functions	ON; OFF; Pulse, Permanent On/Off
Pulse Length	00:01 up to 59:59 mm:ss
Memory Locations	48
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 36 x 63 mm

72112

Standard 2 Module, 1 Channel, 7 Day, 46 Operations
Also available: **72212** (as above with 2 channels

300W LED   **BACKLIT DISPLAY**

- ■ Volt-free 16A changeover contact
- ■ 46 memory locations
- ■ Standard programming
- ■ Works with key programming & EasyVUE connect (Key & hub are optional extras)
- ■ Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	46 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	6A Inductive@0.6pf Filament lamp 1,000W Halogen lamp 1,000W Fluorescent lamp w/ electronic lamp ballast 500W Fluorescent lamp w/ convent. lamp ballast 100W Compact Fluorescent LA 50W LED 230V AC 50W
Reserve	10 years
Switching Functions	ON; OFF; Pulse, Permanent On/Off
Pulse Length	00:01 up to 59:59 mm:ss
Memory Locations	48
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 36 x 63 mm

71111

Standard 1 Module 1 Channel, 7 Day, 46 Operations

50W LED

- ■ Volt-free 16A changeover contact
- ■ 300 memory locations
- ■ Standard programming
- ■ Works with key programming & EasyVUE connect (Key & hub are optional extras)
- ■ Battery Reserve: 6 years
- ■ Extra functions – special weekly programs, channel key assignment

Power Supply	230V AC, 50/60Hz
Programming	300 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000VA Fluorescent lamp series compensated 1,000VA More Switching Capacity info available upon request
Reserve	6 years
Switching Functions	ON; OFF; Pulse; Cycle, Extra On/Off, Permanent On/Off
Pulse length - Pulse function (switching time)	00:01 up to 59:59 mm:ss
Pulse Length - Timer (man. switching)	0:00:01 up to 9:59:59 h:mm:ss
Memory Locations	300
Minimum Interval	1 min
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 36 x 63 mm

25162

Standard 2 Module 1 Channel, Yearly Timer, 300 Operations

200W LED   **BACKLIT DISPLAY**

- Volt-free 16A changeover contact
- 300 memory locations
- Module timer: Multiple applications from one switch
- Standard programming
- Works with key programming & EasyVUE connect (Key & hub are optional extras)
- Battery Reserve: 10 years
- Extra functions - Channel key assignment, accepts external inputs

Power Supply	230V AC, 50/60Hz
Programming	300 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000VA Fluorescent lamp series compensated 1,000VA More Switching Capacity info available upon request
Reserve	10 years
Switching Functions	ON; OFF; Pulse; Cycle, Permanent On/Off
Pulse length - Pulse function (switching time)	00:01 up to 59.59 mm:ss
Pulse Length - Timer (man. switching)	0:00:01 up to 9:59:59 h:mm:ss
Memory Locations	300
Minimum Interval	1 min
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 72 x 63 mm

26404

Standard 4 Module 4 Channel, 7 Day Timer, 300 Operations

200W LED   **BACKLIT DISPLAY**

- Simple programming with 15 min captive segments

- Simple to read switching

- Manual override switch 'Permanent OFF/ Automatic/Permanent ON"

- 100 hour battery reserve

Power Supply	230V AC, 50/60Hz
Programming	Daily
Display	LCD
Mounting	DIN
Current Rating	16A, 2.5amp Inductive @0.6pf
Switching Capacity	Filament lamp Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 750W LED (230 V~) / CFL 200W
Reserve	100 hrs
Switching Functions	ON, OFF, Permanent On/Off
Switching Operation	96 per day
Program Security	unlimited (E2-PROM)
Minimum Interval	15 min
Temperature Range	-5°C to +50°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	65 x 18 x 90 mm

11002

Standard 1 Module 24 hr Timer

200W LED   **BACKLIT DISPLAY**

These switches automatically adjust their sunset & sunrise times based on where you are.
This can be set one of two ways;

LOCATION selecting the nearest city to you

POSITION by inputting your co-ordinates;
Setting the nearest whole longitude & latitude.

ASTRO/SUNTRACKER

71101	Astro 1 Module 1 Channel, 7 Day, 60 Operations

72101	Astro 2 Module 1 Channel, 7 Day, 60 Operations
72201	Astro 2 Module 2 Channel, 7 Day, 60 Operations

Power Supply	230V AC, 50/60Hz
Programming	60 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000VA Fluorescent lamp series compensated 1,000VA more Switching Capacity info available upon request
Reserve	6 years
Switching Functions	Astro ON/OFF, Night ON/OFF, Extra ON/OFF
Memory Locations	60
Offset Astro Switching Time	+/-90mins
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	0°C to 50°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	71101: 45x17.5x58mm. 72101,72201: 45 x 35 x 58 mm.

- Volt-free 16A changeover contact

- 60 memory locations

- Astro timer

- Simple programming

- Works with key programming & EasyVUE (Key & hub are optional extras)

- Battery Reserve: 6 years

- Key not required for 71101

400W LED   **BACKLIT DISPLAY**

PANEL TIME SWITCHES

The panel time switch range can also be surface or din rail mounted.

The analogue 16000 range are simple to use and are a cost effective timer. They are extremely easy to set, change and to view programmes. They are often used where multiple people are involved in setting and changing programs. For instance in church halls and similar applications. They are also fitted where the potential user is not comfortable using the latest digital technology, preferring the traditional pin type setting.

The 28000 range provides additional functionality in the same format to suit additional programming requirements.

Pulse Programming

Short term switching at fixed times. Ideal for school bells, sirens, churches, etc. A burst from 1 second up to 59m59s can be programmed into the unit. This feature appears on all standard switches.

- Volt-free 16A changeover contact
- 300 memory locations
- Programmable via App (iOS, Android and Windows)
- Battery Reserve: 10 years
- Comes ready for panel or surface mounting
- Require accessory 95587 for DIN rail mounting

Power Supply	230V AC, 50/60Hz
Programming	Daily, Weekly, or Astro
Display	LCD Back-lit
Mounting	Optional
Current Rating	16A
Switching Capacity	16A / 250 V – at cos = 1 6A with inductive load cos = 0.6 Filament Lamp, Halogen Lamp 400W Fluorescent Lamp with electron. lamp ballast 100W Fluorescent Lamp with convent. lamp ballast 100W LED (230V~)/CFL 50W
Reserve	10 years
Switching Functions	ON, OFF, Pulse, Cycle, Extra, Permanent, Astro
Pulse length – Pulse function (switching time)	00.01 up to 59.59 mm:ss
Pulse/Pulse Length Cycle	0:00.01 up to 9:59:59 h:mm:ss
Memory Locations	300
Minimum Interval	1 min
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Switchboard flush mounting	Retaining clip in 68 x 68mm cutout
Dimensions	72 x 72mm

SC4411PRO4
Astro Bluetooth 1 Channel 7 Day Digital Panel Timer
Also available: **SC4421PRO4** (as above with 2 channels)

Bluetooth

- Voltage free 16A changeover contact
- Suitable for Surface, Panel or Din rail mounting
- 100 hour battery reserve
- Programming by 15 min captive segments
- Manual override with automatic return to program
- Contact status display

Power Supply	230V AC, 50/60Hz
Programming	24 hour
Display	Analogue
Mounting	Optional
Current Rating	16A
Switching Capacity	Resistive load 16A 250V Voltage free inductive load (cos = 0.6) 2.5A 250V Incandescent lamp 2000W 250V
Reserve	100 hour
Switching Operations	96 per day
Temperature Range	-10°C to +50°C
Storage Temperature	-10°C to +50°C
Connection by cage terminals, section of conductors	0.5 to 4 mm2
Insulation class	2
Protection	IP20
Dimensions	72 x 94.5 x 48.4 mm (Face 72 x 72mm)
Complies with	BS EN 60730

PA16621
Standard Panel 24 hr Timer (with battery)
Also available: **PA16622** (as above with no battery)

- Voltage free 16A changeover contact
- Suitable for Surface, Panel or Din rail mounting
- 100 hour battery reserve
- Programming by 1 hour captive segments
- Manual override with automatic return to program
- Contact status display

Power Supply	230V AC, 50/60Hz
Programming	7 Day
Display	Analogue
Mounting	Optional
Current Rating	16A
Switching Capacity	Resistive load 16A 250V Voltage free inductive load (cos = 0.6) 3A 250V Incandescent lamp 1000W 250V Squirrel-cage motor 350W 250V
Reserve	100 hour
Switching Operations	24 per week
Temperature Range	-10°C to +50°C
Storage Temperature	-10°C to +50°C
Connection by cage terminals, section of conductors	0.5 to 4 mm2
Insulation class	2
Protection	IP20
Dimensions	72 x 94.5 x 48.4 mm (Face 72 x 72mm)
Complies with	BS EN 60730

PA16921
Standard Panel Mount 7 Day Timer with Battery
Also available: **PA16922** (as above with no battery)

95587
Panel Converting Mounting Kit

- For Products: 23871, 23872

143541
Module Enclosure

- 4-6 module
- IP40 protection
- 145 x 165 x 72mm
- Surface mounted
- Integral DIN-rail
- Compatible with 26404

110469
FD930 Conduit Box Time Switch

- Will accept 3/4in or 20mm conduit
- Fixings supplied
- Robust steel construction with black enamelled finish
- Compatible with S250, Q550 & E850 ranges

25193
Programming Data Key

- Data key for use with digital time switches that have key programming feature
- Used to load settings on single or multiple sites where the same product type is used
- Compatible with models ; 72101, 72201, 72112, 72212, 23871, 23872, 25162, 26404
- Not required for 71101, 71111

143602
Module Enclosure

- 1-2 module
- IP40 protection
- 51 x 139 x 60mm
- Surface mounted
- Integral DIN-rail
- Compatible with 1 or 2 module: 11002, 71111, 72112, 72212, 72113NFC, 72213NFC, 25162, 71101, 72201, 72102NFC, 72103NFC, 72203NFC

143603
Module Enclosure

- 3-4 module
- IP40 protection
- 88 x 139 x 60mm
- Surface mounted
- Integral DIN-rail
- Suitable for 2 module product applications where Contactor will be used.

25195
Programming Interface

- The Easy Vue Hub can be used to program your switch with a blank programming key via PC, using the Easy-Vue software
- Compatible with models ; 71101, 72101, 72201, 71111, 72112, 72212, 23871, 23872, 25162, 26404

25196
Programming Interface

- The Easy Vue Hub with Bluetooth can be used to program your switch with a blank programming key via PC, using the Easy-Vue software, or Android smartphone, using the Sangamo Connect app
- Compatible with models ; 71101, 72101, 72201, 71111, 72112, 72212, 23871, 23872, 25162, 26404

PRODUCT AWARENESS TRAINING DAYS

Here at ESP we offer free training aimed at electrical contractors and wholesalers who would like to add fire and security equipment to their product portfolio.

Most aspects of security will be covered including CCTV, Access Control and Essentials with a separate training day dedicated entirely to Fire Protection products.

These training days are held in the new purpose built showroom at our Redditch offices, but we also offer video conference courses when circumstances prevent physical attendees.

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