Making IT Rack deployment simple, fast and easy into Buildings.

Agnès Beverini & Oscar Pons – Category Managers Rack Systems & Edge

Digital transformation is driving IT everywhere…

Healthcare		**Digital Health** E-Health Robotic Surgery DMP HDS
Education Research		Digital learning MOOC HPC Super Calculateur Innovation Labs e-Campus
Local authorities Public Sector		Green City Smart City Smart Water e-Administration Smart Grid
Retail		Magic Mirror Connected Shop e-Beauty Phygital Customer Experience Grocery store with self-checkout

Electric

Every segment is digizing……

Hotels		Personalized welcome — Customer Experience — Keyless — Automated Check-in & out — On-line checking — Connection Quality
Industry		IIOT — Lean — Industrie 4.0 — Industry of the future — M2M — Big Data — Augmented Reality
Logistics		RFID labels — Flow Management — Security — Traceability — Inventory Drones — Automated storage — Location Management — Stacker cranes
Transportation Mobility		e-Mobility — Autonomous Vehicules — Intelligent Traffic — Geolocation — Security — Embedded processors

Electric

Digital innovation and transformation is accelerating very fast

IoT

80Mds

connected things*
By 2025

Big Data

>5x

generated data from 33 ZBs today to
175 ZBs by 2025*

*IDC, 2018

**Artificial
Intelligence**

6x

worldwide spending on cognitive
and AI systems btw 2017 & 2022

**Edge
Computing**

75%

of enterprise datas will be created
at the edge

Edge computing bridges these challenges

Bringing computing closest to the experience

CENTRALIZED
Massive compute and storage located in remote areas

REGIONAL EDGE
Large compute and storage located in central or urban areas

LOCAL EDGE
Compute and storage where data is generated and consumed

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Local infrastructure often looks like this…

No cable management

Non secured enclosures

No monitoring

Lack of dedicated cooling

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The Solution…is Micro Data Center

What is a Micro Data Center?

Micro-Datacenters are IT Infrastructure pre-engieneered , pre-tested, pre-assembled *enclosed rack systems* with all the components needed to run an edge site, *standardized, easy to deploy and highly secured.*

They include *power distribution units, uninterrptible power supplies (UPS), cooling (when needed), security as well as management software and services*

Management

Eco**Struxure**™

Security

Services

Lifecycle Services

Power Distribution

Cooling

Enclosures

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EcoStruxure™ Micro Data Center Fits in any environment !

R-Series

Rugged Environments

Factory floor, industrialized warehouse, manufacturing plant

C-Series

Commercial & Office Environments

Open office, stock room, retail stores, automated warehouse

S-Series

Standard IT Environments

Server rooms, wiring closets, network closets

Retail

Edge Opportunity Use Case

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Grocery Store Chain

Customer Challenge

- Optimized IT infrastructure to manage their stores

- Single Vendor solution standardized across many stores to support refrigeration systems and security systems and other applications in back-office stock space

- Limited technical staff and disparate equipment systems across many of the franchise stores,

Our Solution

- 6U Wall-Mount enclosure
- UPS + Rack Power distribution
- Environmental monitoring & Management Software

Optional Services

Customer Benefits

- Simplified ordering, delivery and management of an all-in-one system for IT infrastructure with reliable high quality products

- Our solution allows store owners to focus on their core business instead of IT.

- More stocking revenue: The 6U's compact form factor allows stores to convert more space to revenue-producing stock area.

Rack	6U Wall-Mount – compact form factor	
UPS	Smart-UPS	
PDU	Rack PDU	
Monitoring	NetBotz	

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Easy Micro Data Center

Make edge computing easy to order, deploy and affordable

NEW

Deployment

- ✓ Pre-integrated
- ✓ Reliable point products
- ✓ Simplified configuration to reduce complexity of customer experience
- ✓ Quick deployment

Savings

- ✓ Reduce deployment cost & time :
  - ✓ Pre-wired sensors
  - ✓ Pre-integrated power & monitoring appliance
  - ✓ Packaging waste
- ✓ Global service network
- ✓ Certification to global standards

Management

- ✓ Pre-wired environment sensors
- ✓ Local & Web monitoring
- ✓ Email notifications
- ✓ EcoStruxure IT optional

Technical Highlights

- ✓ 42U & 24U model available
- ✓ Ventilated enclosure for airflow management
- ✓ Pre-installed UPS Power module
- ✓ PUE monitored
- ✓ **Pre-wired sensors and cables for quicker deployment**
- ✓ UL approved rack w/ 1200kg static loading

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Building blocks of Micro Data Center Infrastructure

Rack enclosures

Rack Power Distribution

Services

UPS

Physical Security

Cooling

Remote Monitoring

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Why Easy Rack & rPDU?

Making IT Rack Deployment Simple, Fast, Easy

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Enclosed 19" Rack types

	Data Rack	Enhaced networking Rack	Server Rack	Specialty Racks
Main application	Network connectivity	Networking applications	Computing, edge, high density	sound proof, seismic, self-contained cooling, harsh environment
Assembled equipment	Primarily passive	Active and passive	Primarily active	-
Power density	Low	Mid, High	Mid, High	-
Common construction	Front glass door Rear solid door Low static load	Perforated front and rear doors, side air mng., Mid static load	Perforated front and rear doors, avoid air bypass, High static load	-

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Easy Rack Applications

Server Applications

Fully assembled with essential features for quick rack & stack of servers:

– Numbered u-spaces
– Easily removable doors/sides during installation
– Pre-installed accessory brackets for PDU & cable management installation

Networking Applications

Multiple sizes and adjustments for networking applications:

– Integrated vertical 1U patching spaces
– Available in 800mm width
– 800mm & 1200mm depths for shallow and/or deepest requirements
– Adjust mounting rails back for port side of network switches
– Roof with cable egress
– New-added dimension in 42U x 800mm W x 800mm deep **New**

Edge Applications

Smaller enclosures with essential features quick edge deployments :

– New-added dimension in 24U x 600mm W x 1000mm D and 24U x 600mm W x 1200mm D **New**

From network closets, to data centres

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Easy Rack

most common accessories included and preinstalled ⏱

Locks on front, rear, side pannels. Option of HID proximity card & Combination Lock

Flat vented doors. 81% ventilation rate, hexagonal pattern

Integrated ground connections

Flat-Pack version to reduce transportation costs

COLOR	Black
ROOF	Cutouts, w/ Brush
DOOR	Single Front, Double Rear
Perforation	**81%**, HEX holes

LOADING CAPACITY	
Static Load	**1,200 kg**
Dynamic Load	600 kg

COMPLIANCE	
Certificates	UL 2416
Environmental	RoHS & REACH

Mounting HW	50x screw+cage nut+cup washer
SIDE PANEL	Half height, quick release, tool - free
CASTER	low profile casters
LEVELLING FEET	Levelling feet
SIZES	H:24/42/48U W:600,800mm D: 800,1000,1100,1200

5 Yr Warranty

Overview Video & WP

https://youtu.be/U02eovGPQwM

Easy Rack Application example

800mm width

More than **889** additional
checked accessories compatible.

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Overview Easy rPDU

Making IT Rack Deployment Simple, Fast, Easy

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Easy Rack PDUs Features

Easy Basic Rack PDUs
- Reliable power distribution

Easy Metered Rack PDUs
- Real-time remote monitoring of connected loads
- User-defined alarms warn IT and data center managers of potential circuit overloads to prevent accidental power loss to critical equipment

Easy Switched Rack PDUs
- Metered functionality
- Switch on/off the connected power load remotely

Easy MBO/SMBO Rack PDUs
- Metered by outlet functionality
- Switch on/off the connected power load remotely

New

	Basic	Metered	Switched	Metered-by-Outlet	Metered-by-Outlet with switching
	EPDU1xxxB	EPDU1xxxM	EPDU1xxxS	EPDU1xxxMBO	EPDU1xxxSMBO
Design feature					
Ultralow-profile, space-saving design	√	√		√	√
Hydraulic-magnetic circuit breakers (in units with 32A input current)	√	√	√	√	√
Environmental monitoring port for external temperature/humidity monitoring		√	√	√	√
Availablity for regional outlets socket type	√				
Display and network management					
Full-featured network management capability via Web and SNMP		√	√	√	√
User-interactive LCD display for local access		√	√	√	√
Network port sharing			4	4	4
Metering capability					
Metering Accuracy		±3%	±3%	±1%	±1%
Active current measurements (amps)		√	√	√	√
Active power measurements (including volts, amps, real power (kW) and energy (kWh))		√	√	√	√
User-customizable alarms and warnings		√	√	√	√
Embedded log memory to record/review/report		√	√	√	√
Individual outlet power metering				√	√
Use access control with two levels		√	√	√	√
Outlet control					
Individual outlet remote power on/off control			√		√
Power-on sequencing and time delays with full user customization			√		√
Outlet level grouping (multiple outlets in same or multiple units follow single command)			√		√
Use access control with two levels		√	√	√	√
Environmental					
Maximum operating temperature	45°C	45°C	45°C	45°C	45°C
Maintenance					
Warranty	1 year	1 year	1 year	2 year	2 year

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Overview Video

https://youtu.be/6OKiK8VQCEU

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Highlights of Easy Rack System

Easy to select
Single PN with all components & accessories

Easy to operate
Minimization of downtime
Supervision & management options

Easy to install
Pre-assembled system,
Tool-less components
Quick to deploy

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Thank you!

How to start?

We'll be delighted to help you,

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Questions?

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