MITSUBISHI ELECTRIC HYDRONICS & IT COOLING SYSTEMS S.p.A.





rcitcooling.com



IT COOLING

POWER DISTRIBUTION SOLUTIONS FOR DATA CENTER **EQUIPMENT CABINET**

inside your data center.

RC PDU is the new power distribution range of products that help to manage power capacity, reduce downtime and improve energy efficiency inside your data center.

The new RC range includes an extensive selection of PDUs to manage power usage for servers, storage and network equipment.

All the products are manufactured to meet the highest quality standards and are 100% performance tested for reliability and accuracy.

Certifications & Compliance

All PDU products comply with one or more of the certifications below:

- European Union (TUVGS mark) to EN 60950-1:2001 EMC - EN 55022 Class A, EN 55024
- CE
- UL 60950-1



Certifications & Compliance

B	Branch circuit protection: PDUs are UL 60950-1 certified for branch circuit protection and use fuses or circuit breakers to protect each outlet branch.
	Input current monitoring: Easy-to-read LEDs display current per phase to help prevent overloads & simplify 3-phase load balancing in high density cabinets.

Temperature/Humidity Monitoring:

Master and Link units each support two external 10' (3m) T/H probes. Receive SNMP-based alerts and email notifications.



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PPS

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Exclusive method for linking additional PDUs together under a single IP address with support for A & B power in-feeds.

Star Multi-link Expansion Kit PROP :

PRO2 provides the ability to link up to four power circuits using one IP address. Kit sold separately.Email, & Syslog.

IP access, security & communications:

Web, SSH, Telnet, SNMPv2c & v3, RS-232 serial, 10/100 Base T-Ethernet, LDAP(S), TACACS+, RADIUS, DHCP, & SMTP/email.

Outlet control:

On Switched PDUs, cycle power to individual outlets or groups of outlets to reboot servers; or to power off unused receptacles.

Pops® (Per outlet power sensing):

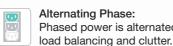
Monitor Current Load (A), Voltage (V), Power (W), Apparent Power (VA), Crest Factor, Power Factor, and Energy per outlet.

Pips® (Per inlet power sensing):

Monitor Current Load (A), Voltage (V), Power (W), Apparent Power (VA), Crest Factor, Reactance, Accumulated Energy (kWh), and Power Factor per inlet.

Startup Stick:

The quick and easy solution to PDU configuration when DHCP is not available.



HDOT® (High Density Outlet Technology):

HDOT

Branch Current Monitoring PROP :

High Temperature Rating: Products are tested and approved for safe and reliable operation in 60°C (140°F) data center environments.

Hot Swappable Network Card with Backup Power PROP: Network access is ensured when power is lost to the Master unit with backup power provided by the primary link unit.

Power Pivot[™]: **Power Pivot**

HII.

ST Dys

no matter where power must be routed. ST Eye Mobile App with Bluetooth Connectivity: The best PDU LCD is the one in your hand. Attach the ST Eye Bluetooth module for access to power data & system settings.



Flexible mounting:: Includes standard button mounts along with provisions for custom mounting brackets (contact Server Tech for details).

Cable retention:

Reduces accidental disconnects by ensuring that power cords are solidly connected to their respective devices.



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Color Coded PDUs: Select from six colors to designate PDU circuits in the data center - black, white, red, green, blue, and yellow.

Maximize outlet density with our uniquely designed, high density modules for standard C13 & C19 outlets.

Phased power is alternated between each outlet, instead of each branch, which simplifies

PRO2 monitors current at each breaker/fuse branch and alerts when high usage risks a tripped circuit.

The 90° rotatable power cord allows for standardized deployment at any facility





PRODUCT RANGE

PDU VERSIONS

Basic PDU

IT COOLING

Basic PDU is an entry level product that provides reliable power distribution and branch circuit protection for all the devices in the equipment cabinet.

Metered PDU

Metered PDU products provide branch circuit protection and reliable power distribution for all devices in the equipment cabinet. Local input current monitoring allows the installation engineer to verify the aggregate load on the circuit or phase.

Smart PDU

Smart PDU products provide reliable power distribution coupled with remote power and environmental monitoring. Use the network interface to view power, temperature and humidity levels via Web browser, or SNMP-based and email alerts when conditions exceed defined thresholds. Add an Expansion.

Switched PDU

Switched PDU products provide the same reliable power distribution, monitoring, and alerting as the Smart PDU while adding outlet On/Off/ Reboot control. Use the Switched PDU to cycle power on dual power IT equipment with one command. With outlet control, gain features like powerup sequencing and smart load shedding.

POPS® Smart & Switched PDU POPS

Adds Per Outlet Power Sensing (POPS) to the Switched PDU which provides power monitoring per an individual outlet/device. Power information per individual outlet / device includes current, voltage, power (kW), apparent power, crest factor, and power factor. Using our grouping technology, power information is available per device, groups of devices (application), individual PDU or cabinet.

PIPS[®] Smart & Switched PDU [PIPS]

Per Inlet Power Sensing (PIPS) PDUs provide expansive high-accuracy power monitoring per inlet/infeed.

This includes current, voltage, power (kW), apparent power, crest factor, power factor, and accumulated energy. With this feature there is no need to add more expensive, less accurate panel monitoring upstream.

PRO2[™] PDU

04/05

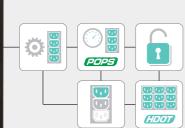


Improve uptime by maintaining high availability to your data through redundantly powered hot-swappable network cards and multi-link capability. Gain additional insight into rising loads or heat through multi-level alarms.

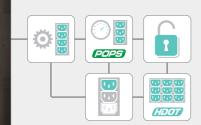
Fail-Safe Transfer Switch (FSTS)

The Fail-Safe Transfer Switch features two input power feeds, providing redundancy for single-supply equipment. If either power in-feed halts, the FSTS auto-switches to the remaining in-feed to retain power to the equipment.

*Some features may only be available on select models.











PRO2[™] PDU The Next Evolution in PDU Design

Designed to satisfy the most demanding application requirements, PRO2's flexible hardware platform features more outlets, a faster processor, improved firmware and security, more redundancy, more customization and additional resiliency.

With PRO2, customers can maintain uptime with access to current data and future trends:

- Maintain high availability to your data
- Stay informed of rising loads
- Be proactive on your power supply management
- Plan your future success

PRO2 shows a 20% smaller form than traditional products, with a 25% increase in outlet density that allows the PRO2 to be utilized in a wider range of cabinets and configurations.

The network interface card is hot swappable in the field without changing the state of the outlets. In the unlikely event that the network card fails, it can easily be replaced under power without any additional configuration required.



Basic PDU

- Hot-swappable, redundantly-powered network card — from link PDU (shown above)
- Branch current measurements and multilevel alerts
- Shallower enclosure when compared to previous generation PDU
- More alarms and configuration options compared to previous generation PDU
- Star architecture multi-linking for connection of up to 3 Link units per Master PDU, allowing for 1 IP address for 2 cabinets

Key Intelligent PDU Benefits

- PIPS® and/or POPS® high-accuracy measurements of current, voltage, power, and other key power metrics
- Environmental measurements via plugand-play probes (including link PDU)
- Use PM (Power Manager) for data center monitoring
- SNMP traps and email alerts

Star architecture multi-linking

- Linking of up to 3 Link units per Master PDU (1 IP address for 2 cabinets)
- No need for a network card (if one of the link units experiences a failure, the user will not lose communication with the other linked units)
- Perfect uptime 24/7 (In case of master unit power outage, redundant power is provided to the network interface of the Master unit via the first link unit)





PRODUCT RANGE

STARTUP STICK

IT COOLING

Increases the speed of the PDU deployment

The StartUp Stick provides a unique means to more easily create individual PDU configurations, including IP addresses, on a computer workstation and be able to mass deploy these configurations to each PDU in mere seconds. You get a spreadsheet-based tool with built-in rules verification, a standard USB interface for PC/MAC, simple LED pass/fail indicator, & onboard logging.



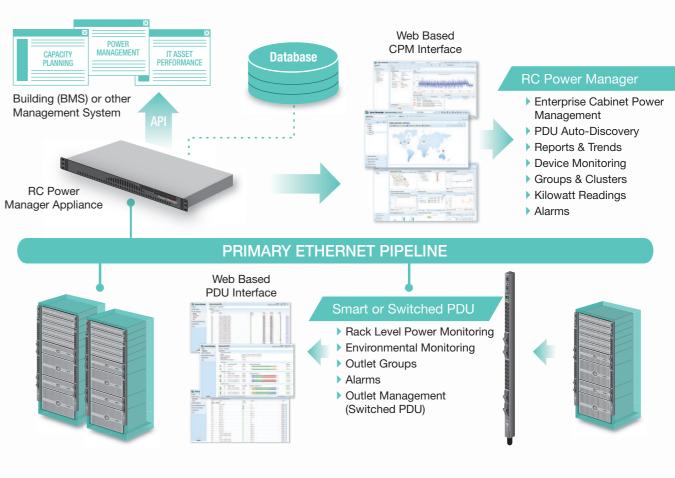
Benefits of using StartUp Stick for your next PDU deployment:

- No DHCP, no problem: One StartUp Stick to get thousands of PDUs on your network
- ▶ No scripting: Set the configuration of as many as 79 parameters at the comfort of your desk
- > No need to lug your laptop or crash-cart around the data center: Configure in rack or at powered bench
- ▶ ROI in a matter of hours: 5-second typical configuration load time per unit with LED confirmation
- Leverage expansion PDUs for even further reduction in configuration time
- > Speed up integration of CPM using scheduled discovery and SNAP to start monitoring right away
- > Requirements: PC/MAC running Microsoft Excel 2007 with VBA or higher & CDU or PRO2 units running v7.0s or v8.0c firmware minimum



Manage multiple PDUs across multiple locations

In case of multiple RC PDUs in one or more locations that you would like to access from one central point, the RC Power Manager (CPM) product is capable of monitoring and managing multipleRC devices in IP-based enterprise networks. CPM provides a global view of all RC PDUs with the ability to view devices based on their temperature, humidity, current and device status. Besides managing and monitoring all alarm conditions, this information can also be used to provide reporting and trending information for display within CPM or integrated with your existing Building Management System (BMS).



- CPM provides a global view of all RC PDUs with the ability to view devices based on their temperature, humidity, current and device status
- Manage and monitor all user-defined alarm conditions on your entire network Group and cluster outlets for remote reboot, power measurement information across a single PDU, a linked
- PDU, or across the entire network
- Allows measurement of power consumption and capacity planning
- Auto-discover all your PDUs connected to your IP network
- > View Logs for user access, discovery, user actions, and alarms
- Multiple user levels and permissions including support for LDAP
- Control individual outlets on Switched PDUs





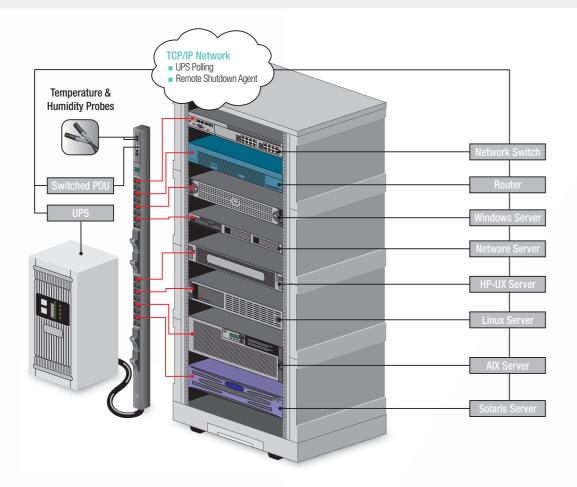
PRODUCT RANGE

RC SMART LOAD SHEDDING

Load Management based on Temperature, In-feed Load, and UPS Status

RC Smart Load Shedding provides data center managers with the ability to automatically manage Switched PDU power outlets based on key operating parameters, including temperature, in-feed load, and UPS power status.

Each outlet may be controlled by one or more of these parameters. Should the temperature or load current exceed defined thresholds or the UPS lose power and go onto battery, all or a portion of the loads may be automatically shed to ensure longer operational life of your critical devices.



- > Easy to use, integral, web based GUI configuration tool.
- > "Auto-recovery" with a reboot delay time when conditions return to normal.
- > Each PDU outlet is assigned the IP address of the connected device for shut down notification.
- Remote shutdown agent for server shut down.
- SNMP trap notifications.
- > Load shedding event notifications via SNMP traps or e-mail alerts.

RC IT COOLING ACCESS, SECURITY & COMMUNICATION

	Sentry Swi	itched PDU			P Address
System	Outlet Cont	rol - Individual			
Outlet Control	Individual (Outlet Control			
Individual	Control	power to individual outlets			
Group	Outlet	Outlet	Outlet	Control State	
Power Monitoring		Cancel	Refresh	Jours.	
	AA1	Navy_Seals	On	On	
Environmental Monitoring	AA2	Server2	On	On	
Smart Load Shedding	AA3	Server3	On	On	
Configuration	AA4	Server4	On	On	
	AAS	ServerS	On	On	
Tools	AA5	Server6	On	On	
	AA7	Server7	On	On	
	AAB	Servert	On	On	
	AA9	Server9	On	On	
	AAID	Server10	On	On	
	AA11	Server11	On	On	
	AA12	Server12	On	On	
	AA13	Server13	On	On	
	AA14	Server14	On	On	
	AAIS	Server15	On	On	
	AA16	Server16	On	On	
	AB1	TowerA_InfeedB_Outlet1	On	On	
	AB2	TowerA_Infeed5_Outlet2	On	On	
	A63	Test	On	On	
	A84	TowerA_Infeed8_Outlet4	On	On	
	AB5	TowerA_Infeed8_Outlet5	On	On	
Logout	AB6	TowerA_Infeed8_Outlet6	On	On	

Web Based GUI: Individual Outlet Control Screen

91	Sentry Switched PDU	Lo. P Acc
System	Configuration - System	
Jutlet Control	System	
Power Monitoring	System information	
Environmental Monitoring	Firmware Version: Ethernet NIC S/N:	Sentry Switched CDU Version 6.1a (D 8201372
imart Load Shedding	Ethernet Address (MAC): Hardware Revision Code:	00-0a-9c-52-05-5c 32
onfiguration	Flash Nemory Size: Uptime:	2 MB 15 days 21 hours 27 minutes 46 seco
System		10 0039 21 10010 27 1110100 40 0000
Network	Configure system options	
Telnet/SSH	Location:	ServerTech-Lab
HTTP/SSL	Display Orientation:	Inverted 🦋
Secial Ports	Strong Passwords:	Disabled 🛩
Towers	Configuration Reset Button:	Enabled 🐱
Input Feeds	Temperature Scale:	Fahranhait M
UPS	Area (Footprint):	0.0 Square Feet
Outlets	Power Factor:	12,00
Shutdown	3-Phase Load Out-of-Balance Threshold:	20 %
	CL1 Session Timeout:	20 minutes
Groups	Web Session Timeout:	5 minutes
Users	Apply Cancel	10 1111010
FTP	Taken Takenan I	
SNTP/Syslog	Configure login banner and system names	
SNMP/Thresholds	Login Banner	
LDAP	Tower Names	
TACACS+	Input Feed Names Outlet Names	
RADIUS	Serial Port Names	
Email	Environmental Monitor Names Sensor Names	
Features	Densor Remas	
Tools	Cepyright @ 2006-2011 Sarver Technology, nc. All Roms Reserved.	
Logout	V	

Web Based GUI: System Configuration Screen

lystem				P Address (6.214.205.91 a Access Admin
	Environment	al Monitoring - Sensors		
Dutlet Control	Temperature	and Relative Humidity		
Power Monitoring		imperature and humidity sensor values		
	Sensor	Sensor	Temperature	Relative Humidity
invironmental Monitoring			(**)	(76)
Sensors	AI	Temp_Humid_Sensor_A1	81.5	20
imart Load Shedding	AI A2	Temp_Humid_Sensor_A2	88.0	20 16
Configuration				
oole				

Web Based GUI: Environmental Monitoring Screen

6.214.208.9	Lab o User ADIIN 1 o Access : Admin
	Control Action
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	None 🛩
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	None 💌

Features

- Secure, web based GUI configuration tool
- ▶ Temperature Support (Celsius/ Fahrenheit) and Humidity (%)
- Logs authentications, configuration changes and system events
- SNMP and email notifications for multiple users of log, event, power, and authorization, configuration messages
- SYSLOG logging protocol support
- Automatic Firmware Updates via FTP
- Strong Password Support and Pre-Login Banner



- Input Feed Voltage (VAC)
- Input Feed Watts (W)
- System Total Watts (W)
- System Footprint (SqFt / SqM)
- System Watts/Area (W/SqFt / W/SqM)

Communication Tools

▶ Web interface, SSL, SSH, Telnet, SNMP & RS-232 access, 10/100 Base T-Ethernet, SSLv3/TLSv1, SNMPv2, ACACS+, LDAP, LDAPS, RADIUS, DHCP, SMTP/ Email, and Syslog.





SMART & SWITCHED PDU WITH PIPS®

PER INLET POWER SENSING PDUS



PIPS technology replaces power monitoring at the RPP (Remote Power Panel) in data centers with higher accuracy in the monitoring of each power circuit attached to the PDU. This feature enhances equipped Smart, Switched, and POPS PDUs with the most accurate and extensive metrics on the market.

PIPS Features

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- Power monitoring per inlet/infeed (current, voltage, power, apparent power, crest factor, reactance, power factor and accumulated energy)
- Easy access through either a secure network or serial connection
- Integral web interface for simple and easy monitoring of the PDU
- Several configuration choices: SNMP traps, email alerts, grouping, and all security and communication settings

▶ SNMPv2

▶ TACACS+

LDAP

LDAPS

RADIUS

DHCP

Syslog

- Web Interface
- RS-232 access
- 10/100 Base-T
- Ethernet SMTP/Email
- Telnet
- SSH
- SSLv3/TLSv1



PER OUTLET POWER SENSING PDUS



POPS Features

- Simple, secure, integral web interface GUI configuration tool
- Temperature and Humidity Support
- Authentication logging, configuration changes and system events
- Secure Syslog protocol support
- > Email notifications of log, event, authorization, power and configuration messages
- > Automatic Firmware Updates via FTP server
- Strong Password Support and Pre-Login Banner
- Ability to ping an IP address to see if the device is responding
- Grouping of outlets across Master & Expansion PDUs
- SNMP: Traps based on Status, Changes, Load, Temperature and Humidity

Power information & management - Internal Web Interface





System Configuration

Intelligent PDUs enable network access to remotely configure access, outlets, alarms, thresholds, and more.



Per Inlet/Infeed Power Information

- Current (Amps)
- Power (Watts) Apparent Power (VA)
- Power Factor Accumulated Energy (kWh)

Voltage (Volts)

Neutral Current:

Easy to read summary screen

The new summary screen allows users to quickly confirm the status of the rack power & environmental conditions.

<u>,</u>	Sentry Sma	Int PDU		P Adores 192214 205 174 - Access Adres
on .	Environmen	tal Monitoring - Sensors		
er Honitoring	Temperatur	e and Relative Hemidity		
romental Hontoring		simplerature and humidity sensor values		
ASOPS	Sensor	Serest Natie	Temperature .	Relative
rtarta			(%4)	(76)
	Δx.	Secury_A1_Privet_Battore	24.0	18
C4	42	Sensir_11_Front_Huttle Terrin_Hurtut_Sensor_61	78.0	18 22
guration	81 82	Terre Hurst Sensor 82	79.5	19
	Water			-
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	Sector 10	Gergan Rama	Secur Status	
		Weter_Serect_0	Normal	
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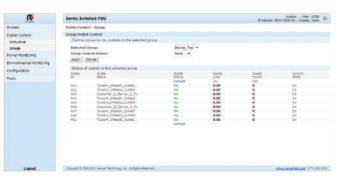
Environmental Monitoring

No additional IP address needed to obtain temperature and humidity readings. A pair of probes (EMTH-1-1) can be added to any intelligent master PDU (Smart or Switched).



Outlet Control Power Monitoring

Individual Outlet Control Current Load Monitoring Power Monitoring Additional Details



Grouped Outlets Power Information*

- Cabinet (single IP address using master/expansion configuration for two PDUs)
- Device (Multiple Outlets)
- Group of Devices (Application)
- Individual PDU:

SMART & SWITCHED PDU WITH POPS®



Communication Tools

- Web Interface
- RS-232 access
- 10/100 Base-T Ethernet
- SMTP/Email
- Telnet
- SSH
- SSLv3/TLSv1

N	Sentry Swe	tched PDU			#-Automa 10214	Lillator: - 1944	4015 D
System	Dutlet Canin	rai - Indistinat					
Dutlet Control	Ostiets						
Powar Monitoring	1911R0F						
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System	453	Time 1_1(sell_cicle)	130	81.083	338.1		theta
185	AA3	Cummer_A_Server_A_91	On	0.00	230.1	0	Catel
	454	TOWERA_STREESA_DURIEN4	0.	0.00	238.3	0	Deta
Envronmental Vonitoring	AAS	Towark_InfeedA_Outlet5	0.	0.00	230.0	0	Date
	A26	Customer_B_Berver_A_PL	0e	0.00	230.0	0	Deta
Configuration	222	TowerA_DrivedA_OutletT	On	0.00	230.0	9	Cutal
	228	Tower-A_7-FeedA_Couries#	O.e	0.00	236.0	0	Deta
Tools	AGS	TowarA_krfsad5_Outst1	De	0.00	339.8	0	Cata
	452	TowerA 1-feedD Outlet2	On	0.00	235.8	0	Celo
	100	Towark_Infeatil_Outeril	0.6	0.00	339.8	9	Ovta
	404	TowerA_Infeed5_Outlet4	On	0.00	239.8	0	Ceta
	ADD	Toward, Infeeda Outsets	De	0.00	229.7	.0	Catal
	404	Customer, C. Senser, A. FO.	Ow.	0.00	259.7	0	Ceta
	387	TENNA_31Feeds_OUT HTT	104	0.00	339.7		Ceth
	468	Towar4_1+feedt_Outlet6	Om	0.00	239.7	0	Cetal
	801	TIME D. THERE D. MALE	De	0.00	239.3	0	Date
	ACS	Timeré_lifea3C_Outie12	On	0.00	239.3	:0	Cutel
	229	Talterer_A_Nerver_A_92	130	11.60	384.3	819	Ceth
	AC4	Tower's_InfeedC_Dutlate	On	0.00	239.3	0	Cale
	ACT -	TownA_DreedC_Dubit	0e	0.00	239.4	0	Cela
	AC6	Towark Tread: Outsett	0.	0.00	239.4	0	Cutal
	ACT	Castorer, R. Server, A.FT	De	0.43	235.4	8.7	Cela
	ACE	Toward, Infeater Outlats	On .	0.60	339.4	0	Ceta
	843	Town D. 1 Feedb. Owier!	De	0.00	237.9	0	Deta
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Legent	845	Towerd Srivesk Outjets	De	0.00	237.0	0	Cetal

Per PDU Power Information

- Current Load
- Infeed Voltage (VAC)
- Input Feed Watts (W)
- System Total Watts (W)
- System Footprint (SqFt / SqM)
- System Watts (W/SgFt / W/SgM)

<u> </u>	Sentry Switched PDU		F 488mm 05 214 208 180 x 44mm Adres	ць.
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Logout	Chapter & 2006-2011 Elevier Test setup, Inc. Ad Rights Reported		aming Architecture 1 175-260	2686

Per Outlet Power Information

- Current Load (A)
- Voltage (V)
- Power (W)
- Apparent Power (VA)
- Crest Factor
- Power Factor



ero-U Vertical En	closures & Horizonta	I Rack Mounted	Enclosures	
Model	EV0 - 1	EV0 - 2	EV0 - 3	
Outlets	(12) C13	(24) C13	(24) C13 + (6) C19	
nput Voltage (V)	220-240V	220-240V	220-240V	506
Max Amps (A)	16A	16A	16A or 32A	
ypical Power (kW)	3.6kW	3.6kW	3.6kW or 7.3kW	and the local dates
Dutput Voltage (V)	220-240V	220-240V	220-240V	Ĩ
Circuit Protection	-	-	Circuit Breakers	00
Height	10U 432mm	18U I 800mm	35U 1520mm	
Special features	-		Power Pivot2	

SMART PDU



Model				
Outlets	Up to (10) C13 or (2) C19	(12) C19	Up to (26) C13 or (6) C19	
Input Voltage (V)	220-240V	220-240V	220-240V	DEBROOM
Max Amps (A)	16A or 32A	16A or 32A	16A or 32A	
Typical Power (kW)	3.6kW or 7.3kW	7.3kW or 14.7kW	3.6kW or 7.3kW	
Output Voltage (V)	220-240V	220-240V	220-240V	
Circuit Protection	-	-	Circuit Breakers	
Height & Depth	1U 178mm Depth	2U 254mm Depth	2U I 178mm Depth	
Special features				

SMART PDU

Smart Power Monitor

Model	EV0 - 7	EVO - 8	EVO - 9	
Outlets	C19	IEC 60309	IEC 60309	
Input Voltage (V)	220-240V	220-240V	3-Phase 230/400V	
Max Amps (A)	16A	32A	16A or 32A	
Typical Power (kW)	7.3kW	14.7kW	22kW or 44kW	
Output Voltage (V)	220-240V	220-240V	3-Phase 230/400V	
Circuit Protection		-	-	
Height & Depth	1U I 178mm Depth	1U 178mm Depth	1U I 178mm Depth	



Zero-U vertical enclosures

Model	EVO - 10
Outlets	(12) C13 + (12) C19
Input Voltage (V)	3-Phase 230/400V
Max Amps (A)	16A or 32A
Typical Power (kW)	11kW or 22kW
Output Voltage (V)	230V
Circuit Protection	Circuit Breakers
Height	40U 1753mm
Special features	

Model	EVO - 12		
Outlets	(24) C13		
Input Voltage (V)	3-Phase 208-240V		
Max Amps (A)	20A or 30A		
Typical Power (kW)	7.2kW or 10.8kW		
Output Voltage (V)	208-240V		
Circuit Protection	Fuses		
Height	40U 69" 1753mm		
Special features	Power Pivotz		

Model	EV0 - 14
Outlets	Up to (42) C13 or (15) C19
Input Voltage (V)	220-240V
Max Amps (A)	16A or 32A
Typical Power (kW)	3.6kW or 7.3kW
Output Voltage (V)	220-240V
Circuit Protection	Circuit Breakers
Height	40U 1753mm
Special features	

Model	EV0 - 17
Outlets	Up to (42) C13 or (12) C19
Input Voltage (V)	3-Phase 230/400V
Max Amps (A)	16A or 32A
Typical Power (kW)	11kW or 22kW
Output Voltage (V)	230V
Circuit Protection	Circuit Breakers
Height	41U 1778mm
Special features	

12/13



EV0 - 11 (18) C13 + (6) C19 3-Phase 230/400V 16A or 32A 11kW or 22kW 230V Fuses 40U 1753mm	
EV0 - 13	
(24) C13 + (6) C19	
3-Phase 230/400V	
16A or 32A	
11kW or 22kW	
230V	
Circuit Breakers	
41U 1781mm	
Power Pivot2	
EV0 - 15	EV0 - 16
(36) C13 + (6) C19	Up to (42) C13 or (15) C19

220-240V 32A 7.3kW 220-240V Circuit Breakers 40U | 1753mm Power Pivot



3-Phase 230/400V

16A or 32A

11kW or 22kW

230V











Horizontal Rack Mounted Enclosures



Model Outlets (4) C19 (12) IEC C13 (12) C19 220-240V 220-240V 220-240V Input Voltage (V) 16A or 32A Max Amps (A) 16A or 32A 16A or 32A 7.3kW or 14.7kW Typical Power (kW) 3.6kW or 7.3kW 3.6kW or 7.3kW Output Voltage (V) 220-240V 220-240V 220-240V Circuit Protection Fuses Fuses Circuit Breakers Height & Depth 1U I 178mm Depth 1U | 178mm Depth 2U I 254mm Depth







METERED PDU **Zero-U Vertical Enclosures**



SWITCHED PDU

Zero-U vertical enclosures

Model				
Outlets	(16) C13	(18) C13 + (6) C19	(18) C13 + (6) C19	(24) C13
Input Voltage (V)	220-240V	220-240V	220-240V	220-240V
Max Amps (A)	16A or 32A	16A or 32A	16A or 32A	16A or 32A
Typical Power (kW)	3.6kW or 7.3kW	3.6kW or 7.3kW	3.6kW or 7.3kW	3.6kW or 7.3kW
Output Voltage (V)	220-240V	220-240V	220-240V	220-240V
Circuit Protection	Fuses	Fuses	Circuit Breakers	Circuit Breakers
Height	29U 1257mm	40U 1753mm	40U 1753mm	40U 1753mm
Special features			Power Pivot	Power Pivot

Model	EV0 - 31	EV0 - 3	2	EV0 - 33
Outlets	(24) C13	(24) C13 (24) C13 + (6) C19		(24) C13 + (6) C19
Input Voltage (V)	3-Phase 230/400V	V 220-240V		3-Phase 230/400V
Max Amps (A)	16A or 32A	16A or 32	2A	16A or 32A
Typical Power (kW)	11kW or 22kW	3.6kW or 7.	3kW	11kW or 22kW
Output Voltage (V)	230V	220-240	V	230V
Circuit Protection	Circuit Breakers	Circuit Brea	kers	Circuit Breakers
Height	40U 1753mm	40U 1753	lmm	41U 1778mm
Special features		Power Pivot2		
Model		EVO - 34		
Outlets	Up to (42) C13 or (12) C19			
Input Voltage (V)	3-Phase 230/400V			
Max Amps (A)	16A or 32A			
Typical Power (kW)	11kW or 22kW		000	
Output Voltage (V)	230V Circuit Breakara			
Circuit Protection	Circuit Breakers			000
Height Special features				
Model	EV0 - 35	EV0 - 36	EV0 - 37	
Outlets	(48) C13	(36) C13 + (12) C19	(48) C13	
Input Voltage (V)	220-240V	3-Phase 230/400V	3-Phase 230/400V	
Max Amps (A)	16A or 32A	16A or 32A	16A or 32A	
Turcianal Desugar (IAMA	0 CI/W at 7 0I/W	111/W az 001/W	111/W ar 001/W	

Model	EVO - 31	EV0 -	32	EV0 - 33
Outlets	(24) C13	(24) C13 (24) C13 + (6) C19		(24) C13 + (6) C19
Input Voltage (V)	3-Phase 230/400V	3-Phase 230/400V 220-240V		3-Phase 230/400V
Max Amps (A)	16A or 32A	16A or 32A 16A or 32A		16A or 32A
Typical Power (kW)	11kW or 22kW	3.6kW or	7.3kW	11kW or 22kW
Output Voltage (V)	230V	220-24	0V	230V
Circuit Protection	Circuit Breakers	Circuit Bre	akers	Circuit Breakers
Height	40U 1753mm	400 175	i3mm	41U I 1778mm
Special features		Power Pivotz		
Model		EVO - 34		
Outlets	Up to (42) C13 or (12) C19			
Input Voltage (V)	3-Phase 230/400V			
Max Amps (A)	16A or 32A			
Typical Power (kW)	11kW or 22kW			
Output Voltage (V)	230V			
Circuit Protection	Circuit Breakers			000
Height	41U 1778mm			
Special features				
Model	EV0 - 35	EVO - 36	EV0 - 37	
Outlets	(48) C13	(36) C13 + (12) C19	(48) C13	
Input Voltage (V)	220-240V	3-Phase 230/400V	3-Phase 230/400V	
Max Amps (A)	16A or 32A	16A or 32A	16A or 32A	
Turning Devuer (1)10	0 CI/W as 7 OI/W	111/0/ 07 001/0/	111/W at 001/W	

Model		
Outlets	(48) C13	(36) C13 + (12) C19
Input Voltage (V)	220-240V	3-Phase 230/400V
Max Amps (A)	16A or 32A	16A or 32A
Typical Power (kW)	3.6kW or 7.3kW	11kW or 22kW
Output Voltage (V)	220-240V	230V
Circuit Protection	Circuit Breakers	Circuit Breakers
Height	40U 1753mm	40U 1753mm
Special features	Ø	⊘₹

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SWITCHED PDU 📲 🖬 🗗 🔝 🕤 🔝

Horizontal Rack Mounted Enclosures





IT COOLING





FAIL-SAFE TRANSFER SWITCH (FSTS)

Horizontal Rack Mounted Enclosures

Model	EV0 - 42	EVO - 43	EVO - 44	
Outlets	(8) C13	(8) C19	(16) C13	
Input Voltage (V)	100-120V or 220-240V	220-240V	220-240V	
Max Amps (A)	16A	16A or 32A	16A or 32A	
Typical Power (kW)	1.9kW or 3.6kW	3.6kW or 7.3kW	3.6kW or 7.3kW	
Output Voltage (V)	100-120V or 220-240V	220-240V	220-240V	
Circuit Protection	Internal Fuses	Internal Fuses	Internal Fuses	
Height & Depth	1U 203mm Depth	2U I 254mm Depth	2U 254mm Depth	
Special features				
Model	EV0 - 45		EVO - 46	EV0 - 47
Outlets	(16) C13		C19	C19
Input Voltage (V)	220-240V		220-240V	220-240V
Max Amps (A)	16A or 32A		16A	32A
Typical Power (kW)	3.6kW or 7.3kW		3.6kW	7.3kW
Output Voltage (V)	220-240V		220-240V	220-240V
	220-240V Circuit Breakers		220-240V -	220-240V -
Output Voltage (V) Circuit Protection Height & Depth				220-240V - 1U 178mm Depth

POPS® SWITCHED PDU

Zero-U Vertical Enclosures

Outlets	(12) C13 + (4) C19	(18) C13 + (6) C19
Input Voltage (V)	220-240V	220-240V
Max Amps (A)	16A or 32A	16A or 32A
Typical Power (kW)	3.6kW or 7.3kW	3.6kW or 7.3kW
Output Voltage (V)	220-240V	220-240V
Circuit Protection	Fuses	Circuit Breakers
Height	29U 1256mm	40U 1753mm
Special features		
Model	EV0 - 52	
e	(24) C13 + (6) C19	
Outlets		
Outlets Input Voltage (V)	220-240V	
Input Voltage (V)	220-240V	
Input Voltage (V) Max Amps (A)	220-240V 16A or 32A	
Input Voltage (V) Max Amps (A) Typical Power (kW)	220-240V 16A or 32A 3.6kW or 7.3kW	
Input Voltage (V) Max Amps (A) Typical Power (kW) Output Voltage (V)	220-240V 16A or 32A 3.6kW or 7.3kW 220-240V	

POPS®
SWITCHED PDU Horizontal Rack Mounted Enclosures

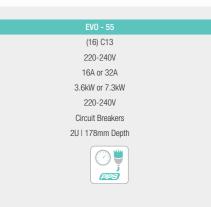
Model	
Outlets	(8) C13
Input Voltage (V)	220-240V
Max Amps (A)	16A or 32A
Typical Power (kW)	3.6kW or 7.3kW
Output Voltage (V)	220-240V
Circuit Protection	Circuit Breakers
Height	2U I 178mm Depth
Special features	















(18) C13 + (6) C19

220-240V

16A or 32A

3.6kW or 7.3kW

220-240V

Circuit Breakers

35U | 1550mm

PPS



Zero-U Vertical Enclosures

Outlets

Input Voltage (V)

Typical Power (kW) Output Voltage (V)

Circuit Protection

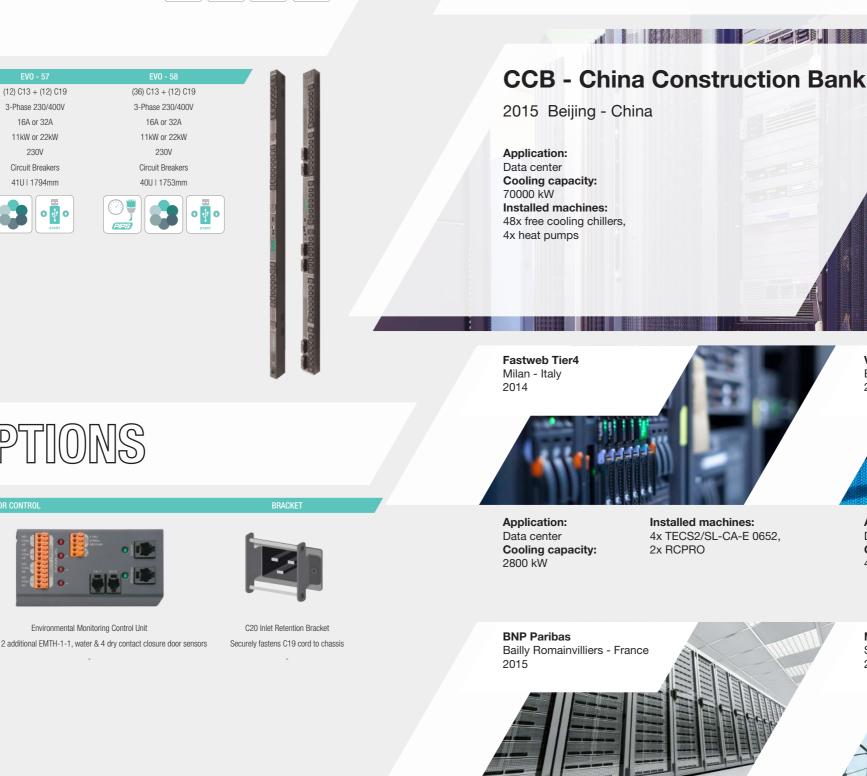
Height & Depth

Special features

Max Amps (A)

"EXPERIENCE IS BY FAR THE BEST PROOF"

Sir Francis Bacon British Philosopher (1561-1626)



Application: Data center **Cooling capacity:** 12208 kW



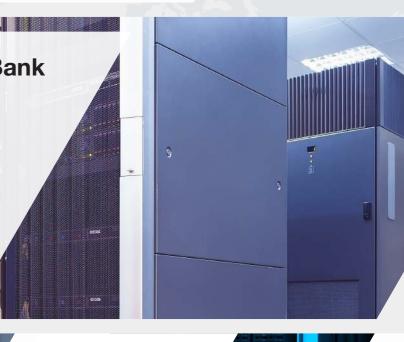
ACCESSORY OPTIONS



Туре Temperture & Humidity probes (EMTH) Function Measures cabinet temperature & humidity 3m Lenght



Environmental Monitoring Control Unit Supports 2 additional EMTH-1-1, water & 4 dry contact closure door sensors



Vodafone Buccinasco Buccinasco - Italy 2015

Application: Data Center **Cooling capacity:** 4635 kW

Installed machines: 4x TECS2/SL-CA-E 0512, 1x FX-FC-NG/SL-T+2602 2x RCPRO. 29x AC close control units

Minera Spence Sierra Gorda - Chile 2013

Application: Telecommunications Cooling capacity: 3094 kW

Installed machines: 130x HED+HCAT 0041, 42x HED+HCAT 0056, 78x HED+HCAT 0061







Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a

MITSUBISHI ELECTRIC HYDRONICS & IT COOLING SYSTEMS S.p.A.

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