

# PowerMax™

Power Distribution Units  
for Data Centers



# PowerMax™ Power Distribution Units

Siemon's PowerMax line of PDUs range from basic and metered for simple, reliable and cost-effective power distribution, to a full line of intelligent PDUs that deliver real-time power information with varying degrees of intelligent functionality for valuable troubleshooting, control and monitoring of power usage, capacity and environmental conditions. Available in both single phase and either Delta or Wye three phase power, PowerMax PDUs feature a variety of input currents and voltages with either NEMA or IEC style plugs. Multiple NEMA and IEC output options distribute reliable 120V, 208V or 230V to a wide range of rack-mounted IT equipment, ranging from 1.8kW to 22kW.

All PowerMax PDUs come in both horizontal and vertical styles. Horizontal PDUs mount easily in any standard EIA 19-inch rack, while vertical PDUs are ideal for mounting within a cabinet's Zero-U space, such as the Zero-U space offered with Siemon's VersaPOD® and V800™ cabinets.

## Mounting

- Vertical PDUs mount via tool-less button attachments
- Horizontal PDUs mount to standard EIA 19 in. configurations

## Features

- NEMA and IEC plug inputs
- Single and 3-phase voltages
- Horizontal and Zero-U vertical styles
- 3m (10 ft.) cords with other lengths available
- Soldered connections for high reliability

## PDU Families

- Basic
- Metered
- Monitored
- Smart
- Switched
- Managed



FUNCTION	BASIC	METERED	MONITORED	SMART	SWITCHED	MANAGED
Built-In Display for Local Use		✓	✓	✓	✓	✓
Device-Level Monitoring		✓	✓	✓	✓	✓
Remote Monitoring via Ethernet Port			✓	✓	✓	✓
Outlet Level Monitoring				✓		✓
Outlet Level Switching/Control					✓	✓

## Specifications

GENERAL	
CE	EN 62368-1:2014+A11:2017
	IEC 62368-1:2014+A11:2017
	EN 55022:2010
	EN 61000-3-2:2014
	EN 61000-3-2:2013
Emissions	EN 55024:2010
	FCC Part 15 Class A
Cord Length	3m (10ft)
Circuit breakers	Above 16 Amps
Finish	Black, painted
Warranty	3 years
Meter Accuracy	+/-1%

ENVIRONMENTAL	
Operating Temperature	10° to 45°C (50° to 113°F)
Storage Temperature	-25° to 65°C (-13° to 149°F)
Operating Humidity	5% to 95% (non-condensing)
Storage Humidity	5% to 95% (non-condensing)
Operating Elevation	0 to 3000 m (0 to 9842 ft)
Storage Elevation	0 to 15240 m (0 to 50000 ft)



## Basic PDUs

Basic PDUs offer a lower-cost alternative for everyday, reliable power distribution when advanced features are not required, providing a robust yet economical means to distribute power to IT equipment.



## Metered PDUs

Metered PDUs provide local visual monitoring capability through a built-in LED meter that displays real-time power data. Metered PDUs are a cost-effective alternative for providing more intelligence than basic PDUs.



- Single phase PDUs display current voltage.
- Three-phase PDUs display voltage and current for each phase.



Single-Phase



Three-Phase

# PowerMax™ Intelligent PDUs

With an industry-leading accuracy of  $\pm 1\%$ , Siemon's line of PowerMax Intelligent PDUs are ideal for reducing energy costs, managing and optimizing power capacity, and identifying and preventing potential problems to ensure uptime and improve power usage effectiveness (PUE).

PowerMax Intelligent PDUs identify high and erratic power consumption, underutilized equipment and overcooling situations to save operating costs, while collecting information on actual usage, true power needs and capacity to make informed decisions regarding equipment density, consolidation, and moves, adds and changes. They reduce downtime via real-time monitoring of environmental conditions at the cabinet level via sensor ports and potential problems such as overloads. Smart, Switched and Managed PDUs enable individual outlet control for remotely restarting or shutting down specific equipment.

- IP address sharing enables 4 PDUs to share a single IP address in a master-slave hierarchy
- Optional lights-out mode turns off PDU displays after 15 seconds to reduce power consumption of the PDU itself
- Display rotation facilitates screen reading whether the power supply is delivered from above or below
- Embedded web-based intuitive interface or accessible via any third-party software via SNMP
- Outlet grouping and group access control for Smart, Switched and Managed PDUs facilitate overall management





## Monitored PDUs

Monitored PDUs enable remote monitoring at an aggregate, device-level via an Ethernet port, generating a smaller quantity of information to simplify management.

- Built-in display for local use
- Device level monitoring
- Remote monitoring via Ethernet port
- Environmental sensor ports
- IP address sharing
- Log trends and historical data
- User defined alarms



## Smart PDUs

Smart PDUs offer a higher level of monitoring at the device or outlet-level via an Ethernet port. Smart PDUs offer the ability to configure outlets into up to six groups and assign user group access to specific outlets groups.

- Built-in display for local use
- Device level monitoring
- Remote monitoring via Ethernet port
- Outlet level monitoring
- Environmental sensor ports
- IP address sharing
- Log trends and historical data
- User defined alarms



## Switched PDUs

Switched PDUs combine total monitoring with outlet-level switching that enables users to remotely control individual receptacles, allowing equipment to be restarted or remotely shut down. Switched PDUs offer the ability to configure outlets into up to six groups and assign user group access to specific outlets groups.

- Built-in display for local use
- Device level monitoring
- Remote monitoring via Ethernet port
- Environmental sensor ports
- Outlet level switching/control
- IP address sharing
- Log trends and historical data
- User defined alarms



## Managed PDUs

Managed PDUs offer the highest level of control and monitoring with outlet-level monitoring and outlet-level switching that enable users to remotely monitor and control individual receptacles. Managed PDUs offer the ability to configure outlets into up to six groups and assign user group access to specific outlets groups.

- Built-in display for local use
- Device level monitoring
- Remote monitoring via Ethernet port
- Environmental sensor ports
- Outlet level monitoring
- Outlet level switching/control
- IP address sharing
- Log trends and historical data
- User defined alarms



## User-Friendly Firmware

Embedded in PowerMax™ Intelligent PDUs is a firmware that enables access to each PDU via a web browser that features an intuitive user interface for viewing real-time monitoring information. Simple, easy-to-read log trends and graphs display historical data of power and environmental conditions at the device or outlet level. Accessing PDUs via the web browser offers improved user control, allowing for configuring IP address sharing, setting alarm thresholds, grouping outlets, assigning users to different groups, and establishing outlet group access to user groups. PowerMax Intelligent PDUs can also be accessed with third-party software via SNMP using the Ethernet port.



- Easy-to-read graphs display power and environmental conditions



- For Smart, Switched and Managed intelligent PowerMax PDUs, six outlet groups can be configured and user groups can be assigned / denied access to outlet groups



## PowerMax™ PDU Accessories

### Temperature/Humidity Sensor 8ACC-S-TEHU

Each PowerMax PDU can be fitted with two temperature/humidity sensors, providing the customer with accurate environmental measurements at the cabinet level

*Only PowerMAX™ Monitored, Smart, Switched and Managed PDUs are compatible with the above PDU Accessory.*

ITEM	PARAMETER	
Environment	Working temperature	0°C-55°C (32°F - 131°F)
	Relative Humidity	10-90%
Temperature Measurement	Range	-40°C - 95°C (-40°F - 203°F)
	Resolution	0.1°C
	Accuracy	0.5°C
	Response time	400ms
Humidity Measurement	Range	0-95%
	Resolution	0.1%
	Accuracy	0.5%
	Response time	400ms
Working Voltage	5V DC	
Power Consumption	1.0W	

*Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.*

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