POWER DISTRIBUTION UNITS



Tripp Lite PDUs

Reliable rack power distribution for high-density IT environments.



TRPP-LITE INTRODUCTION



Tripp Lite Rack PDUs increase the availability, efficiency and manageability of equipment in data centers and other high-density IT environments. A wide selection of vertical (0U) and horizontal (1U or 2U) models are available, divided into several types with distinct features and benefits.

Basic PDUs

• Provide Reliable Power Distribution to multiple devices from a UPS system, generator or utility (mains) source.

Metered PDUs

• Provide all Basic PDU features, plus digital LED meters that provide local Current Monitoring to enable load balancing and help prevent overloads.

Monitored PDUs

- Provide all Metered PDU features, plus an Ethernet Network Interface for remote monitoring and control from any location.
- · Send automated alerts to help IT managers prevent accidental overloads, power loss and downtime.

Switched PDUs

- Provide all Monitored PDU features, plus Individual Outlet Control.
- Eliminate costly site visits by remotely rebooting malfunctioning devices.
- Increase runtime of critical systems by automatically turning off nonessential equipment during extended power outages.

ATS PDUs

• Provide all Metered or Switched PDU features, plus dual AC inputs and an Automatic Transfer Switch to provide redundant power to single-cord devices that do not have redundant power supplies.

Hot-Swap PDUs

• Include dual AC inputs and a Manual Transfer Switch to allow hot-swappable replacement of compatible UPS systems up to 3kVA without interrupting power to connected equipment.

PDU Types

| Features | Basic PDUs (p. 4) | Metered PDUs (p. 5) | Monitored PDUs (p. 6) | Switched PDUs (p. 7) | ATS PDUs (p. 8) | Hot-Swap PDUs (p. 8) |
|-----------------------------------|-------------------------|---------------------------|-----------------------------|----------------------------|--------------------------|----------------------------|
| Reliable Power Distribution | | | | | | |
| Current Monitoring | | RMPS | RMP5 | AMP5 | RMP5 | |
| Network Interface | | | | | Select Models | |
| Individual Outlet Control | | | | ON OFF | ON OFF OFF Select Models | |
| Automatic Transfer Switch | | | | | P | |
| Manual Transfer Switch | | | | | | |





TRIPP-LITE BASIC PDUs

Basic PDUs provide reliable power distribution to multiple devices from a UPS system, generator or utility (mains) source.





Horizontal PDU (Front and Back)

- 3 models
- 14 outlets
- Up to 3,7 kW
- Horizontal or vertical rack installation

Versatile Mounting Options

- EIA-compliant rack installation or surface mounting.
- Horizontal PDUs are optimized for 1U or 2U rack installation.
- Reversible PDU housing allows for additional customized configuration.



Durable Metal Case

• The metal case increases the PDU's operational service life in harsh and demanding installation environments.

AC Outlets

• High-quality C13 and C19 outlets provide reliable power distribution to multiple devices.

Heavy-Duty AC Input Cord and Plug Adapters

- Most models have a C20 AC input power cord long enough to reach distant outlets and improve placement flexibility.
- C20 AC inlet connects to the PDU's detachable power cord or a user-supplied cord (PDU12IEC model only).
- Additional C14 and NEMA L6-20P, L5-20P, 5-20P and 5-15P adapters simplify plug conversion (with select models).

Mounting Brackets

• Detachable brackets support rack or surface mounting.

Vertical Installation Option (select models)

- PDUSIDEBRKT accessory supports select
 Tripp Lite 1U PDUs in an upright vertical mounting format.
- Button mount installation option snaps into compatible Tripp Lite SmartRack[®] enclosures.
- Nut and bolt installation option connects to mounting rails.



Keyhole Mounting Slot Toolless Mounting Button

Circuit Breakers

 Most models include breakers to protect against short circuits and overloads.



For more information, refer to "PDU Models and Specifications" or visit www.tripplite.com/basic-pdu

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METERED PDUs

Metered PDUs provide all Basic PDU features, plus digital load meters for local current monitoring to enable load balancing and help prevent overloads.





Power Distribution

Current Monitorina



Horizontal PDU (Front)

- 5 models
- Up to 45 outlets
- Up to 7,4 kW for Single-phase models
- Up to 11 kW for 3-phase models

Load Meters

- Digital LED meters display the current draw of connected equipment in amps.
- Real-time visual data from local current monitoring helps installers balance load levels to prevent PDU and supply circuit
 - overloads that cause downtime. Installers can connect more equipment with confidence to increase utilization of available PDU, UPS and circuit capacity without a reduction in reliability.

Single Load Meter

• PDUs with more than one output bank either have more than one load meter or a multimode load meter capable of displaying the load for the each bank/phase or all banks/phases combined.

Cord Retention Brackets

• Most models include detachable brackets with built-in anchor points to secure equipment power cords and help prevent accidental disconnection.





Triple Load Meters



Dual Load Meters



For more information, refer to "PDU Models and Specifications" or visit www.tripplite.com/metered-pdu

TRIPP-LITE MONITORED PDUs

Monitored PDUs provide all Basic and Metered PDU features, plus a network interface for remote monitoring and automated alerts.







Power
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- 6 models
- Up to 36 outlets
- Up to 7,4 kW for Single-phase models
- Up to 11 kW for 3-phase models

Network Interface

 RJ45 Ethernet connection permits remote monitoring and alerts over the LAN/WAN via



SNMP, Web, SSH, telnet, RSS, text message and e-mail.

- Automated alerts warn IT managers when load levels exceed user-defined thresholds, identifying potential trouble spots and preventing accidental power loss and downtime.
- Embedded system with real-time clock and upgradable firmware supports enterprise network standards, including SMTP, SNMPv1, SNMPv2, Telnet, SSH, FTP, DHCP, BOOTP and NTP.

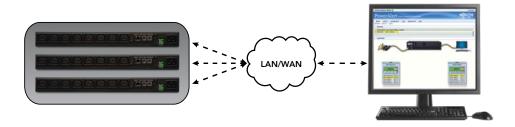
ENVIROSENSE® Sensor

- Environmental sensor connects to PDU for remote monitoring of temperature, humidity and contact closure interface.
- Contact closure interface can monitor alarm, security and telecom devices, as well as additional sensors.
- 3,7 m cord provides placement flexibility inside or outside racks.



Centralize Power Management with PowerAlert NMS (Included)

- PowerAlert NMS allows IT managers to auto-discover and manage hundreds of PDUs, UPS systems, connected environmental sensors and other devices through a single interface from any location.
- PowerAlert software does not require any licensing fees, regardless of the quantity of managed devices.



For more information, refer to "PDU Models and Specifications" or visit www.tripplite.com/monitored-pdu



TRIPP·LITE SWITCHED PDUs

Switched PDUs provide all Basic, Metered and Monitored PDU features, plus individual outlet control for remote reboots and automated load shedding.







Current



Interface



Individua Outlet Control



Horizontal PDU

- 14 models
- Up to 30 outlets
- Up to 7,4 kW for Single-phase models
- Up to 27,6 kW for 3-phase models

Individual Outlet Control

- Switch individual outlets on or off over the network manually or automatically.
- Remotely reboot unresponsive devices to eliminate costly site visits.
- Automatically turn off idle devices outside business hours to reduce power costs.
- Lock out unused outlets to prevent unauthorized use and related overloads.

Load Ramping and Shedding

- Load ramping defines power-on sequences and delays to prevent malfunctions and inrush overloads at startup.
- Load shedding increases the runtime of critical systems by automatically turning off nonessential equipment. Example: A UPS supporting sixteen network switches can provide about twenty minutes of runtime during an outage. After load shedding turns off twelve switches that aren't essential to core network functions, runtime expands

to two hours for the remaining mission-critical switches.

Outlet LEDs

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• Display whether each Switched PDU outlet is on or off.





Outlet-Level Current Monitoring

- All 3-phase and some single-phase models can display how much power a specific device is drawing from a specific outlet.
- Outlet-level current monitoring provides the granular data needed to determine the power draw and operating cost of individual devices on the network. As data granularity increases, guesswork decreases, and efficiency and system reliability can increase.

Example: If a PDU is near capacity, and a device connected to the PDU draws the majority of the power, it helps to know which device it is in order to better accommodate it without risking an overload. Outlet-level current monitoring can also reveal how much work a device does in relation to the energy it uses, confirming whether it would be more cost-effective to upgrade to a device that delivers more work value per watt.



For more information, refer to "PDU Models and Specifications" or visit www.tripplite.com/switched-pdu

TRIPP-LITE ATS PDUs

ATS PDUs provide redundant power to single-cord devices that do not have redundant power supplies.



Horizontal PDU (Front and Back)

Dual AC Inputs

• Power cords and/or inlets connect to primary and secondary AC sources.

Automatic Transfer Switch (ATS)

• Internal circuitry automatically switches to the secondary power source if the primary source deviates from the reliable operating range.







Current Monitoring



Network Interface (Select Models)



Individual **Outlet Control** (Select . Models)

- 2 models with 10 outlets
- Also include all Metered or Switched PDU features (depends on model)

Input Source LEDs

• LEDs indicate which source is currently supplying power to connected equipment.





For more information, refer to "PDU Models and Specifications" or visit www.tripplite.com/ATS-pdu

TRIPP:LITE HOT-SWAP PDUs

Hot-Swap PDUs allow maintenance, repair or replacement of compatible UPS systems up to 3kVA without system downtime.



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Distribution



Dual AC Inputs

• Power cords and/or inlets connect to utility (mains) and UPS sources.

Manual Transfer Switch

• Selects the active power source to bypass the UPS when required.

- 2 models with 8 outlets
- **Dual AC inputs**
- Manual transfer switch

Space-Saving Form Factor

• 2U cabinet can be installed back-to-back with select UPS systems to conserve rack space.



For more information, refer to "PDU Models and Specifications" or visit www.tripplite.com/hotswap-pdu

About Tripp Lite

Since 1922, Tripp Lite has established a global reputation for quality manufacturing, superior value and excellent service. Tripp Lite makes more than 2,500 products to power, protect and connect electronic equipment. Learn more at www.tripplite.com.







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