

Smart PDU for Temperature and Humidity Monitoring

Article Overview

Smart PDUs with temperature and humidity monitoring provide real-time environmental insights, remote management, and predictive maintenance to protect IT and telecom equipment.

Key Features

Environmental Monitoring: Smart PDUs allow monitoring of temperature and humidity at the rack or cabinet level, helping prevent equipment failures due to overheating, condensation, or corrosion. Many models support multiple sensors, including daisy-chainable options for up to 32 sensors per PDU, providing detailed environmental data across the rack . **Remote Management:** These PDUs offer web-based interfaces or network access to monitor power usage, device status, and environmental conditions remotely. Administrators can receive alerts, set thresholds, and even perform remote restarts to restore service quickly . **Predictive Maintenance:** AI-driven insights and historical data analysis help identify potential issues before they escalate, reducing downtime and maintenance costs by up to 40% . Early detection of power fluctuations and environmental changes ensures proactive responses. **Energy Efficiency:** Smart PDUs improve energy management by monitoring power consumption per outlet or branch, enabling better load balancing and reducing overall energy costs . **Modular and Upgradeable Designs:** Some PDUs, like the CLEVER SUM series, allow hot-swap modules to upgrade from basic to fully monitored PDUs without interrupting power supply . This flexibility supports evolving data center needs. **Integration with Software Platforms:** Many Smart PDUs integrate with management platforms such as EnerTree DCEM, allowing centralized monitoring of multiple racks and environmental sensors without additional licensing costs .

Benefits

- o Protects equipment from heat, humidity, and condensation-related failures.
- o Reduces downtime through remote monitoring and quick device restarts.
- o Lowers operational costs by minimizing on-site technician visits and enabling predictive maintenance.
- o Enhances energy efficiency and supports sustainability goals.
- o Scalable and flexible for small to large data centers or telecom cabinets.

Examples of Smart PDUs

- o **Server Technology Monitored PDUs:** Offer input current monitoring, temperature/humidity ports, and remote alerts .
- o **CLEVER SUM IP-PDUs:** Support environmental sensors, hot-swap modules, and web-based monitoring .
- o **Schleifenbauer PDU 5.0:** Supports up to 32 daisy-chainable sensors with full integration into EnerTree DCEM software .



Smart PDU for Temperature and Humidity Monitoring

o Intellinet 19" Intelligent 8-Port PDU: Monitors current, voltage, temperature, and humidity with web interface threshold settings . Smart PDUs with temperature and humidity monitoring are essential for maintaining reliable, efficient, and safe operation of IT and telecom infrastructure, especially in environments with variable climate conditions or high-density equipment.

Easy Rack PDU environmental sensor that monitors temperature and humidity in your Data Center or Network Closet.

Utilize ASHRAE Standards for Environmental Monitoring W hen it comes to environmental monitoring in your data center, it"s

An Environmental Monitored PDU tracks temperature, humidity, and airflow, ensuring optimal IT conditions, real-time alerts, energy

Smart PDU for your network The Intellinet Network Solutions 19" Intelligent 8 Port PDU provides your system-critical devices with

Data centers also benefit from environmental monitoring, as these PDUs can track temperature and

APC NetShelter Rack PDU Advanced Temperature and Humidity Sensor ensures optimal environmental monitoring

Add to List Find a reseller EAN Code: 0731304405153 Provides real-time monitoring of temperature and humidity

Designed for small and medium-sized data centers, it offers reliable power distribution and metering at the inlet level and support

The Intellinet Network Solutions 19" Intelligent 8 Port PDU provides your system

They are equipped with sensors that provide real-time information about power consumption, temperature, humidity,

The Intellinet Network Solutions 19" Intelligent 8 Port PDU provides your system-critical devices with

Smart PDUs provide precise monitoring and control of energy consumption. They can give data center

Clever SUM monitored PDU (IP-PDU) is designed for small and medium-sized data centers. Via Web



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interface, it offers reliable

Discover how PDU intelligent features like remote monitoring, energy analytics, and environmental tracking

For environmental monitoring and management, ATEN provides sensor probes that work in tandem with the Power Distribution

Intelligent Power Distribution Units - switched, metered and monitored PDUs for data centers, telecom and industrial applications.

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