Size matters! No 19" rack without a vertical IP Power Distribution Unit





3 Key Benefits

More Safety

The vertical power strip has 16 and 24 load outlets (NEMA5-15 or NEMA 5-20). This allows connected devices to be **switched off and on again** in the event of a fault. Thanks to integrated watchdogs, frozen devices can even be restarted fully automatically. In addition, the operator receives warning messages when fault currents occur. This enables **preventive** maintenance measures to be taken even before downtime occurs.

More Sustainability

The new IP power solutions can effectively reduce the installation's energy consumption and electricity costs: Collective switching off of several power consumers, especially with **programmed switching routines**, help to ensure sustainable operation of the infrastructure. **Free drivers** of cooperating technology partners allows quick and easy integration into existing media controls and DCIM solutions.

More Control

Two integrated connections for compatible accessory sensors allow monitoring of ambient temperature, humidity, air pressure as well as signal inputs (NO/ **NC)**. System-critical conditions are thus detected at an early stage. Defined threshold values also ensure that **event-based switching routines** can be initiated and **alarm messages** sent. Thanks to **hot-pluggable sensors**, commissioning is done in no time at all.

Support of well-known technology manufacturers:





















Expert Power Control 87



















Intelligent switched PDU with 16 or 24 NEMA outlets and integrated monitoring functionality

Features

- Up to 24 load outputs individually switchable (12 A, 16 A)
- All load outputs individually switchable at the device, via HTTP(S), SNMP, ModbusTCP as well as via command line interface using Telnet, SSH and MQTT
- Switching state and switch-on delay (0...9999 seconds) adjustable for each power port after power failure
- Current peaks during simultaneous switching operations are prevented by an automatic latency of 1 second
- Programmable schedules and on/off sequences
- Input-side measurement of current, voltage, phase angle, power factor, frequency, active, apparent and reactive power
- 2 energy meters, one meter counts permanently, the other is resettable
- 16-/24-channel watchdog, each power port can be assigned its own watchdog (ICMP/TCP)
- Connection for plug-n-play sensors for environmental monitoring (temperature, humidity, air pressure, signal input)
- Load outputs can be switched when preset sensor thresholds are exceeded
- Integrated surge protection prevents damage of device and of connected consumers (L-N 10 kA), status retrievable over network
- Easy-to-read and configurable LED displays for revealing total current, IP address, sensor values and error messages
- Buzzer for audible alarm when sensor thresholds are exceeded
- Long-life high-Inrush relays prevent welding of relay contacts during inrush current peaks
- Easy and flexible configuration via web browser, Windows or Linux program
- Firmware update possible during operation via Ethernet
- IPv6-readv
- Generation of status messages and alarms (e-mail, syslog, SNMP traps, MQTT, SSH and Telnet)
- Encrypted e-mails (SSL, STARTTLS)
- Access protection through IP access control
- SNMPv1, v2c, v3 (Get/Traps)
- Encrypted communication via SSH and SSL (TLS 1.1, 1.2, 1.3)
- Password protected access
- Support of Radius, Modbus TCP and MQTT 3.1.1

- · Configuration and control via Telnet
- Low power consumption
- Developed and produced in Germany

Application Scenarios

- Server racks & technical rooms
- AV and IT racks
- · Lecture halls & universities
- Laboratory/healthcare facilities
- Super yachts
- Data centersn

Electrical Connections

· Mains connection:

87-7410: NEMA 5-15 (max. 12 A, 100-240 V) **87-8510**: NEMA 5-20 (max. 16 A, 100-240 V)

• Load outputs:

87-7410: 16x NEMA 5-15, 12 A **87-8510**: 24x NEMA 5-20, 16 A

- Ethernet connector RJ45 (10/100 Mbit/s)
- 2 Sensor connectors RJ45 for plug-n-play sensors (temperature, humidity, air pressure)

Technical Details

- Housing for vertical rack mounting (0 HU), including mounting bracktes (LxHxW)
 87-7410: 53.15 x 3.15 x 2.56 in
 87-8510: 66.93 x 3.15 x 2.56 in
- Sturdy housing made of eloxated aluminum
- Weight: **87-7410:** 102.3 oz., **87-8510**: 137.6 oz.
- Operating temperature: 32 to 122 °F
- Storage temperature: -4 to 158 °F
- Relative humidity: 0 95 % (non condensing) (non-condensing environment)

Bright LED displays revealing port status, metering and sensor values

Order code	Product	Feature	Power supply	Max. current
87-7410-66	Expert Power Control 87-7410	16 switchable outputs NEMA 5-15, mains connection NEMA 5-15, 12 A, current metering per bank, surge protection (SPD type 3)	100-240 V	12 A
87-8510-77	Expert Power Control 87-8510	24 switchable outputs NEMA 5-20, mains connection NEMA 5-20, 16 A, current metering per bank, surge protection (SPD type 3)	100-240 V	16 A
7205	Temp., Humidity Sensor 7205	Plug-n-play sensor, RJ45 connector, -6°F to +176°F, 0-90% humidity		
7209	Temp., Humidity, Signal Sensor 7209	Plug-n-play sensor, RJ45 connector, -6°F to +176°F, 0-90% humidity, 300-1100 hPa 2 passive signal inputs		







