

Switched and outlet-metered PDU with industrial grade DC power supply

Manage and secure all your different AV and IT consumers with one single AC/DC PDU



Avoid headaches due to lack of socket space

The *Expert Power Control 8291-2* is an AC/DC Power Distribution Unit (PDU) that combines a smart 19" distribution panel with a **high quality power supply**. The remote power switch allows responsible of AV infrastructure to rely on a compact 1 RU solution in order to **control and monitor their IT and media equipment**. 26 outlets on the rear side enable connections of all common voltages: IEC C13 for 110-230 V, terminal clamps for 24 V, 12 V and 5 V as well as USB. All DC current connections are even measured at socket level. So servers, routers, projectors and other appliances are managed, switched and metered securely by *Expert Power Control 8291-2*.

The power supply units of IT and AV devices often block valuable socket space. By connecting these consumers to the terminals of *Expert Power Control 8291-2*, **this lack of available space is solved**. Moreover, the integrated power supply unit is a high quality part of industry standard. So users do not have to worry about the weakest link in the chain: The often cheap and unreliable power supply units of electronic appliances are not required anymore.

Features

- 21 Power Ports individually switchable directly on the device, via HTTPS, SNMP, command line tool and RS232 serial interface
- Integrated failure-proof power supply unit (max. 300 W), MTBF: around 1.8 mio operating hours
- Power monitoring of 5 V, 12 V and 24 V (Bank A-D)
- Maximum available DC current per port: 4 A
- Current segmentation of banks:
5 V: max. 8.8 A, 12 V: max. 6 A, 24 V: max. 12.5 A
- Switching through programmable sensor thresholds
- Scheduled and event-based switching
- Zero Voltage Switching (ZVS) avoids high switching currents by switching at the zero crossing of the AC voltage.
- Self-healing feature: An individual watchdog (ICMP/TCP) for each Power Port automatically reboots in case of lock-up
- Each outlet protected by eFuses in case of short circuits
- Individual current metering per DC load output
- Metering of energy, current, power factor, phase angle, frequency, voltage and active / apparent / reactive power
- Residual current metering type A
- A clearly visible LED display for port status, total current, IP address, sensor data and error reports
- Integrated surge protection (SPD) type 3
- 2 interfaces for plug-n-play sensors for environmental monitoring (temperature, humidity and air pressure)
- RJ45 network connection and RS232 interface
- IPv6, SNMPv3, Telnet, Radius, ModbusTCP, MQTT (3.1.1)
- Support for the 802.1X standard for port authentication
- HTTP/HTTPS, e-mail (SSL, STARTTLS), SSH, DHCP, Syslog
- Access control via IP Access Control List
- Developed and manufactured in Germany
- Low internal power consumption

Electrical Connections

- Power supply IEC C20 (max. 16 A, 110-230 V)
- 4 power ports IEC C13 (max. 10 A)
- 12 power ports industrial clamp, 12 V DC or 24 V dc (max. 4 A)
- Current distribution of the banks: 5 V (max. 8.8 A), 12 V (max. 6 A), 24 V (max. 12.5 A)
- 5 power ports industrial clamp or USB A (no data transfer), 5 V DC (max. 3 A)
- 1 Ethernet connector RJ45 (10/100 Mbit/s)
- 1 serial interface RS232 (Sub-D, 9-pin)
- 2 connectors (RJ45) for plug-&-play sensors

Technical Details

- Dimensions: 19-inches, 1 HU (LxWxH: 43.9 x 24.1 x 4.4 cm)
- Weight: approx. 4.4 kg
- Operating temperature: 0-50 °C
- Storage temperature: -20 - 70 °C
- Relative humidity: 0 - 95 % (non condensing)

International Awards



Inavation Awards
TECHNOLOGY WINNER



Key Benefits

- 17 DC switchable power ports with voltages of **24 V, 12 V and 5 V** and 4 AC switchable power ports at **230 V**
- Triple security feature: Short-circuit protection by **eFuse** per outlet, **SPD type 3, SSL** and **802.1X port authentication**
- Integrated **failure-proof power supply unit** (max. 300 W) with active power factor correction (PFC)
- Power cycling (reboot)** of hung-up devices: automatic by watchdog, from remote or on-site
- Saves sockets and rack space** (only 1 RU): DC power supply units for AV devices no longer required
- IP Monitoring**: Easily integrate anywhere with API interface like REST API, HTTPS, SNMP, Telnet and MQTT
- Precise load distribution** thanks to detailed **outlet-metering per DC connection**
- Avoidance of downtimes through **power and residual current monitoring**
- Monitoring of temperature, humidity and air pressure by available **plug-n-play sensors**



110-230 V (max. 10 A)
4x IEC C13

12 V OR 24 V (max. 4 A)
3x 4 terminal clamp

5 V (max. 3 A)
5x terminal clamp or USB type A

Front and rear panel of Expert Power Control 8291-2: Reliable power supply and effective control for every AV device

Order Code	Product	Features
8291-2	Expert Power Control 8291-2	4 x IEC C13 (110-230 V), 3 x 4 x PTR multi-connector (12 V or 24 V), 5 x PTR multi-connector (5 V) or 5 x USB type A (5 V, no data transfer), power supply IEC C20; DC outlet-metering; dimensions: LxHxD: 43.9 x 4.4 x 24.1 cm (without brackets), 1 RU
7205	Temp., Humidity Sensor 7205	Plug-n-play sensor, RJ45 connector, -20°C to +80°C, 0-90% humidity
7206	Temp., Humidity, Air pressure Sensor 7206	Plug-n-play sensor, RJ45 connector, -20°C to +80°C, 0-90% humidity, 300-1100 hPa
7209	Temp., Humidity, Signal Sensor 7209	Plug-n-play sensor, RJ45 connector, -20°C to +80°C, 0-90% humidity, 2 passive signal inputs
0804	IEC Extension Cable 0804	Extension cable for IEC C13 to C14, length: 3 m
0871	Desk/Wall Bracket 0871	Accessories for mounting a 19-inch device under a tabletop or on a wall