

## 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 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)

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 responsables 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*.

- 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