# PROFESSIONAL Systemintegration

7 | 2019



Special edition of Professional System 7-2019



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## More than a power strip

Switchable IP power strips provide more security, especially in collaboration applications, such as the latest power distribution units from Gude: The Expert Power Control allows control, energy measurement and monitoring of up to twelve connected loads.

N othing works without power, certainly not complex AV systems. An infrastructure that is as fail-safe and resilient as possible is the foundation of every successful installation. Here, the distribution of electricity is a neuralgic point. For this switchable socket strips are required that have certain protection and control features. Such "Power Distribution Units" (PDU) can be found, for example, at the Cologne-based company Gude. For more than 30 years, Gude Systems GmbH has been manufacturing devices for the IT, AV and industrial sectors, and this summer it launched new power strip systems with its "Expert Power Control" devices.

#### Smart power outlets

The switchable LAN power outlets are integrated into sturdy metal housings and are suitable for horizontal installation in 19-inch cabinets, where they require one height unit. The PDUs are offered in variants with four, eight or twelve slots on the back, designed as IEC C13 or protective contact. This allows connected devices to be switched off and on in the event of a fault - this is also possible in particular via media controls and DCIM solutions. For switching, Gude uses so-called high inrush relays. These relays withstand short-term inrush peaks of 80 A in addition to the 16 A continuous current. This makes sticking of the relays almost impossible.

The integrated energy meters provide precise measurement and recording of power consumption. The new IP switchable sockets can also help to efficiently reduce power consumption: The connected loads can be switched off collectively, even in stand-by mode. In addition, the integrated energy meters enable sustainable operation of the infrastructure. If fault currents occur, the operator receives warning messages. In this way, preventive maintenance measures can be taken in good time, even before downtimes occur.

Two integrated sensor connections for optionally available sensors allow monitoring of ambient temperature, humidity and air pressure. Programmable limit values ensure that event-based switching operations are initiated automatically. System-critical conditions, such as those caused by overtemperature or cable fire, are thus detected at an early stage. The Expert Power Control can be configured and controlled both locally and via a web-based control center. This promises simple and location-independent management and monitoring of the PDU. Secure communication and authentication is guaranteed thanks to the corresponding protocol support. The device can also be accessed using an Android or iOS app. In addition, the PDU can be integrated into monitoring solutions from popular software providers.

#### Areas of application

The PDU can be used in all areas where media technology is used: conference rooms, media technology furniture, lecture halls, in media racks, LED walls or data centers. Gude works with all major manufacturers in the AV industry such as Atlona, Barco, Crestron, Extron or Neets. For example, Atlona uses Gude's



switchable LAN power strips to equip modern conference rooms, auditorium technology or huddle rooms. Presentation technology, for example, can be switched on one after the other with a switch-on delay, or amplifiers that are no longer needed can be switched off according to a schedule. The integrated overvoltage protection prevents damage to the connected media technology and ensures increased operational safety. //

### IMPORTANT FUNCTIONS AT A GLANCE

- Up to twelve switchable load outputs (4×, 8× or 12× IEC C13 or 8× Schuko type F).
- Remote monitoring and switching of connected loads: event-based switching, remote start, programmable on/off sequences, automatic switch-on delay to limit inrush currents
- Load outputs can be switched when preset sensor limits are exceeded.
- Measurement of current, voltage, phase angle, power factor, frequency, active, apparent and reactive power
- Fault current monitoring (measurement of residual current type A)
- Environment monitoring thanks to sensor connections and optionally available sensors (temperature, humidity, air pressure)
- · Generation of messages (e-mail, syslog and SNMP traps)
- · Location-independent access via web interface
- Controllable via iOS and Android app
- Supports IPv6, SNMPv3, SSL, Telnet, Radius and Modbus TCP
- Compatible with popular monitoring software solutions such as PRTG, Nagios or Power IQ
- Easy integration into AV control systems



Application example: Use of the Expert Power Control 8031-3 PDU in a conference room (Image: Gude)