Managed AC PDU
Managed DC PDU

Introduction

The ALGpower Managed PDUs are Power Distribution Units that offer a unique combination of features to optimize the way power is distributed, controlled, and monitored.

The Managed DC PDU enables the distribution of power from various sources such as rectifiers, uninterruptible power supplies (UPS), switched-mode power supplies, charge controllers, and batteries. Each of the 8 outputs has a capacity of up to 10 A, totaling a device capacity of 80 A. It operates within a voltage range of 10 - 60 VDC, meeting the demands of high-power devices and providing flexibility for various applications.

The Managed AC PDU serves as an alternating current power distributor, offering 8 outputs, each with a capacity of up to 10 A and a total device limit of 20 A. It operates within a range of 85 to 270 VAC when connected to the electrical grid.

Both PDUs feature robust outputs with protection against short circuits and overloads. Additionally, the Managed PDUs include alarms and indicator LEDs for each output, creating a continuous monitoring system. This ensures proactive measures are taken before potential issues become critical, keeping your infrastructure protected and in continuous operation.

Remote management and monitoring play a crucial role in these products. The models include a secure and user-friendly interface through a web browser, providing remote power monitoring, displaying information on voltage, current, and power for each output, alarms, and control of operations through an Ethernet connection, along with SNMP support for integration into your network management system.

Each output can be remotely turned on and off, allowing real-time adjustments to power distribution as needed. Scheduling activations by time and day of the week is also possible. The customization of output settings is an additional benefit; for instance, it is possible to program undervoltage shutdown, gradually turning off less critical outputs and directing power only where necessary.

Features and Highlights

Managed DC PDU:
- Input Voltage of 10 - 60 V_{DC};
- Total Capacity of 80 A divided into 8 outputs of 10 A each;
- Includes individual fuses for protection on each output.

Managed AC PDU:
- Input Voltage of 85- 270 V_{AC};
- Total Capacity of 20 A that can be divided into 8 outputs;
- Each Output Supports up to 10 A.

General Features:
- Ethernet for Remote Monitoring via SNMP-V2 and Control through Web Page;
- Compatible with Monitoring Systems such as Zabbix, Grafana, LibreNMS, The Dude, among others;
- Voltage, Current, and Power Measurement System per Output;
- Remote Activation of Outputs;
- Alert Monitoring via Web Page (Overcurrent, Overvoltage, and Undervoltage);
- Up to 10 Schedule Activations per Time and Day of the Week;
- Watchdog for Automatically Restarting up to 10 Devices;
- Undervoltage Shutdown Programming, Gradually Turning off Less Critical Outputs;
- Indicator LEDs for Individual Operation per Output;
- Local Manual Control for Turning Outputs On/Off;
- Robust Terminal Input Connectors on the Front Panel.

Applications

- Critical Power Loads;
- Telecommunication Networks;
- Data Centers;
- Renewable Energy Systems;
- Alarm Systems.

Input Characteristics	Managed AC PDU	Managed DC PDU
Input Voltage (Range)	85 – 270 V_{AC}	10 - 60 V_{DC}
Frequency	50/60 Hz	DC
Input Current	Up to 20 A	Up to 80 A
Connection	Terminal block for wires up to 4 mm^2, compatible with tubular terminal.	The connector features a 5 mm screw, compatible with fork and ring terminals.
Input Protections	20 A input circuit breaker for short-circuit and overload protection.	15 A fuse for each output.
Output Characteristics	**Managed AC PDU**	**Managed DC PDU**
Output Voltage (Range)	85 – 270 V_{AC}	10 - 60 V_{DC}
Current per Output	Up to 10 A	Up to 10 A
Total Outputs	8	8
Connection	Standard 10A NBR14136 Outlet Standard NEMA 5-15R Outlet	Connector with 4mm Screw, Compatible with Ring and Fork Terminals.
Output Protections	20 A Input Circuit Breaker.	8 fuses of 15 A (1 for each output) for short-circuit and overload protection.
	Disconnects the PDU for Overcurrent, Overvoltage, and Undervoltage (User-defined on the Web Page).	
Management Interface		
Ethernet	10/100 Mbps	
Suported Protocols	TCP/IP – SNMP V2	
Firmware Updates	Remote update capability for the management interface.	
Alarms	Alarms for overcurrent, overvoltage, and undervoltage on input power, overcurrent per output, and output fault. (Values can be user-defined through the Web Page)	
Monitoring	Measurement of voltage, current, and power individually for each output, as well as the activation status.	
	Ability to customize the name of each output, facilitating the identification of connected devices	
Commands	Ability to send remote commands to turn on/off and restart outputs, individually and in groups.	
Scheduling	Possibility to configure up to 10 schedule activations for outputs, to be defined by time and day of the week.	
Watchdog	Possibility to configure up to 10 watchdogs to monitor equipment availability. If the configured watchdog criteria are met, the respective output will be restarted, and the counter incremented.	
Automatic Load Shutdown	Each output is user-defined, with the option of manual or automatic restart.	
Manual Output On/Off	Commands can be executed through a button located on the front panel. Pressing it allows turning on/off all outputs.	
Manual Factory Reset	Commands can be executed through a button located on the front panel. Pressing it allows restoring network settings and operational configurations to factory values.	
General Specifications	**Managed AC PDU**	**Managed DC PDU**
Input to Ground Isolation	1000 V_{AC}	500 V_{DC}
Output to Ground Isolation	1000 V_{AC}	500 V_{DC}
Operating Temperature	-10 °C to 60 °C	
Operating Humidity	20 to 90% (non-condensing)	
Alarm (Green LED)	Activated and Energized Outputs	
Alarm (Blinking Green LED)	Failure in the Corresponding Output	
MTBF	>120.000 hours	
Installation Mode	1U Height for 19" Rack Mounts	
Dimensions (H x W x D) / Weight	43 x 440 x 150 mm / 2,1 kg	43 x 440 x 170 mm / 2,2 kg

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