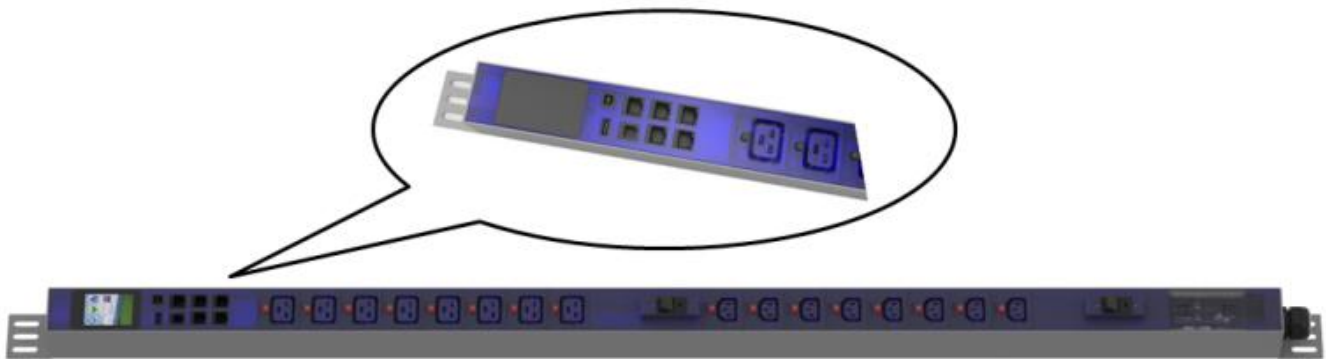# IMP Series PDU

Intelligent Modular Power Distribution Unit

The IMP Series PDU (Intelligent Modular Power Distribution Unit) provides complete power management with features for the immediate display and control of power operations, remote network access, and unattended, timed control and network reporting using pre-configured values.

The IMP Series supports HTTP/HTTPS (HTML5, REST, JSON), SSH (+PKI), Telnet, IoT (MQTT), SNMP (v1, 2, 3) and SMTP with user defined access control to all system functions. The products allow the remote monitoring of temperature, humidity, current, voltage, and external sensors with threshold exception detection and reporting over the network.

Features

- Various outlets mixed together in any sequence
- 2.4" 262K color LCD display with touch screen
- Circuit breaker(s) and surge protection
- Up to 255 PDUs can be daisy chained together using WiFi, Bluetooth, CAN, RS-485 under Master control with group configuration
- Ethernet 10M/100M, USB, CAN, I/O, IIC(sensor), RS485(sensor), daisy chaining (RS485 Modbus), optional WiFi and Bluetooth connectivity
- Temperature, humidity, power consumption monitoring; digital binary state signal sensor; supports third party external sensor with power supply (5V)
- Individual outlet control, power sequencing on/off, timed on/off control
- Protocols: HTTP/HTTPS (HTML5, REST, JSON), SSH (+PKI), Telnet, IoT (MQTT), SNMP (v1, 2, 3), SMTP
- User defined threshold alarms for sensors reported over SNMP, SMTP, and HTTP POST to customizable URL

- Access control through user accounts with passwords and X.509 (PKI) certificates
- Cloud Access (AWS and Google)
- Signed and encrypted firmware upgrades (network, USB) to ensure authenticity and integrity
- Event logging

Specifications

Table 1. Input and output Section Specifications

Item	Value
Input Plug	Battier Connector
Input Voltage	85-260 VAC
Input Current	32 Amp
Output Receptacles	Nema5-15R, IEC60320-C13, IEC60320-C19, GB2099.9-10A, GB2099.9-16A
Output Nominal Voltage	85-260 VAC
Circuit Breaker	Optional
Surge Protection	Optional
Communication port	RJ45, 10M/100M, USB, CAN, I/O, IIC(sensor), RS485(sensor)
Daisy Chain	RJ45*2, Up to 255 PDUs
Environmental Sensor	Temperature, Humidity, Power Consumption Monitoring, Smoke, Water Leakage Via RJ11 or RJ 45 port Sensor (Supports third party external sensor)
Network Protocol	HTTP/HTTPS (HTML5, REST, JSON), SSH (+PKI), Telnet, IoT (MQTT), SNMP (v1, 2, 3), SMTP
Energy Monitoring	Voltage (V, RMS), Current (A, RMS), Active Power (kW), Reactive Power(kW), Apparent Power (kVA), Energy (kWh), Power Factor, Frequency
Remote Outlet Switching	Yes
Monitoring Input line	Yes
Monitoring Per Group	Yes
Monitoring per Outlet	Yes
Display	2.4" 262K color LCD display : Voltage, current, or active power (per line, per breaker, or per receptacle / outlet); Alarms; Configuration information (name, ratings, IP / Networking information). Auto-flip orientation

Table 2. General Specifications

Parameter	Value	Units	Test Condition Comments
IRMS Measurement Error	1.0	%	-40 ˚C to +85 ˚C
VRMS Measurement Error	1.0	%	-40 ˚C to +85 ˚C
Active Energy Measurement Error	0.5	%	-40 ˚C to +85 ˚C
Reactive Energy Measurement Error	0.5	%	-40 ˚C to +85 ˚C
Power Factor Error	±0.05	Degrees	-40 ˚C to +85 ˚C
Relative Humidity Tolerance	±2.0	%RH	
Temperature Tolerance	±0.3	˚C	
Operating Temperature	-5 - +60	˚C	
Storage Temperature	-20 - + 70	˚C	
Relative Humidity	10 - 90 % RH, non-condensing	%RH	
Dimensions (WxDxH)	W: 2.165" (55mm)	Inch	
	D: 2.362" (60mm)		
	H: You can derive the PDU length based on module's length and outlet configuration, outlet quantity should be multiple of 4		LCD: 8.86" (225mm) Barrier connector: 5.71" (145mm) CB Cover: 4.80" (122mm) Outlet: 1.75" (44.5mm)
Weight	Base on product configuration	kg	

Ordering Information

The IMP Series PDU is available in a wide variety of configurations. Consult your Customer Service Representative or Applications Engineer to determine the best configuration for your particular application.