LEGRAND PDU
Solutions Guide

VARYING FORM FACTORS AND FUNCTIONALITY
TO ALIGN WITH YOUR PHYSICAL
INFRASTRUCTURE

POWER SYSTEM APPLICATIONS

Legrand offers power solutions that are designed to deliver power with an array of density, capacity, and connector options for compatibility with nearly any application. Each product and system is engineered with installation efficiency and performance in mind—providing the flexibility to design and efficiently install in any **building network**, as defined below.

Building Network

Commonly referred to as a Local Area Network (LAN) or Edge network, these applications connect computers, servers, switches, and other devices in a single building.

Legrand offers a broad range of power distribution and backup systems, including Intelligent Power Distribution Units and Online and Line Interactive Uninterruptible Power Supplies, that make the most of any budget. Legrand power systems deliver benefits like simple installation, easy administration, and high performance. As networks evolve to support higher bandwidths and new architectures, Legrand helps maximize power investments by designing our power systems to allow for quick swaps of components or simple firmware updates while utilizing the same equipment.

POWER DISTRIBUTION UNIT (PDU)

A PDU is designed to protect and distribute power to attached equipment. Networked PDU models provide remote monitoring and control, alert notifications, and visibility of usage, power problems, and availability. This is accomplished through the Legrand® PDU controller, which allows for delayed power sequencing, power regulation, and the aggregation of sensors.

Selecting a Power Distribution Unit (PDU)

1) Determine form-factor

- Vertical: Zero U
- Horizontal: 1U (19" EIA)

2) Verify the PDU input voltage, phase, and current that will work with the feed to your rack or cabinet and with the connected equipment

- Voltage: 120 or 208V
- Phase: Single-phase
- Current:

Input Current	Input Current Rated
15 Amps	12 Amps
20 Amps	16 Amps
30 Amps	24 Amps

3) Determine the input-plug type that will work with the feed to your rack or cabinet

- NEMA 5-15P
- NEMA 5-20P
- NEMA L5-20P
- NEMA L5-30P
- NEMA L6-20P
- NEMA L6-30P
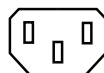

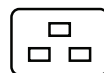NEMA 5-15P   NEMA 5-20P   NEMA L5-20P   NEMA L5-30P   NEMA L6-20P   NEMA L6-30P

4) Determine the outlet receptacle types and quantities needed to power the equipment connected to the PDU

- IEC C13
- IEC C19
- NEMA 5-15R/5-20R

IEC C13   IEC C19   5-15R/5-20R

4) Remote access and control requirements

Networked PDUs

- **Network Metered PDUs:** Network Metered PDUs meter power at the PDU inlet-level. Network Metered PDUs display the inlet power data both locally and over a network. They also allow for sensors to be connected and monitored through the PDU interface.

- **Network Switched PDUs:** Network Switched PDUs offer the same features as Network Metered PDUs, but also enable authorized users to securely power-cycle outlets remotely. Network Switched PDUs minimize inrush currents through power sequencing, prevent unauthorized device provisioning, power off devices that are not in use to conserve energy, and reboot devices to quickly restore services.

PDU IN DETAIL
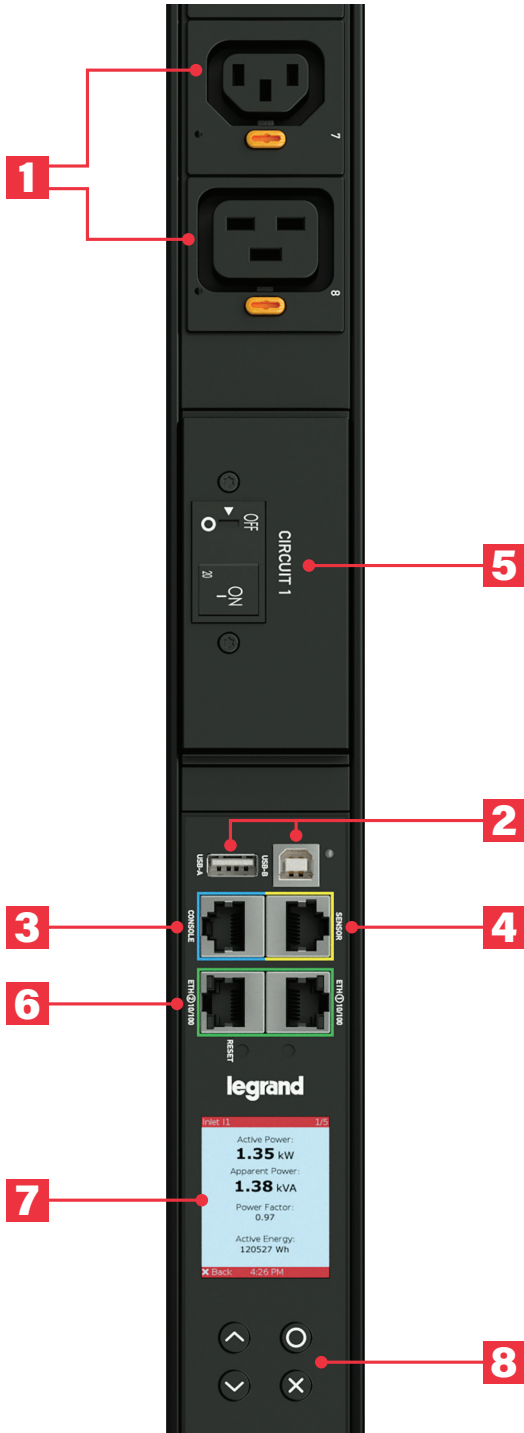
1
Outlet Receptacles

IEC or NEMA outlet receptacle options. Integrated locking receptacles, available on C13 and C19 outlets, provide maximum port retention without the need of special cords that lock at the PDU

2
USB-A and B Ports

USB-A and B ports for connecting peripheral devices, so data can be viewed on smartphones

3
RJ45 Console Port

Data connection for direct control and management

4
RJ45 Sensor Port

Plug-and-Play sensor port for directly connecting optional temperature and humidity sensors

5
Circuit Breaker

Hydraulic-magnetic breakers on 30A units provide local protection, quick recovery from circuit overload, and are not affected by ambient temperature

6
Dual Network Ports

Dual network connection ports (Fast Ethernet) allow for redundant and configurable access to the PDU from two different networks—ideal for daisy–chaining PDUs or colocation environments

7
LCD Color Screen

220 x 176mm super bright screen with configurable measurement data display

8
Intuitive Navigation Buttons

Intuitive control buttons to navigate local PDU screen

INNOVATION & PERFORMANCE

CORD LOCKING SYSTEM

The security of cable connections is a critical element which must be considered to ensure longevity of the installation. Legrand PDUs with IEC receptacles have a power supply cord locking system which prevents accidental disconnection due to human error or vibration.
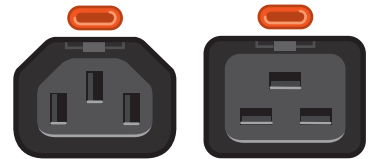
Functionality integrated in all Legrand PDUs with IEC receptacles: Network Metered, and Network Switched.
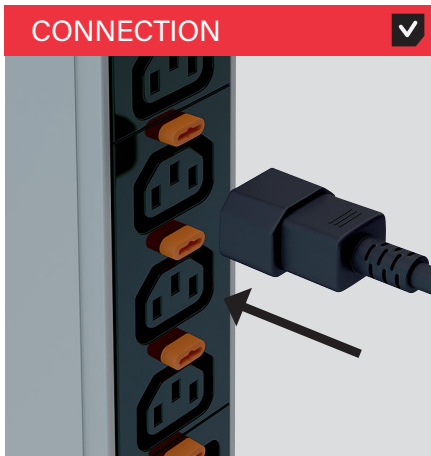
*Not available on high-density unit: LP-42300
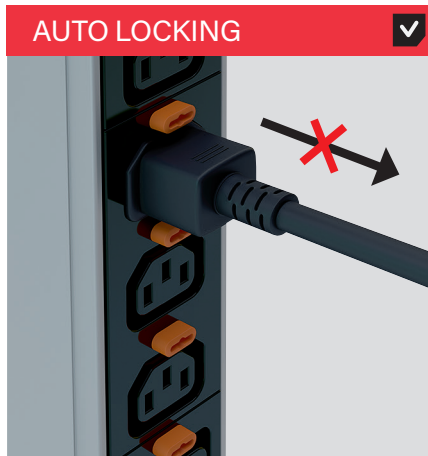
CONNECTION ☑

CORD CONNECTION
The cord connects to the socket smoothly with one quick action

AUTO LOCKING ☑

CORD HELD IN PLACE
Once the power supply cord is connected, it locks automatically and cannot be removed

### UNLOCKING ☑

EASY REMOVAL
Simply pressing the unlock button releases the cord from the socket

Every detail matters! Legrand's unique and original innovations help ensure optimum performance for the Zero U range of PDUs. A rotatable inlet cord allows for flexibility in design, installation, and configuration of your setup.

*Not available on high-density unit: LP-42300

STANDARD FEATURE FOR ZERO U, METERED, & SWITCHED PDUs

ROTATIVE CABLE ENTRY

330°
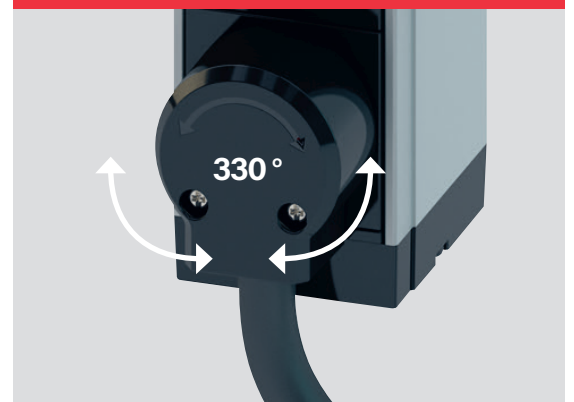
CABLE ORIENTATION
330° rotatable cable entry for perfect cable orientation and no interference in the cabinet

NETWORK SWITCHED PDU – SINGLE-PHASE

Distribute, manage, and control power to connected equipment, enabling load monitoring, individual outlet power cycling, and power sequencing. This control can be accessed locally or remotely, multiplying the reach and ability of staff and caretakers. A single portal view provides visibility and control of power usage and available capacity, which simplifies the maintenance responsibilities of taxed IT departments.

FEATURES:

- **Networked Controller:** Enables remote and local monitoring and control of the PDU and peripherals

- **Circuit Breaker Trip Detection / Alerting:** Get notification instantly in the instance of a tripped circuit breaker

- **Advanced Load Monitoring:** View and control the power being drawn for the entire PDU, receive notifications of potential issues or when near max amperage draw

- **Delayed Power Sequencing:** Sequence the order in which each outlet is turned on or off to avoid dropped power loads or circuit overloading

- **Outlet Use Management:** From the PDU GUI, you can remotely identify named outlets and if an outlet is on or off

- **High-Res Color LCD:** Displays energy reading, current, and voltage; important configuration settings, alarm settings, and control outlets which simplifies commissioning

- **Hydraulic-Magnetic Breakers:** Provide less heat dependent local protection and quick recovery from circuit overload, by utilizing a two-step response curve— these breakers provide a delay on normal overcurrents, while tripping quickly on short circuits

- **Integrated Locking Outlets on IEC Receptacles:** Eliminates the need for special cords that lock at the PDU

- **Rotatable Cord:** Enables maximum flexibility for routing the input plug – simplifying the installation of Zero U PDU's

- **Mounting Types:** Available in horizontal and vertical (on rail, flush rail, and button mount) configurations to ensure power distribution is optimally located and simple to install

- **PDU Linking:** Cascade up to 16 PDUs via Ethernet or USB—this can minimize port usage on network switches or consolidate accessibility to multiple PDUs from a single IP address

- **Optional Environmental Sensors and Remote Locking:** Can alert of any threats of downtime or potential physical security breaches

- **Software Interoperability:** Seamlessly integrate into any monitoring software with open JSON-RPC interface **Compatibility:** SNMP, LUA, Java, JavaScript, and Perl

| Part No. | Form Factor | Mounting Type | INPUT | | | | | | RECEPTACLES | | | | |
			Input Nominal Voltage (V)	Input Current (A)	Input Current Rated (A)	Input Power Capacity (kW)	Inlet Location	Input Plug Type	IEC C13	IEC C19	NEMA 5-20R	Integrated Locking Outlets	Circuit Breaker
LP-61110	1U	Horizontal Rack	120V	15	12	1.4	Rear C20	5-15P			8		
LP-61210	1U	Horizontal Rack	120V	20	16	1.9	Rear C20	L5-20P			8		
LP-61100	Zero U	Button	120V	15	12	1.4	Front Rotatable	5-15P			8		
LP-61200	Zero U	Button	120V	20	16	1.9	Front Rotatable	L5-20P			24		
LP-61300	Zero U	Button	120V	30	24	2.9	Front Rotatable	L5-30P			24		3x20A
LP-62201	Zero U	Button	208V	20	16	3.3	Front Rotatable	L6-20P	21	3		▪	
LP-62300	Zero U	Button	208V	30	24	5	Front Rotatable	L6-30P	21	3		▪	3x20A

NETWORK METERED PDU – SINGLE-PHASE

Network Metered PDUs enable line level power metering in real time. Allowing remote monitoring of the load level, custom notifications, and user specified conditions. Each Network Metered PDU provides visibility and reporting of power usage on the PDUs Color LCD screen and to tablets, smart phones, or computers from nearly anywhere.

FEATURES:

- **Load Monitoring:** View the power being drawn for the entire PDU, receive notifications of potential issues or when near max amperage draw

- **User Defined Notifications:** User defined thresholds for power draw or environmental factors with notifications if threshold have been met

- **Remote Management:** Manage and configure the unit from any location

- **High-Res Color LCD:** Displays energy reading, current, and voltage; important configuration settings, alarm settings, and control outlets which simplifies commissioning

- **Hydraulic-Magnetic Breakers:** Provide less heat dependent local protection and quick recovery from circuit overload; by utilizing a two-step response curve— these breakers provide a delay on normal overcurrents, while tripping quickly on short circuits

- **Integrated Locking Outlets on IEC Receptacles:** Eliminates the need for special locking cords

- **Rotatable Cord:** Enables maximum flexibility for routing the input plug—simplifying the installation of Zero U PDU's. (Rotatable cord is not available on vertical PDU LP-42300)

- **Mounting Types:** Available in horizontal and vertical configurations to ensure power distribution is optimally located

- **PDU Linking:** Cascade up to 16 PDUs via Ethernet or USB—this can minimize port usage on network switches or consolidate accessibility to multiple PDUs from a single IP address

- **Optional Environmental Sensors and Remote Locking:** Can alert of any threats of downtime or potential physical security breaches

- **Software Interoperability:** Seamlessly integrate into any monitoring software with open JSON-RPC interface
    Compatibility: SNMP, LUA, Java, JavaScript, and Perl

| Part No.	Form Factor	Mounting Type	INPUT						RECEPTACLES				
			Input Nominal Voltage (V)	Input Current (A)	Input Current Rated (A)	Input Power Capacity (kW)	Inlet Location	Input Plug Type	IEC C13	IEC C19	NEMA 5-20R	Integrated Locking Outlets	Circuit Breaker
LP-41110	1U	Horizontal Rack	120V	15	12	1.4	Rear C20	5-15P			8		
LP-41210	1U	Horizontal Rack	120V	20	16	1.9	Rear C20	L5-20P			8		
LP-41100	Zero U	Button	120V	15	12	1.4	Front Rotatable	5-15P			10		
LP-41200	Zero U	Button	120V	20	16	1.9	Front Rotatable	L5-20P			24		
LP-41300	Zero U	Button	120V	30	24	2.9	Front Rotatable	L5-30P			24		2x20A
LP-42201	Zero U	Button	208V	20	16	3.3	Front Rotatable	L6-20P	18	2		.	
LP-42300	Zero U	Button	208V	30	24	5	End	L6-30P	36	6			2x20A

NETWORKED PDU CONTROLLER

THE HEART OF NETWORKED PDUs

A WIDE BRIGHT COLOR LCD DISPLAY

The new Legrand® PDU controller allows local and remote access to all critical measurement data. The bright color LCD display will change color according to the alert level detected by the PDUs; your field technicians can quickly identify PDUs on which the thresholds have been exceeded, obtain correct power supply data immediately, and take appropriate action.
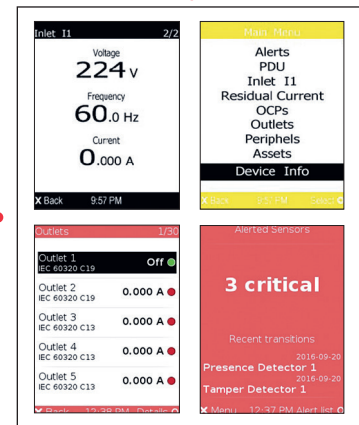
DIRECTLY ACCESSIBLE DATA

Makes it easier to view the power supply data and information about the environment. The responsive web user-interface can be accessed from any device or tablet, or directly from a desktop computer.

The redesigned overview screen provides the most important information at a glance, so you can easily monitor your PDU health and critical data, and also view the cabinet energy consumption in real time.

ADAPTIVE COLOR SCREEN

The LCD display on the unit changes color according to the alert level, making it easier for the technical teams to see the critical information.

L3 legrand®