The ABC's of rPDU Technology

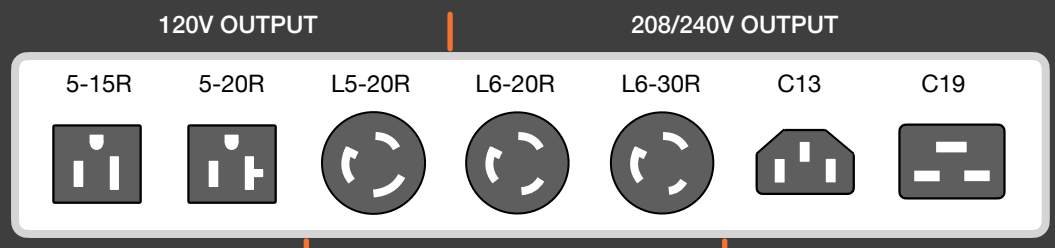
Courtesy of Gateview Technologies, creators of POWERLOK

POWERLOK

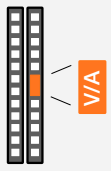
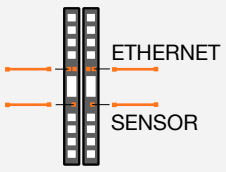
Please consider POWERLOK for:

- Slim high power PDUs with leading power density
- Advanced switching technology
- Cord locking using standard cords
- Factory automation for rapid build-to-order
- 3X greater reliability due to USA made and robotic soldering

rPDU Receptacles for IT Equipment

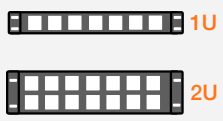
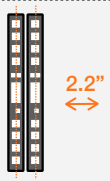
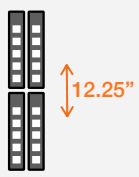


rPDU Type

A	Basic Local Metered		**BASIC** has no power reporting. **LOCAL METERED** has power reporting on the local PDU display only.
B	Monitored Monitored w/Sensors Monitored Ready[1]		**MONITORED** reports power over Ethernet and on local display. Includes in and out ports for daisy chaining PDUs. **MONITORED W/SENSORS** allows the use of PDU sensors for rack environmental monitoring. **MONITORED READY** allows monitoring to be upgraded or added in the field.
C	Switched[2] Switched Ready[3] Outlet Monitored		**SWITCHED** allows remote on/off/reboot control of power to PDU outlets. **SWITCHED READY** allows PDU switching cords to be added in the field for on/off/reboot control. **OUTLET MONITORED** allows reporting of power data for PDU outlets.

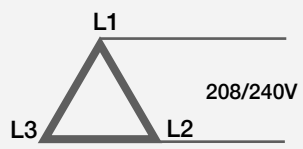
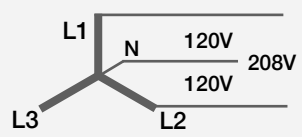
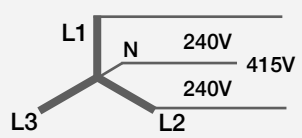
1. First introduced by Geist (Vertiv). 2. First introduced by Servertech (Legrand). 3. First introduced by PowerLOK

Mounting

A	Horizontal Rack Mount[4]		**HORIZONTAL RACK MOUNT** PDUs are typically 1U or 2U in height and conform to EIA-310D standards for rack mounting. Horizontal rack mount PDUs are limited on receptacle count due to their size and require rack U-space for mounting.
B	Vertical (Zero-U)[5]		**VERTICAL** PDUS are also known as zero-U PDUs and do not use U-space in the rack. The industry standard allows two vertical PDUs to mount 2.2" apart side-by-side. Typically 72" is the maximum length PDU that fits a 42U rack.
C	Vertical Stacking[6]		**VERTICAL STACKING** PDUs mount in series and side-by-side and conform to a 12.25" button spacing standard for key slot mounting. Vertical Stack PDUs are available in 24", 36", and 41" lengths, allowing 2-3 PDUs to be stacked in one 72" or 82" PDU footprint.

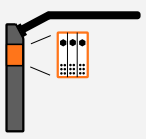
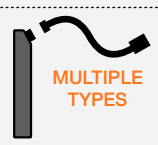
4. Conforms to EIA-310D Standard. 5. First introduced by APC (Schneider). 6. First introduced by PowerLOK

Power

		Volts	Amps	kW	
A	120V	120V	20A 30A	1.9 kW 2.9 kW	
	208/240V 1PH	208/240V 1PH	20A 30A 50A 60A	3.3 kW 5.0 kW 8.3 kW 10.0 kW	**120 or 208/240V 1PH** uses a 2-wire plus earth input. **Use Volts*Amps*0.8** to determine kW. Use NEMA L5-**XX**P plug for 120V and L6-**XX**P plug for 208/240V, where **XX** is input Amps. Example: 30A 208/240V input uses a L6-30P.
B	208/240V 3PH	208/240V 3PH	30A 35A 50A 60A 100A 120A	10.0 kW 11.2 kW 14.4 kW 17.2 kW 28.8 kW 34.6 kW	 **208/240V DELTA 3PH** uses a 3-wire plus earth input. The input voltage can be 208V or 240V, and the output is always the same as the input. Use **Volts*Amps*1.732*0.8** to determine kW. Use L15-30P for 30A, CS8365C for 35/50A. IEC style plugs typically used for 60A and greater. A neutral tap can reduce 240V to 120V but is uncommon in this application.
C	120/208V 3PH	120/208V 3PH	20A 30A 60A 100A	5.7 kW 8.6 kW 17.3 kW 28.8 kW	 **120/208V WYE 3PH** uses a 4-wire plus earth input and allows both 120V and 208V output. Use **Volts*Amps*1.732*.08** to determine kW. Use NEMA L21-20P for 20A and use L21-30P for 30A. IEC style plugs are an option. IEC style plugs are available in IP44 (splash-proof) and IP67 (watertight). IP44 is most prevalent in this application.
	240/415V 3PH[7]	240/415V 3PH	20A 30A 60A 100A 120A	11.5 kW 17.2 kW 34.5 kW 57.5 kW 69.0 kW	 **240/415V WYE 3PH** uses a 4-wire plus earth input. The input voltage is typically between 400-415V and the output is always 230-240V. Use **Volts*Amps*1.732*0.8** to determine kW. Use NEMA L22-20P for 20A, use L22-30P for 30A. IEC style plugs are also available.

7. 415V is a higher voltage allowing for greater power without increasing copper size. Voltage to 277/480V Is available.

Input

A	Whip[8] & Plug		**WHIP & PLUG** connects PDU to a mating receptacle found overhead or under the raised floor. Whip length is specified for the application where 10FT is the most common. Some companies optimize local manufacturing to offer any whip length to 15FT maximum per EN60950 standard.
B	Entrance Terminals		**ENTRANCE TERMINALS** are starting to become common for higher power PDUs. Entrance terminal blocks allow the customer to make their own termination using individual wires and conduit and eliminate the need for expensive plugs and receptacles.
C	Universal Input PDU[9]		**UNIVERSAL INPUT** allows a common PDU to be used for various voltage and amperage applications. The PDU is universal in this case but the whips are unique and must be readily available for the voltage and amperage requirement.

8. Input whip lengths 2FT to 15FT in 1FT increments introduced by PowerLOK. 9. First introduced by Geist (Vertiv).