Infra Power®

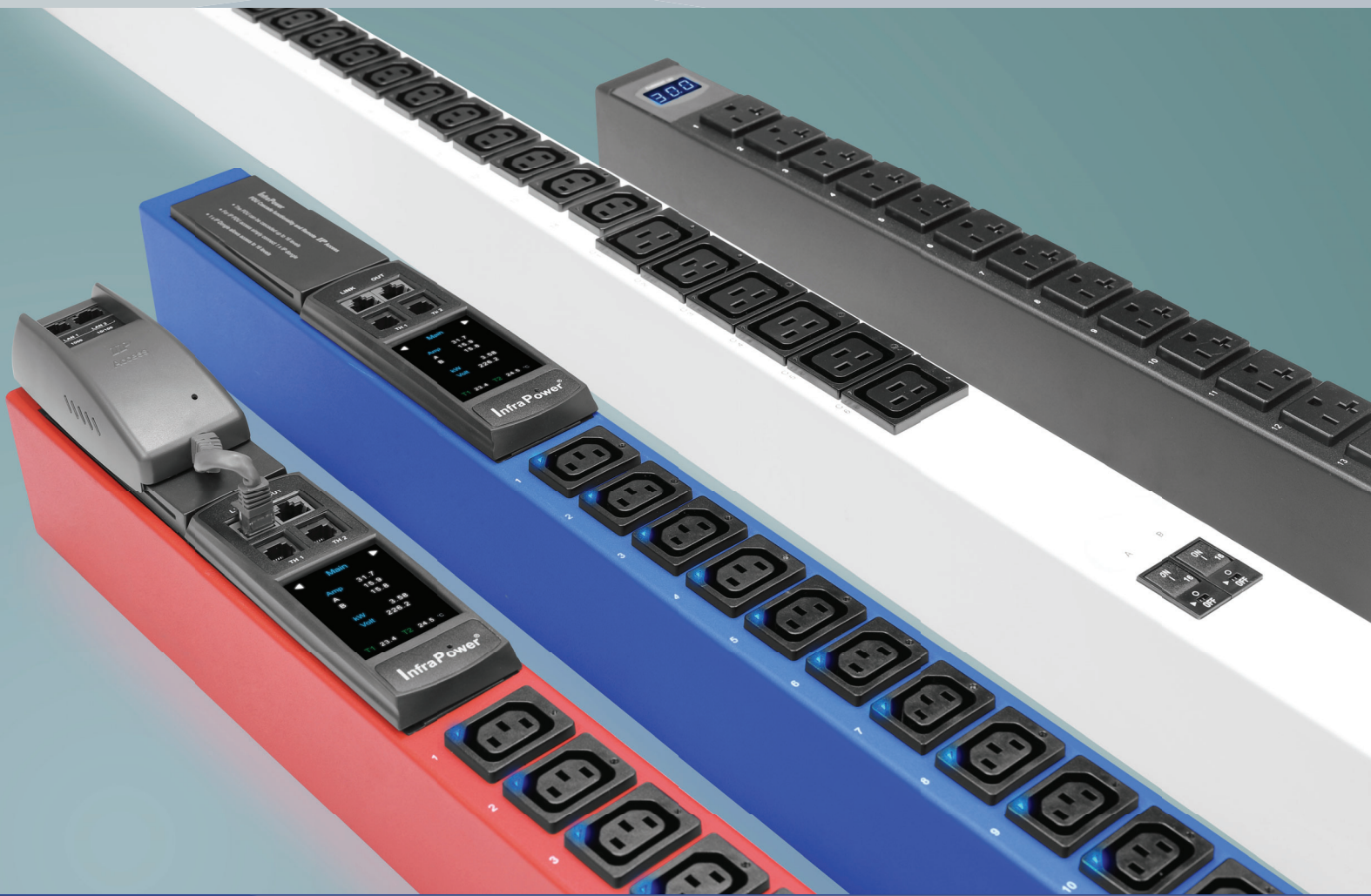**IEC / NEMA Rack PDU**

1-Phase 230V / 208V / 110V
3-Phase 400V / 208V

AUSTIN
HUGHES

Knowledge is Power.

Fit for Purpose

Rack Power Management, like many areas of Information Technology Infrastructure has evolved in recent years and the options available today enable better usability, energy efficiency and capacity planning.

The rack mounted hardware, application and incoming power would have a bearing on the Intelligent rack mounted PDU technology levels – whether monitored, metered and outlet switched, or outlet switched with outlet metering.

Austin Hughes offers InfraPower cutting-edge rack power solutions for your IT environment, including a comprehensive range of single phase & three phase power distribution units.

InfraPower®

Austin Hughes produces affordable, quality InfraPower PDU while providing you with superior service. Whether it is enhancing customer care or implementing new technologies, Austin Hughes promotes innovation, quality and satisfaction in all aspects of business.

InfraPower IEC / NEMA PDU series	Basic	Metered		Monitored		Switched	
		MD	MK	W	Wi	WS	WSi
1-Phase : 230V / 208V / 110V	✔	✔	✔	✔	✔	✔	✔
3-Phase : 400V / 208V	✔		✔	✔	✔	✔	✔
Outlet Level Measurement Over IP					✔		✔
Outlet ON / OFF Switching Over IP						✔	✔
Latching Relay						✔	✔
Field Replaceable DC Module			✔	✔	✔	✔	✔
Circuit / Phase Amp & kWh Measurement			✔	✔	✔	✔	✔
Hot-Swappable Meter			✔	✔	✔	✔	✔
Billing Grade Meter Accuracy Within +/- 1%			✔	✔	✔	✔	✔
1.8" Color LCD Meter			✔				
2.8" Color Touch LCD Meter				✔	✔	✔	✔
32 Daisy Chained PDUs Supported on 1 IP				✔	✔	✔	✔
Free Management Software				✔	✔	✔	✔
DCIM Support : SNMP V2/V3 & REST API				✔	✔	✔	✔
Phase Balance % for 3-Phase PDUs				✔	✔	✔	✔
Temp., Humidity, Smoke & Door Sensors				✔	✔	✔	✔
RCM (Residual Current Monitoring Module)				✔	✔	✔	✔
Door Mount PDU Panel w/ 4.3" Color LCD				✔	✔	✔	✔
WiFi Kit (Supports Max. 32 Daisy Chained PDUs)				✔	✔	✔	✔
3-digit RMS Current Meter		✔					
Ammeter Accuracy ± (3% of the reading + 5 last digits)		✔					
Resettable Fuse / Hydraulic MCB	✔	✔	✔	✔	✔	✔	✔
ELCR / Surge Protector / EMI Filter	✔	✔	✔	✔	✔	✔	✔
Tool-less Mounting for Vertical PDU	✔	✔	✔	✔	✔	✔	✔
0U / 1U / 2U Form Factors	✔	✔	✔	✔	✔	✔	✔
Operating Temperature -5 to 60°C	✔	✔	✔	✔	✔	✔	✔
Outlet : NEMA / C13 / C19 / Lockable IEC / Fused IEC	✔	✔	✔	✔	✔	✔	✔
Custom PDUs on Request	✔	✔	✔	✔	✔	✔	✔

CE FC c(UL)us TUV SUD
RoHS3 COMPLIANCE REACH

InfraPower® intelligent PDUs are supplied with a sophisticated meter with 2.8" color LCD display and touchscreen functionality. The W meter provides not only local metering, but also daisy chain connection ports to connect up to 32 PDUs and 2 optional external sensors.
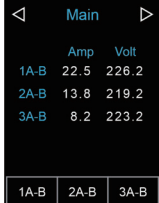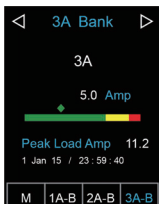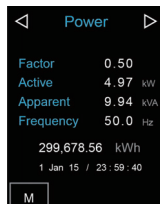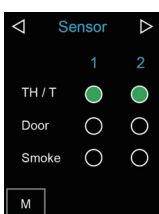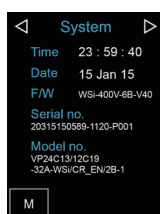
Cascade port
Up to 32 PDU Level

Sensor port x 2
- Door Mounted PDU Panel
- Temperature & Humidity Sensor
- Temperature Sensor
- Smoke Sensor
- Door Sensor

2.8" color LCD
with Touchscreen

Reset button
To re-power the meter if necessary but won't cause any change on settings and memories

Meter Reading & Setting

◁	Main	▷
	Amp	Volt
1A-B	22.5	226.2
2A-B	13.8	219.2
3A-B	8.2	223.2
1A-B	2A-B	3A-B

◁	PDU Level	▷
Group :		050
Level :		32
M		

◁	3A Bank	▷
	3A	
	5.0 Amp	
Peak Load Amp		11.2
1 Jan 15 / 23 : 59 : 40		
M	1A-B 2A-B	3A-B

◁	Power	▷
Factor	0.50	
Active	4.97	kW
Apparent	9.94	kVA
Frequency	50.0	Hz
299,678.56		kWh
1 Jan 15 / 23 : 59 : 40		
M		

◁	Sensor	▷
	1	2
TH / T	●	●
Door	○	○
Smoke	○	○
M		

◁	System	▷
Time	23 : 59 : 40	
Date	15 Jan 15	
F/W	WSi-400V-6B-V40	
Serial no.	20315150589-1120-P001	
Model no.	VP24C13/12C19 -32A-WSi/CR_EN/2B-1	
M		

▶ **Billing Grade Meter Accuracy Within +/- 1%**

The sharp and highly visible display of color LCD provides local data of:
> Energy Consumption (kWh)
> Power (KW)
> Power Factor
> Current (Amp)
> Voltage (V)
> Temperature & Humidity

The power data has a billing grade meter accuracy to within +/- 1%.
Outlet level measurement available for WSi & Wi models.
Phase balance % available for 3-Phase models.

± 1%

▶ **Field Replaceable Meter**

A field replaceable RMS meter with 2.8" color LCD display with touchscreen functionality. The hot swappable design helps eliminate maintenance downtime by simply replacing a possible defective meter without a service interruption.

▶ **Field Replaceable DC Module**

Given the mission critical nature of the environment the intelligent rack PDU is designed, built and manufactured to provide extremely high levels of resiliency. In addition to the hot swappable digital local touchscreen display, field replaceable DC power modules are used within the intelligent PDU models to avoid unnecessary downtime.
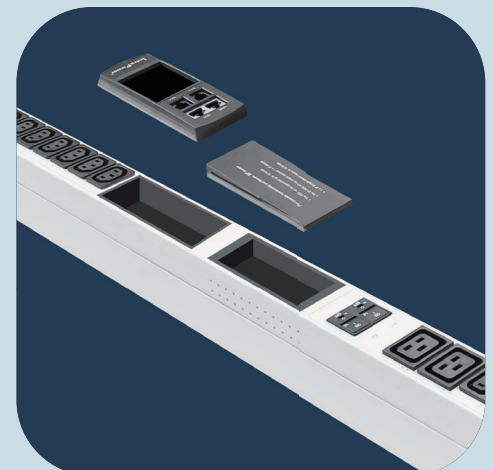
With any rack mount device or in-cabinet PDU, one of the largest challenges is to integrate the device into the data centre environment without building up additional connectivity, cable run, patch panel, or network related costs.

Patented PDU IP Dongle provides IP remote access to the PDUs by a true network IP address chain. Only one PDU IP Dongle allows access to all PDUs in a single daisy chain – which is a highly efficient application for saving not only the IP remote accessories cost, but also the true IP addresses required on the PDU management.

Hot-Pluggable design facilitates the IP Dongle installation. Simply integrate the PDU IP Dongle to the first PDU, then the entire daisy chain group can be remote over IP. Two RJ-45 connection ports are provided by an IP Dongle. Up to 32 PDU can be cascaded, subject to the dongle model.

The new stylish Dual Lan PDU IP Dongle provides standard 10/100 & Gigabit Ethernet ports. The PDUs in daisy chain can be accessed via two separate networks and hence the PDU connection can be secured by dual LAN network.

For enterprise software management, Dual LAN PDU IP Dongle supports DCIM integration via **SNMP V2 / V3** or **REST API**.
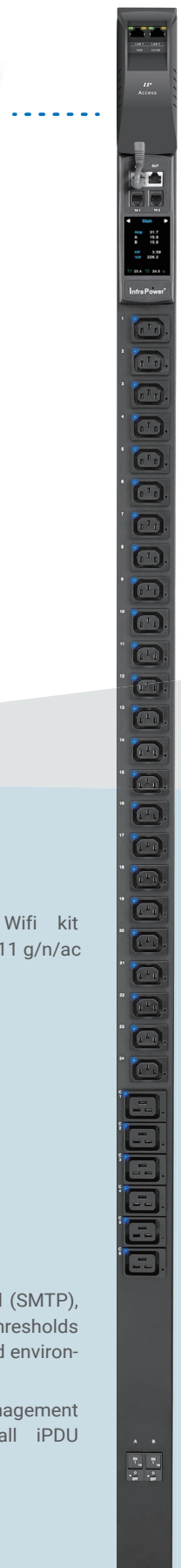
US & Worldwide Patents

IPD-H03-S
Dual LAN IP Dongle - Horizontal
- For 1U iPDU
- Up to 32 levels in daisy chain

IPD-03-S
Dual LAN IP Dongle - Vertical
- For 0U / 2U iPDU
- Up to 32 levels in daisy chain

Dual LAN Network Failover
> Auto failover to a 2nd Ethernet-connection in the event of network interruption
> Ensuring 100% iPDU uptime reporting

Connectivity
> Access your iPDU on two independent networks or VLANs
> Auto-negotiable 10/100 BaseT Ethernet & 1000 BaseT Gigabit Ethernet ports
> Redundant network access to the connected iPDUs via IP

USB Wifi Port
> Optionally connect via a Wifi kit (IPD-WIFI) complying with 802.11 g/n/ac

Remote Management
> Significantly reduce the number of Ethernet ports used in deployment by cascading a single network connection across multiple iPDUs (up to 32)
> Simultaneous access via free management software IPM-04, web GUI & SNMP V2 / V3 or REST API
> Remote level & ID setting for cascaded iPDU's
> Protocols : HTTP(S); SSH Command Line Interface; Telnet; SMTP; IPv6/IPv4

Enterprise Level IP Authentication
> Active Directory (AD), Lightweight Directory Access Protocol (LDAPv3 / LDAPS), Remote Access Dial-In User Service (RADIUS) protocol, or local credential database.
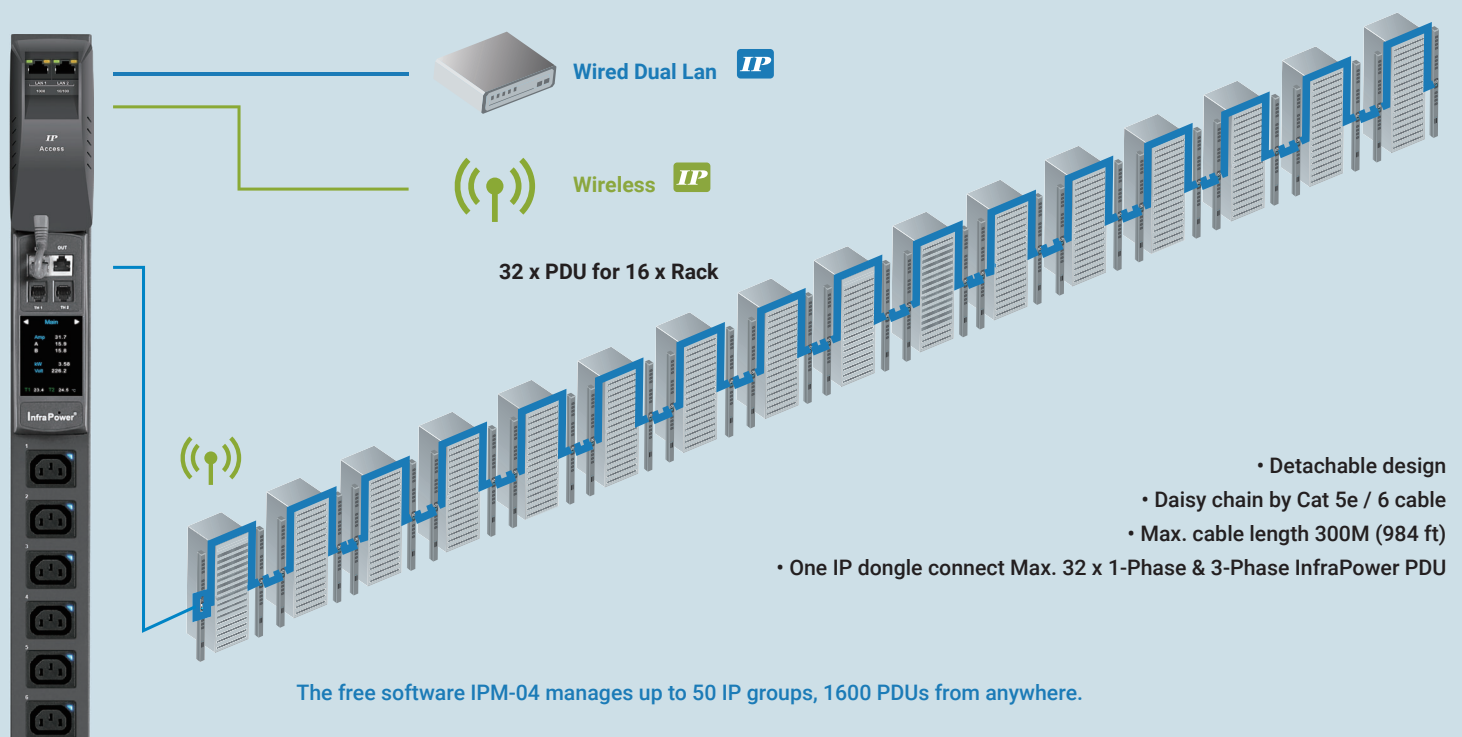> Strong passwords and granular user/ user group permissions.

Alerts / Alarms
> Receive alerts via SNMP, email (SMTP), and syslog when predefined thresholds are exceeded for both iPDU and environmental sensor events.
> Common SNMP MIBs (Management Information Base) across all iPDU families

InfraPower® rack intelligent PDUs provide connection ports for PDU daisy chain. To daisy chain units, each PDU can simply be connected in series to the next by Cat5/6 cables. With the Dual Lan PDU IP Dongle (IPD-03-S), up to 32 daisy chain levels can be achieved. Single & Three Phase PDUs can be inter-cascaded in a single daisy chain.

▶ High Efficiency PDU Remote Management

Patented PDU IP Dongle provides IP remote access to the PDUs by a true network IP address chain. Only one network IP is required for maximum 32 PDUs in a single daisy chain. The free but comprehensive IPM-04 supports up to 50 IP groups. Hence, max 1600 PDUs can be remotely managed from anywhere.

Wired Dual Lan **IP**

Wireless **IP**

32 x PDU for 16 x Rack

• Detachable design
• Daisy chain by Cat 5e / 6 cable
• Max. cable length 300M (984 ft)
• One IP dongle connect Max. 32 x 1-Phase & 3-Phase InfraPower PDU

The free software IPM-04 manages up to 50 IP groups, 1600 PDUs from anywhere.

Remote Management Over IP

PDU remote management helps reducing manpower and hence improving uptime and productivity. It also benefits users with capacity planning and increasing the overall efficiency of the data center. InfraPower intelligent PDU offers 3 kinds of remote management solutions for users' selection.

InfraPower® IPM-04
Free Download

InfraPower® GUI
Built-in

3rd Party DCIM
via SNMP / API

Free Management Software IPM-04

InfraPower Manager IPM-04 is the free, powerful and user friendly PDU management software provided with W Series PDUs. The Administrator can remotely manage the PDUs and the temperature / humidity sensors via the web browser. The Windows based software consolidates management of max. 1600 single & three phase PDUs via 50 IP dongles. 5 concurrent user access licences are part of the IPM-04 bundle, for achieving the demand of multi-user requirements in data center operations. IPM-04 provides complete PDU monitoring / control and reporting functions for your data center.

Web-based GUI

A web-based GUI is integrated with our intelligent PDU. It is ideal for some users who simply require the power monitoring and input switching over IP.

3rd Party DCIM via SNMP V2/V3 or REST API

Nowadays, many data centers apply the DCIM (Data Center Infrastructure Management) in order to centralize the management for monitoring power, cooling and environmental factors across facilities and IT systems. InfraPower intelligent PDU supports SNMP V2/V3 or REST API integration and hence user can remotely manage the PDU via their DCIM.

IPM-04 Managment Software		
Capacity	IP Dongle Group (Just 1 for 32 PDU levels)	50
	PDU Number	1600
	Concurrent Users	5
Features	Outlet Level kWh & Amp Measurement	✔
	Circuit Level kWh & Amp Monitoring	✔
	Apparent Power (kVA) Monitoring	✔
	Power Factor Measurement	✔
	Circuit Breaker (MCB) Monitoring	✔
	Temp-Humid Monitoring	✔
	Individual Outlet Switch ON / OFF	✔
	Outlet Scheduling	✔
	Alarm Threshold Setting	✔
	Rising Alert Threshold	✔
	Remote Access via Web	✔
	Graphic User Interface	✔
	Reporting	✔
PDU Series Support	1-Phase / 3-Phase W - Monitored PDU	✔
	1-Phase / 3-Phase Wi - Monitored PDU (Outlet Measurement)	✔
	1-Phase / 3-Phase WS - Switched PDU	✔
	1-Phase / 3-Phase WSi - Switched PDU (Outlet Measurement)	✔

PDU Monitoring

Temp. & Humid. Monitoring

Reporting

▶ Outlet ON/OFF Switching & Latching Relay

Outlet LEDs are built-in for WS & WSi PDU models with outlet switching functionality. Outlet switching is controlled via latching relays. Ensuring an 'always on' operational performance and outlet status returning to a pre-power outage after a planned or unplanned shutdown. Power consumption during normal/ standard operation is low and therefore assists to reduce energy usage of the overall PDU.
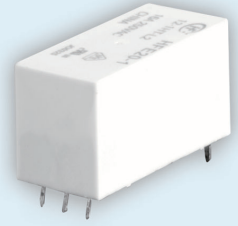
▶ Multiple Outlet Configurations

> US NEMA + IEC outlet configurations per each individual PDU
> Flexibility on variety of power connection to different devices
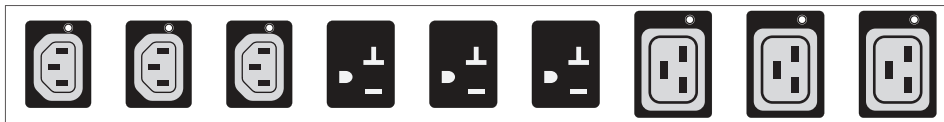
▶ Fused IEC Outlet

> IEC C13 / C19 individually fused outlets available on request
> Prevent overload of the active equipment and avoid short circuiting of the entire PDU.
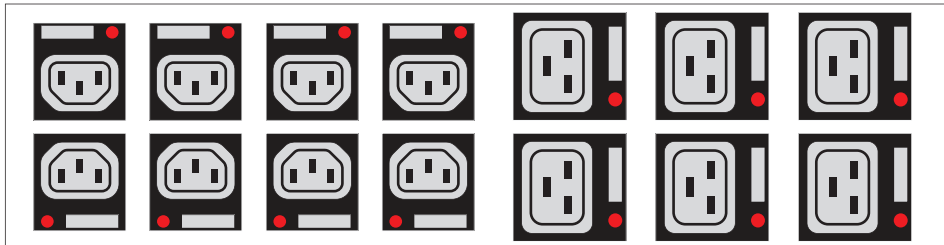
▶ Lockable IEC Outlet

• Lockable IEC outlet PDU models are available to secure plugs and prevent accidental disconnection
• Supports standard or switched outlets
• Compatible with InfraPower lockable IEC power cords for outlet locking features

C13

Switched Outlet
Build in LED

Regular Outlet
No LED

Easy Locking
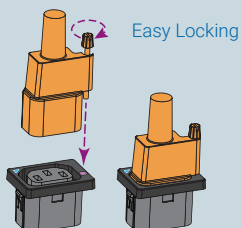
C19

Switched Outlet
Build in LED

Regular Outlet
No LED

Easy Locking

A **B**
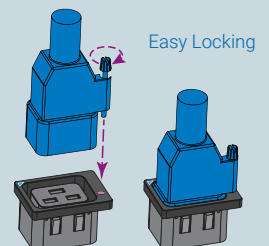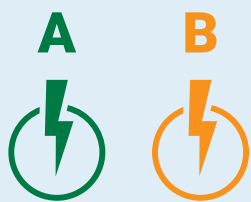
▶ Colored PDU Power Feed Differentiation

The use of colors at rack PDU and cord levels has become a huge market trend with most orgainzations favouring different colors in the rack for the A & B primary and redundant feeds into equipment. Colored PDU chassis & power cords are available to achieve such power source visualization & cable management requirement.

▶ Colored PDU Chassis

Colored PDU chassis allow easy identification of power paths and simplifies management of power sources.
Standard color : Black
Optional color : White, Red, Blue, Green, Orange, Yellow, Purple

1	2	3	4	5	6	7	8

▶ Colored Lockable IEC Power Cord

• Connect to InfraPower lockable IEC outlets to secure plugs and prevent accidental disconnection
• Selection: Black / Grey / Red / Blue / Orange / Green

C13 - C14 (0.75 mm²):
0.5M / 1M / 2M

C19 - C20 (1.5 mm²):
1M / 2M
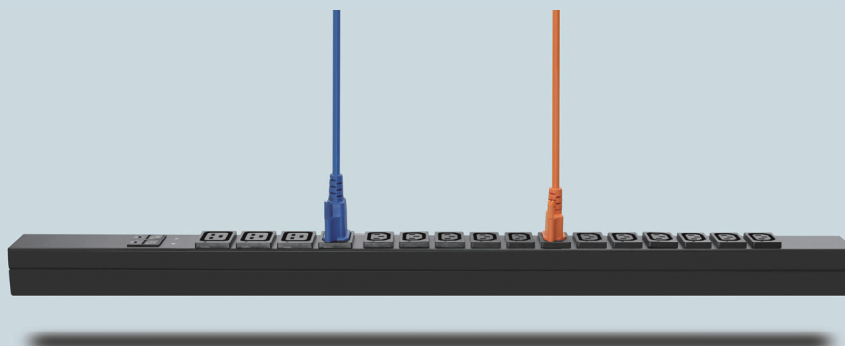
W series PDU meter comes with a pair of connection ports for sensors & peripherals. It provides a simple and affordable solution for customers to monitoring the environmental status of racks. Dual LAN PDU dongle supports optional WiFi kit with standards 802.11 g/n/ac. It meet the wireless network requirements and reduce capital expenditure cost as well as Ethernet installation & maintenance.

IP-ED-01
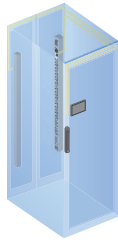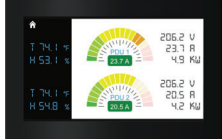
4.3" Door Mount Display Panel

- Connect to iPDU meter TH2 port
- 1 smart display panel support 2 iPDUs (1-Phase & 3-Phase)
- Displays power, temp., humid., smoke or door status
- Alarm & log
- Viewable while doors in closed position
- Resistive touchscreen

- Resolution 480 x 272
- Horizontal or vertical display option
- Easily affix to doors by magnetic rear
- No cut-out / damage required to doors
- Upgrade racks to smart and stylish look
- Plug & Play

IPD-WIFI

WiFi Kit

- Connect to IPD-03-S IP Dongle
- 802.11 g/n/ac WiFi
- Low-profile design wireless athena
- Magnetic base design for tool-less affix
- 1M cord w/ USB port

IG-TH01-2M/4M

IG-T01-2M/4M

Temperature & Humidity Sensor
Temperature Sensor

- Plug & play
- External sensor with 2M or 4M cord
- Low profile design with magnetic base for easy affixing to the rack

IP-S01-1M/3M

Smoke Sensor

- Smoke Sensor w/ 1M or 3M cord
- When smoke alarm triggers, sensor red LED lights on with beep sound continuously

IP-DSW-2M/4M

Door Sensor

- Mechanical door sensor w/ 2M or 4M cord
- Cost efficient integration into rack

The operating parameters for PDUs should take into account temperature rise within the rack due to the exhaust air from server/ network equipment. InfraPower PDU supports operation temperature -5 to 60°C for reliable operation in high density rackmount equipment environment. A range of safety devices are offered not only to protect the equipment from overcurrent but also the users from harm when working on racks.

-RCM

Residual Current Monitor
• Residual current monitoring
• Alerts users to current leaking from IT devices
• Reduces the danger for both the user and IT system

-ELCB

Earth-leakage Circuit Breaker
• Earth-leakage circuit breaker
• Safety component with high Earth impedance to prevent shock
• Interrupting the circuit if a dangerous voltage is detected

-CR

Magnetic Circuit Breaker (MCB)
• Hydraulic magnetic circuit breaker
• Overload switch
• Designed to prevent accidental on / off operation
• Safety Regulatory : UL / cUL / TUV / CE

-F

Resettable Fuse
• Protected load segments for increased reliability
• Overload reset buttons
• Safety Regulatory :
  UL / cUL / CSA / TUV / CCC / VDE

-SPT

Surge Protector
• Enhances the device protection
• Grounds unwanted voltages above the safe threshold
• Surge suppression: 2,700 Joules
• Max surge current: 75,000 Amps
• Max voltage: 6,000 Volts
• Response Time: 1 nanosecond

-EMI
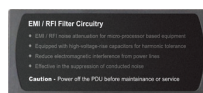
EMI Filter
• Maintains power stability
• Suppresses conducted interference on a signal/power line
• Line frequency : 50 / 60 Hz
• Attenuation : Up to 50 dB

|← 54mm →| |← 2.1inch →|

CURRENT (A)
32.0

CURRENT (A)
30.0
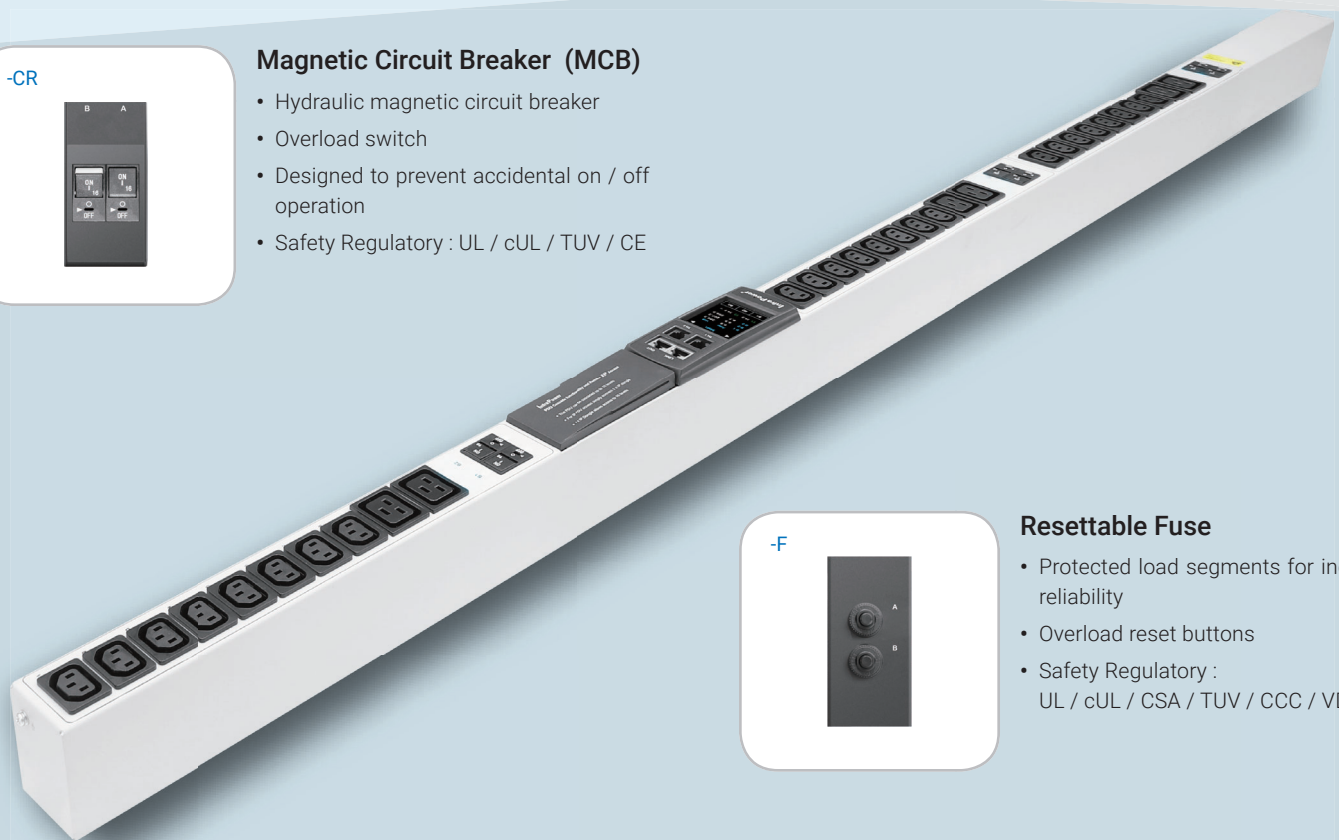
▶ Vertical 0U - Slim Design

For efficient mounting to rack, InfraPower vertical IEC / NEMA PDU steel chassis is designed in 54mm (2.1 inch) slim profile.

For some global brand of IT racks, such slim casing design allows dual PDU mounting to one side in the rack for one side power cabling orientation.

▶ Bottom/ Top Power Feed

When selecting a rack PDU, we always need to consider the power input feed route through the rack enclosure.

In some data centers, the power feed is positioned at the top, hence Top Feed PDU is preferred in order to facilitate the power cabling.

Austin Hughes designs the 0U PDU chassis with power feed position flexibility. Customer can select bottom feed or top feed when ordering. By Built-To-Order, Austin Hughes simply assembe the PDU according to your request.

B O T T O M   F E E D

T O P   F E E D

24.0

▶ Vertical 0U or Horizontal 1U/ 2U

Typical PDUs can be mounted either vertically (0U) or horizontally (1U-2U) inside the rack. Most PDU manufacturers focus on 0U PDUs, whilst the choices are limited for 1U / 2U rackmount PDUs. Austin Hughes offers a wide range of InfraPower rackmount PDU in order to meet the market needs.

▶ Vertical Button Mounting Kit

Quick and tool-less integration. Designed for global branded racks with key hole type mounting holes.
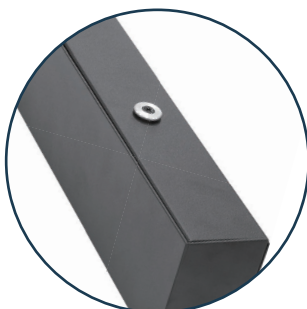
▶ Vertical Bracket Mounting Kit

Universal mounting kit supports all IT rack models.
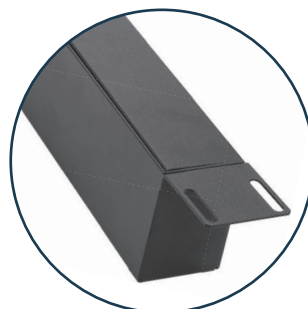
▶ Horizontal Rackmount Kit

Design for 19" Rackmount.

3 Phase MK Metered PDU

MK Meter

Infra Power®

Main		
Ph	Amp	Volt
1A	4.3	207
1B	6.0	
2A	5.5	206
2B	7.1	
3A	3.6	205
3B	13.2	
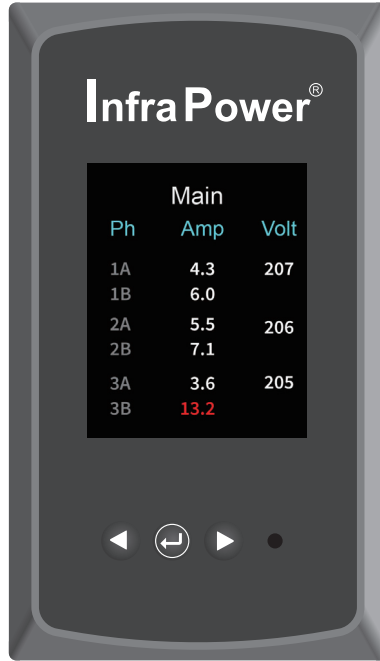
Hot-Swappable Meter

1.8" Color LCD Display
- 3 Phase Local Metering
- Circuit / Phase Amp, Volt & kWh
- Billing Grade Meter Accuracy Within +/- 1%

Display Selction Buttons

* 1-Phase MK meter available on request

Meter Reading & Setting

PDU Power		
Ph	Volt	Bal%
1AB	207.0	100.4
2AB	206.0	100.0
3AB	205.0	99.6
Energy	69,137.2 kWh	

3AB	
Active	3.37 kW
Apparent	3.44 kVA
Factor	0.98
Frequency	60.0 Hz
Energy	29,566.0 kWh

Setup
Buzzer
Alarm
Screen
Reset
Exit

Alarm	
1A	11 Amp
1B	11 Amp
2A	11 Amp
2B	11 Amp
3A	11 Amp
3B	11 Amp
Exit	

1 Phase MD Metered PDU

1 Phase / 3 Phase Basic PDU

CURRENT (A)

16.0
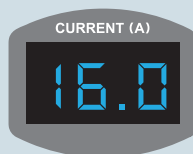
MD Meter

- 1 Phase local metering
- 3-digit ture RMS ammeter
- Circuit Amp measurement
- Accuracy :
  ± (3% of the reading + 5 last digits)
- Blue light LED
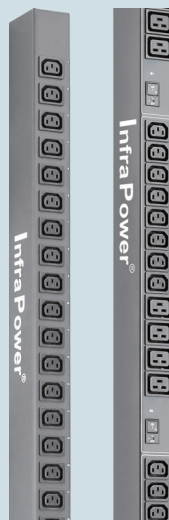
Basic

- Cost efficient and reliable rack power
- Multiple outlet configurations available
- Colored PDU casings and cord options
- Horizontal or Vertical form factors
- Basic PDUs available in Single Phase or Three Phase

1 Phase 230V   16A / 20A / 32A
208V   20A / 30A

1 inch = 25.4mm

Outlet nos C13	C19	Vertical PDU Dimension (mm) Basic	MD	W	Wi	WS	WSi
36	6	54 x 70 x 1650	54 x 80 x 1725 / 85 x 80 x 1650				
30	6	54 x 70 x 1650	54 x 80 x 1775				
28	6	54 x 70 x 1650	54 x 80 x 1775				
28	4	54 x 70 x 1650	54 x 80 x 1775				
24	6	54 x 70 x 1300	54 x 80 x 1650				
24	4	54 x 70 x 1300	54 x 80 x 1650				
21	3	54 x 70 x 1100	54 x 80 x 1350				
20	6	54 x 70 x 1300	54 x 80 x 1650				
20	4	54 x 70 x 1100	54 x 80 x 1350				
20	2	54 x 70 x 1100	54 x 80 x 1350				
16	4	54 x 70 x 900	54 x 80 x 1200				
16	2	54 x 70 x 900	54 x 80 x 1200				
12	12	54 x 70 x 1100	54 x 80 x 1350				
12	4	54 x 70 x 800	54 x 80 x 1100				
12	2	54 x 70 x 800	54 x 80 x 1100				
8	4	54 x 70 x 600	54 x 80 x 1100				
8	2	54 x 70 x 600	54 x 80 x 1100				
36		54 x 70 x 1650	54 x 80 x 1725 / 85 x 80 x 1650				
32		54 x 70 x 1300	54 x 80 x 1650				
28		54 x 70 x 1300	54 x 80 x 1650				
24		54 x 70 x 1100	54 x 80 x 1350				
20		54 x 70 x 1100	54 x 80 x 1350				
16		54 x 70 x 900	54 x 80 x 1200				
12		54 x 70 x 800	54 x 80 x 1100				
8		54 x 70 x 600	54 x 80 x 1100				

Outlet nos C13	C19	Rackmount PDU Dimension (mm) Basic	MD	W	Wi	WS	WSi
20	4	2U 120D	2U 350D				
16	4	2U 120D	2U 350D				
12	4	2U 120D	2U 350D				
28	4	1U 120D	1U 180D / 1U 270D				
8	2	1U 120D	1U 180D / 1U 270D				
6	4	1U 120D	1U 180D / 1U 270D				
6	2	1U 120D	1U 180D / 1U 270D				
24		2U 120D	2U 350D				
20		2U 120D	2U 350D				
16		2U 120D	2U 350D				
12		1U 120D	1U 180D / 1U 270D				
10		1U 120D	1U 180D / 1U 270D				
8		1U 120D	1U 180D / 1U 270D				
6		1U 120D	1U 180D / 1U 270D				
	2	2U 120D	2U 350D				
	4	2U 120D	2U 350D				
	2	1U 120D	1U 180D / 1U 270D				
	4	1U 120D	1U 180D / 1U 270D				
	2	1U 120D	1U 180D / 1U 270D				

* cUL & TUV available for selective configurations

TUV SÜD   cUL   FC   CE   REACH   RoHS3 COMPLIANCE

1 Phase 110V   15A / 20A / 30A

Outlet nos US NEMA	Vertical PDU Dimension (mm) Basic	MD	W	Wi	WS	WSi
36	54 x 70 x 1650	54 x 80 x 1725 / 85 x 80 x 1650				
32	54 x 70 x 1300	54 x 80 x 1650				
28	54 x 70 x 1300	54 x 80 x 1650				
24	54 x 70 x 1100	54 x 80 x 1350				
20	54 x 70 x 1100	54 x 80 x 1350				
16	54 x 70 x 900	54 x 80 x 1200				
12	54 x 70 x 800	54 x 80 x 1100				
8	54 x 70 x 600	54 x 80 x 1100				

Outlet nos US NEMA	Rackmount PDU Dimension (mm) Basic	MD	W	Wi	WS	WSi
24	2U 120D	2U 350D				
20	2U 120D	2U 350D				
16	2U 120D	2U 350D				
12	1U 120D	1U 180D				
10	1U 120D	1U 180D / 1U 270D				
8	1U 120D	1U 180D / 1U 270D				
6	1U 120D	1U 180D / 1U 270D				

PDU drawings available for download :
www.austin-hughes.com/resources/rack-pdu-selector

Custom configurations available on request

Inlet (1-PH 230V)	Amp	Cordset mm²	length
60309	32A	4	3 M
Open end	20A	2.5	3 M
60309 / C20	16A	1.5	3 M
C14	10A	1.5	3 M

Inlet (1-PH 208V)	Amp	Cordset AWG	length
L6-30P	30A	10	10 FT
L6-20P	20A	12	10 FT

Inlet (1-PH 110V)	Amp	Cordset AWG	length
L5-30P / 5-30P	30A	10	10 FT
L5-20P / 5-20P	20A	12	10 FT
5-15P	15A	14	10 FT

* The company reserves the right to modify product configuration & chassis dimension without prior notice.

3 Phase 400V 16A / 32A / 63A
208V 20A / 30A

Outlet nos		Vertical PDU Dimension (mm)					
C13	C19	Basic	MK	W	Wi	WS	WSi
36	12	54 x 70 x 1650		85 x 90 x 1850			
36	6	54 x 70 x 1650		54 x 80 x 1725 / 85 x 90 x 1850			
30	12	54 x 70 x 1650		85 x 90 x 1850			
30	6	54 x 70 x 1650		54 x 80 x 1850			
24	12	54 x 70 x 1300		54 x 80 x 1850			
24	6	54 x 70 x 1300		54 x 80 x 1725 / 54 x 80 x 1775			
21	3	54 x 70 x 1100		54 x 80 x 1700			
18	6	54 x 70 x 1300		54 x 80 x 1700			
12	12	54 x 70 x 1100		54 x 80 x 1700			
12	6	54 x 70 x 1100		54 x 80 x 1700			
48		54 x 70 x 900		85 x 90 x 1850			
42		54 x 70 x 900		85 x 90 x 1850			
36		54 x 70 x 1100		85 x 90 x 1850			
30		54 x 70 x 800		54 x 80 x 1775			
24		54 x 70 x 800		54 x 80 x 1700			
18		54 x 70 x 600		54 x 80 x 1700			
	24	54 x 70 x 600		54 x 80 x 1700			
	18	54 x 70 x 1650		54 x 80 x 1700			
	12	54 x 70 x 1300		54 x 80 x 1700			

3 Phase 400V 16A / 32A
208V 20A / 30A

1 inch = 25.4mm

Outlet nos		Rackmount PDU Dimension (mm)					
C13	C19	Basic	MK	W	Wi	WS	WSi
21	3	2U 270D					
18	6	2U 270D		2U 380D			
12	6			2U 380D			
6	3	1U 270D		1U 380D			
24		2U 270D		2U 380D			
18		2U 270D		2U 380D			
12		1U 270D		1U 380D			
	18	2U 270D					
	12			2U 380D			
	9	1U 270D					
	6			1U 380D			

3 Phase 208V 50A / 60A

Outlet nos		Vertical PDU Dimension (mm)					
C13	C19	Basic	MK	W	Wi	WS	WSi
36	12			85 x 90 x 1850			
36	6			85 x 90 x 1850			
30	12			85 x 90 x 1850			
30	6	60 x 70 x 1875		85 x 90 x 1850			
24	12	60 x 70 x 1875		85 x 90 x 1850			
24	6	60 x 70 x 1875		60 x 90 x 1875 / 85 x 90 x 1850			
21	3	60 x 70 x 1875		60 x 90 x 1875			
18	6	60 x 70 x 1875		60 x 90 x 1875			
12	12	60 x 70 x 1875		60 x 90 x 1875			
12	6	60 x 70 x 1875		60 x 90 x 1875			
48				85 x 90 x 1850			
42				85 x 90 x 1850			
36		60 x 70 x 1875		85 x 90 x 1850			
30		60 x 70 x 1875		85 x 90 x 1850			
24		60 x 70 x 1875		60 x 90 x 1875			
18		60 x 70 x 1875		60 x 90 x 1875			
	24	60 x 70 x 1875		60 x 90 x 1875			
	18	60 x 70 x 1875		60 x 90 x 1875			
	12	60 x 70 x 1875		60 x 90 x 1875			

* cUL & TUV available for selective configurations

Inlet (3-PH 400V)	Amp	Cordset	
		mm²	length
60309	63A	10	2 M
60309	32A	4	2 M
60309	16A	1.5	2 M

Inlet (3-PH 208V)	Amp	Cordset	
		AWG	length
60309	60A	6	6.6 FT
CS8365C	50A	6	6.6 FT
L15-30P / L21-30P	30A	10	6.6 FT
L15-20P / L21-20P	20A	12	6.6 FT

PDU drawings available for download :
www.austin-hughes.com/resources/rack-pdu-selector

Custom configurations available on request

* The company reserves the right to modify product configuration & chassis dimension without prior notice.

Dual Feed Rack PDUs

> Two PDUs in one single chassis
> Simplify dual PDU setup & save the valuable rack spaces
> Colored PDU layout distinguishes between primary & secondary power feeds
> Achieve one side orientation for power cabling
> Facilitate rack cabling and management efficiency
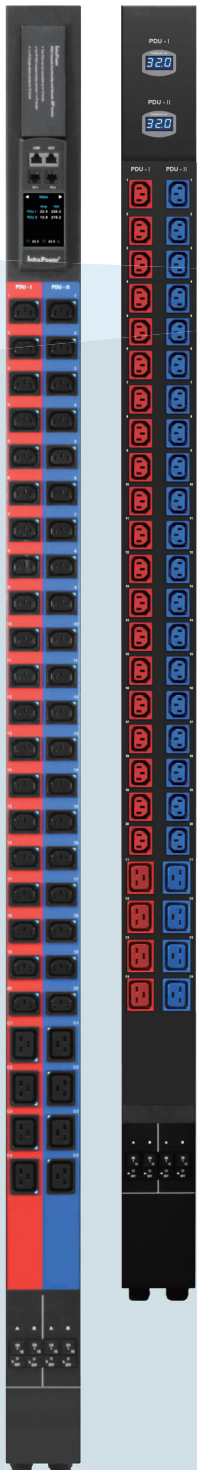
Two PDU's in One Chassis

Traditionally, data center racks are equipped with two PDUs positioned in the rear left and right side respectively.

InfraPower dual feed PDU is designed to house two PDUs in a single chassis which only requires one side installation.

Hence, this facilitates PDU setup and saves valuable rack space.

Red + Blue colored PDU layout enables differentiation of the primary and redundant (A&B) power feeds.
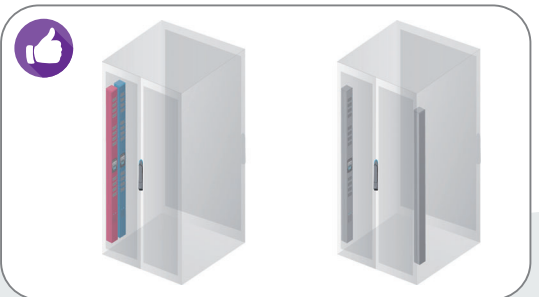
Save Network IP Cost

For intelligent PDU, Austin Hughes develops 1 Meter 2 PDUs solution.

The sophisticated LCD touchscreen meter is integrated in a single chassis but for both primary and secondary PDUs.

The meter not only allows local monitoring for 2 PDUs, but also supports up to 32 cascade levels.

By the patent IP dongle and dual PDU design, only one IP is required to access up to 64 PDUs in a single cascade group.
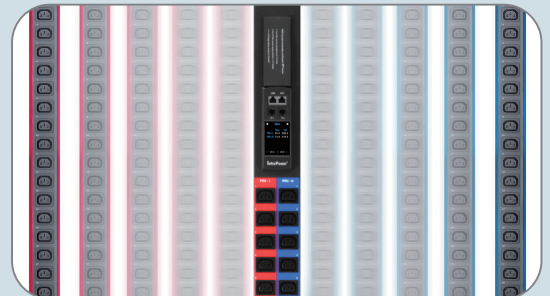
Facilitate Cable Management

Separating power and data cables inside a rack minimizes erratic data transfer as well as EMI and assists in distinguishing between power and data cabling.

By InfraPower Dual Feed PDU, power & data cable separation is easily achieved.

In addition, space-saving design and Red + Blue distinguishable layout contribute to a well-organized rack cabling.
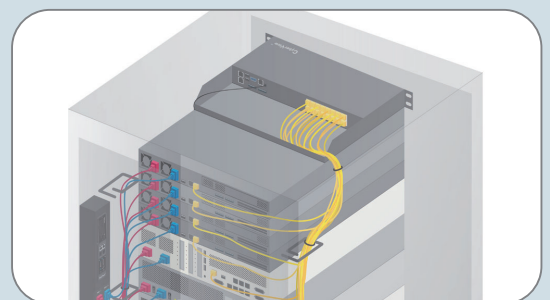
One Side Orientation for Power Cabling

Power and data cables should be kept apart in order to avoid interference. It is a typical practice to isolate power cabling to one side of the rack, whether it is for primary or secondary power connection. InfraPower Dual Feed PDU series offers an efficient, convenient & space saving solution - Primary & Secondary PDUs are integrated to one unit with dual power feed.

POWER

DATA

1 Phase

110V 15A / 20A / 30A
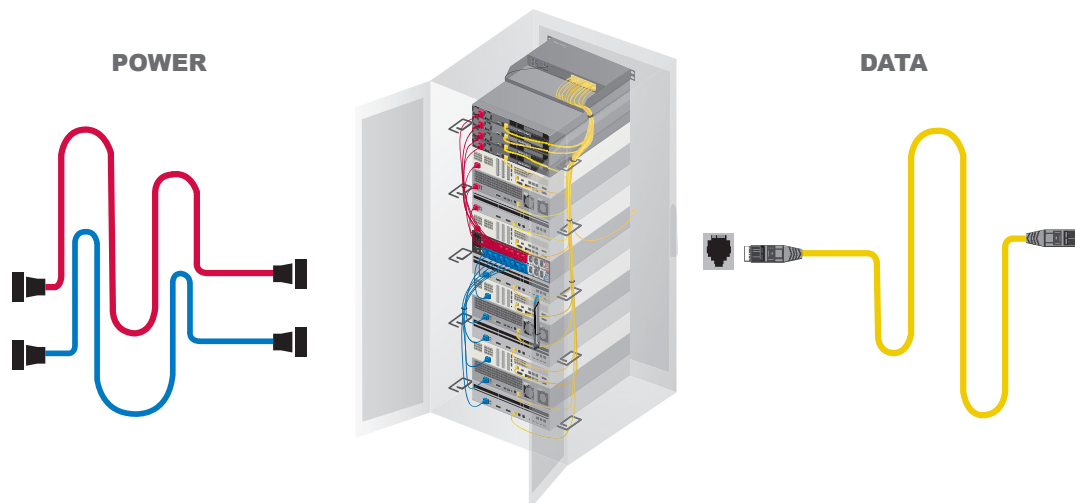
Outlet nos		PDU Chassis	
US NEMA		Vertical	Rackmount
24	x 2	✔	
20	x 2	✔	
16	x 2	✔	
12	x 2		✔
10	x 2		✔
8	x 2		✔

230V 16A / 20A / 32A   208V 20A / 30A

Outlet nos			PDU Chassis	
C13	C19		Vertical	Rackmount
20	4	x 2	✔	
18	6	x 2	✔	
16	4	x 2	✔	
8	2	x 2		✔
24		x 2	✔	
20		x 2	✔	
16		x 2	✔	
12		x 2		✔
10		x 2		✔
8		x 2		✔

3 Phase

400V 16A / 32A   208V 20A / 30A

Outlet nos			PDU Chassis	
C13	C19		Vetical	Rackmount
30	6	x 2	✔	
24	12	x 2	✔	
21	3	x 2	✔	
18	6	x 2	✔	
12	12	x 2	✔	
36		x 2	✔	
32		x 2	✔	
24		x 2	✔	

Inlet (1-PH 110V)

Inlet (1-PH 110V)	Amp	Cordset	
		AWG	length
L5-30P / 5-30P	30A	10	10 FT
L5-20P / 5-20P	20A	12	10 FT
5-15P	15A	14	10 FT

Inlet (1-PH 230V)

Inlet (1-PH 230V)	Amp	Cordset	
		mm²	length
60309	32A	4	3 M
Open end	20A	2.5	3 M
60309 / C20	16A	1.5	3 M

Inlet (1-PH 208V)

Inlet (1-PH 208V)	Amp	Cordset	
		AWG	length
L6-30P	30A	10	10 FT
L6-20P	20A	12	10 FT

Inlet (3-PH 400V)

Inlet (3-PH 400V)	Amp	Cordset	
		mm²	length
60309	63A	10	2 M
60309	32A	4	2 M
60309	16A	1.5	2 M

Inlet (3-PH 208V)

Inlet (3-PH 208V)	Amp	Cordset	
		AWG	length
60309	60A	6	6.6 FT
CS8365C	50A	6	6.6 FT
L15-30P / L21-30P	30A	10	6.6 FT
L15-20P / L21-20P	20A	12	6.6 FT

PDU drawings available for download :
www.austin-hughes.com/resources/rack-pdu-selector

Custom configurations available on request

cUL & TUV available for selective configurations

PDU Part Code = **0** **1** **2** **3a** **3b** / **4a** **4b** / **5a** **5b** - **6** - **7** / **8** _ **9** / **10** **11** - **12** - **13**

0	Single or Dual Feed		No Code Required for Single Feed PDU / D = Dual Feed PDU	
1	Chassis		V = Vertical 0U / H = Horizontal Rackmount 1U or 2U	
2	Power Phase		No Code Required if Single Phase / P = Three Phase	
3a	US NEMA Outlet	Qty	Refer to Configuration Tables (P.13/14 for Single Feed PDU ; P.16 for Dual Feed PDU)	No Code Required for Nothing
3b		Type	US = US NEMA	
4a	C13 Outlet (if any)	Qty	Refer to Configuration Tables (P.13/14 for Single Feed PDU ; P.16 for Dual Feed PDU)	No Code Required for Nothing
4b		Type	C13 = IEC C13	
5a	C19 Outlet (if any)	Qty	Refer to Configuration Tables (P.13/14 for Single Feed PDU ; P.16 for Dual Feed PDU)	No Code Required for Nothing
5b		Type	C19 = IEC C19	
6	Amp Rating		Single Phase 230V : 16A / 20A / 32A ; 208V : 20A / 30A ; 110V : 15A / 20A / 30A	
			Three Phase 400V : 16A / 32A ; 208V : 20A / 30A / 50A / 60A	
7	Model		Basic (No Code Required) / MD / MK / W / Wi / WS / WSi	
8	Safety Device		CR = MCB / F = Resettable Fuse / GF = Fused IEC / ELCB = Earth-leakage Circuit Breaker / No Code Required for Nothing	
9	Inlet		Single Phase : EN = 60309 / 6mmEN = 60309 with 6mm² cordset / OE = Open-end / C20 = C20 L630 = L6-30P / L620 = L-620P / L530 = L5-30P / 530 = 5-30P / L520 = L5-20P / 520 = 5-20P / 515 = 5-15P	
			Three Phase : EN = 60309 / CS8365C = CS8365C / L2130 = L21-30P / L2120 = L21-20P / L1530 = L15-30P / L1520 = L15-20P	
10	Cordset Length		3 = 3M (Standard for Single Phase PDU) / 2 = 2M (Standard for Three Phase PDU) / Custom Length on Request	
11	Power Feed Position		B = Bottom Feed (Standard) / T = Top Feed	
12	Color		Single Feed PDU : 1 = Black (Standard) / 2 = White / 3 = Red / 4 = Blue / 5 = Green / 6 = Orange / 7 = Yellow / 8 = Purple	
			Dual Feed PDU : 1 = Red Layout for PDU-I + Blue Layout for PDU-II (Standard)	
13	Extra Options		SPT = Surge Protector / EMI = EMI Filter / RCM = Residual Current Monitor / No Code Required for Nothing	

* Contact us for specific PDU configuration part code

Example 1:
Part Code : VP18C13/6C19-20A-WSi/CR_L2120/2B-1
Model : WSi iPDU with Circuit Monitoring + Outlet Monitoring + Outlet Switching
Configuration : Vertical, Three Phase, C13 x 18 + C19 x 6, 20A, MCB, NEMA L21-20P Inlet, 2M (6 FT) Cordset, Bottom Feed, Black Chassis

Example 2:
Part Code : DV40C13/8C19-32A-W/CR_OE/3T-1
Model : W iPDU with Circuit Monitoring
Configuration : Dual Feed, Vertical, Single Phase, (C13x20 + C19x4) x 2, 32A, MCB, Open-end, 3M (10 FT) Cordset, Top Feed,
        Standard Dual Feed PDU Chassis Colors (Red Layout for PDU-I + Blue Layout for PDU-II)

Example 3:
Part Code : H12US-30A-MD/CR_L530/3B-2
Model : MD Metered PDU
Configuration : Horizontal Rackmount, Single Phase, US NEMA x 12, 32A, MCB, L5-30 Inlet, 3M (10 FT) Cordset, White Chassis

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>> FHD - 55", 43", 32", 28", 23", 21", 17", 15" & 13"
>> FHD 144Hz - 27" & 17"
>> WUXGA - 24" & 16.2"
>> Regular - 20", W19", 19", 17", 15", 12" & 10"

MiniBoot
Web Power Reboot

>> C13 - Single / Dual Power Input
>> NEMA - Single / Dual Power Input
>> UK BS1363 - Single Power Input
>> German Schuko - Single Power Input
>> French - Single Power Input

AUSTIN HUGHES

Founded in 1995, Austin Hughes is a design and manufacturing group that offers a broad range of solutions based around 19 inch rack mount technology: the UltraRack IT server rack series, InfraRack intelligent rack solutions, InfraPower intelligent remote management power solutions, InfraCool intelligent remote cooling systems, InfraGuard environmental sensors and peripherals, InfraSolution remote locking and access control & CyberView LCD KVM switches. We also offer industrial & commercial IT products: UltraView professional displays & MiniBoot web power reboot.

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