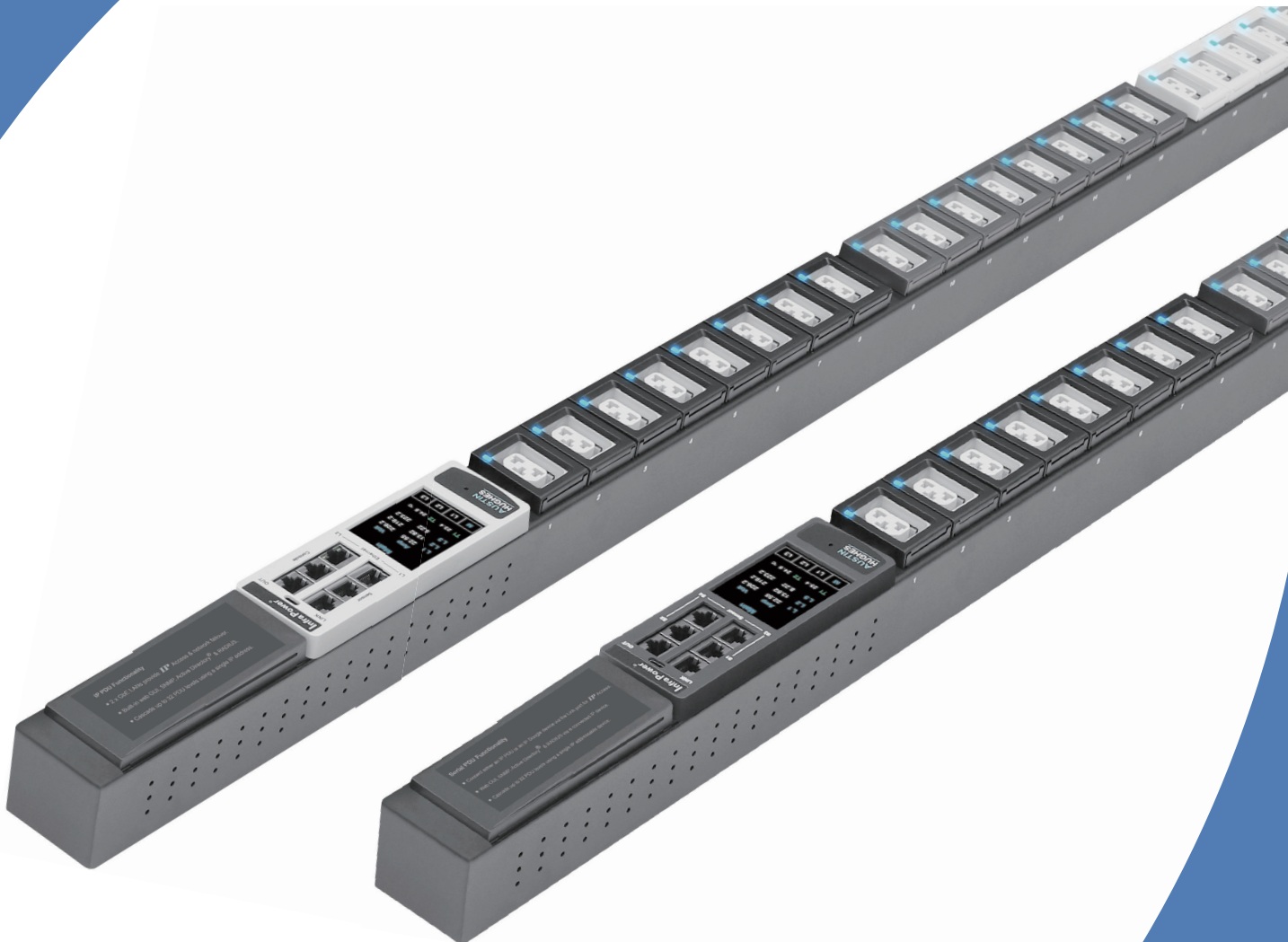


InfraPower[®]

2000 Series PDU

3-Phase 400V / 208V

1-Phase 230V / 208V / 110V



Slimmer. Smarter. Superior

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.

Austin Hughes has developed the new InfraPower 2000 series cutting-edge rack power solutions for your IT environment, including a comprehensive range of single-phase to three-phase power distribution units with a new design intelligent meter and lockable / combo IEC outlets.

**AUSTIN[®]
HUGHES**

CONNECTION - Secure Auto Lock.

- Patented IEC outlets with slide lock mechanism design by Austin Hughes
- L13 Slide-lock C13 outlets connectable & lockable to C14 plugs using generic IEC cables
- L19 Slide-lock C19 outlets connectable & lockable to C20 plugs using generic IEC cables
- X19 Slide-lock combo C13 / C19 outlet connectable & lockable to C14 / C20 plugs using generic IEC cables

REMOTE ACCESS - High Availability.

- Z IP PDU model with embedded dual Gigabit ethernet LAN IP for redundant network access via IP
- Enterprise-level IP authentication support e.g., Active Directory (AD), LDAPv3 / LADPS, RADIUS or local credential database

METERING - Precise Intelligence.

- Z & M meters provide real-time local & remote power management
- Billing grade meter accuracy within +/- 0.5%

LINKING - Cost Saving Efficiency.

- Both Z & M iPDU's provide daisy chain functionality
- Via one single Z IP PDU or PDU dongle up to 32 iPDU levels can be accessed via single network IP

CONFIGURATION - Diversified & Customizable.

- 110V, 208V, 230V, 400V, 415V and more Volt inputs
- 1 Phase, 2 Phase & 3 Phase PDU
- 10A to 100A Amp inputs
- Up to 48 outlets for standard models; Custom outlet configurations available
- 0U, 1U & 2U form factor for standard models; Customized chassis size and color available
- Wide range of PDU models, including Intelligent, Metered & Basic
- C13, C19, US NEMA, UK, Schuko, French, Fused IEC and other outlet selections available
- Variety cordset & inlet available
- Top or Bottom Feed
- Flexible Mounting :
 - all vertical PDUs are supplied with screw button & universal bracket mounting kits
 - all rackmount PDUs are supplied with horizontal rackmount kits

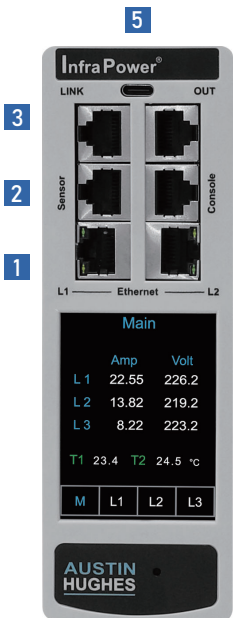
Smarter.
Slimmer.
Superior.

Intelligent Model Coverage

InfraPower 2000 Series Intelligent PDUs are available with a variety of models and functionality.

	IP PDU Series				Serial PDU Series			
	Z-2100 (Z)	Z-2200 (Zi)	Z-2300 (ZS)	Z-2400 (ZSi)	M-2100 (M)	M-2200 (Mi)	M-2300 (MS)	M-2400 (MSi)
Embedded Dual IP	●	●	●	●	✘	✘	✘	✘
Strip Power Monitoring	●	●	●	●	●	●	●	●
Circuit Power Monitoring	●	●	●	●	●	●	●	●
Circuit Breaker Monitoring	●	●	●	●	●	●	●	●
Outlet Level Monitoring		●		●		●		●
Outlet Level Switching			●	●			●	●

New Generation Meter



Z IP Meter

- 1 Embedded dual LAN IP
- 2 Sensor port x 1
 - support single or daisy chain sensors (up to 4)
- 3 LINK & OUT cascading ports
 - up to 32 levels of M / Z meter iPDU
- 4 Console port x 1
 - PDU configuration
- 5 USB-C function port x 1
 - WIFI
 - firmware update
 - backup power for meter against PDU power failure
- ✘ The latest Z PDU controller, powered by ARM9 CPU (Microchip AT91SAM9G25)

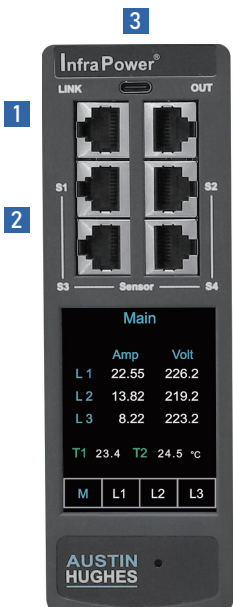
2.8" Touchscreen Color Display

The sharp & highly visible display of 2.8" touchscreen LCD provides local data of:

- Energy Consumption (kWh)
- Power (KW)
- Power Factor
- Current (Amp)
- Voltage (V)
- Temperature & Humidity

Billing Grade Meter Accuracy

The +/- 0.5% accuracy of the InfraPower PDU meter is vital for billing accuracy, energy efficiency, capacity planning and performance monitoring.



M Serial Meter

- ✘ IP connection via Z meter PDU or IP dongle
- 1 LINK & OUT cascading ports
 - up to 32 levels of M / Z meter iPDU
- 2 Sensor port x 4
 - support single or daisy chain sensors
- 3 USB-C function port x 1
 - backup power for meter against PDU power failure

Hot-swappable Meter Design

Easily replace meter & power module without interrupting critical operations, ensuring maximum uptime and flexibility. Simplify maintenance and minimize downtime with this innovative and user-friendly solution.

Mechanical Design - Outlets.

In 2023, Austin Hughes takes great pride in announcing the obtainment of a patent for our outstandingly designed IEC outlets. This significant milestone encompasses the auto lock design of L13, L19 outlets, and combo X19 outlet. In addition to the patented innovative design, the materials and manufacturing of these new outlets strictly adhere to UL standards.

X19 Slide-lock Combo C13 / C19 Outlet

- Patented slide lock design by Austin Hughes
- Patented hybrid of IEC C13 & C19 outlet design by Austin Hughes
- X19 outlets provides the flexibility to connect C14 and C20 plugs in the same outlet
- Simplify PDU outlet configuration and provides flexibility to accommodate different power distribution requirements
- Secure C13-C14 and C19-C20 power cords and avoid accidental disconnection
- LED available for Switched PDUs to indicate outlet on / off status

L13 Slide-lock C13 Outlet

- Patented slide lock design by Austin Hughes
- Built-in slide locking lever automatically lock the C14 plug after insertion
- Secure C13-C14 power cords and avoid accidental disconnection
- LED available for Switched PDUs to indicate outlet on / off status

L19 Slide-lock C19 Outlet

- Patented slide lock design by Austin Hughes
- Built-in slide locking lever automatically lock the C20 plug after insertion
- Secure C19-C20 power cords and avoid accidental disconnection
- LED available for Switched PDUs to indicate outlet on / off status

Color selection for slide lock outlet

Colored L13, L19 & X19 IEC outlets allow easy identification of rackmount equipment power paths, and facilitate power distribution management.



Mechanical Design - Chassis.

- Slim profile 0U chassis design with only 56mm in width and 55mm/68mm in depth
- Industrial grade chassis supports PDU operating temperature -5 to 60°C
- 8 colored chassis available for primary & redundant (A&B) power feed differentiation



Standard

Alternative Outlet

US NEMA, UK BS1363, German Schuko, French, standard IEC C13 & C19 outlets are available. For project based custom requirements, specific outlets (e.g., Fused IEC, Australian, South African or International) are also available.



Safety & quality assurance

In the same year, Austin Hughes has proceeded the submission to UL . With a profound understanding of the significance of safety in PDUs, we firmly believe that both safety and quality are indispensable. The UL qualified further solidifies our commitment to delivering secure and reliable products.

Daisy Chain PDU Connection.

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 1st level Z PDU with embedded IP, up to 32 daisy chain levels can be achieved. Z and M series 1-phase/ 3-phase PDUs can be inter-cascaded in a single daisy chain, up to 32 PDU levels.

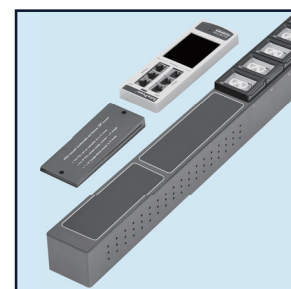
Field Replaceable Design.

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.

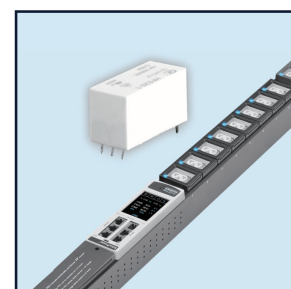
DC Module

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.



Latching Relay.

Outlet LEDs are built-in for switched 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 or standard operation is low and therefore assists to reduce energy usage of the overall PDU.



Safety | Protection.

Downtime can be incredibly expensive in data centers and lead to data loss in mission-critical applications. InfraPower PDUs offer a range of safety devices that protect equipment from unexpected power quality issues, protect users from harm while working on the rack.

Selection for safety devices

Magnetic Circuit Breaker (MCB) / Earth-leakage Circuit Breaker / Resettable Fuse / Surge Protector / EMI Filter / Residual Current Monitor (RCM)

Software.

PDU management software 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.

1. Free Management Software IPM-04

Free IPM-04 management software offers instantaneous visibility into crucial power quality, energy efficiency, and equipment health. By employing the most comprehensive and precise power management, you can effectively handle energy optimization, capacity planning, remote PDU control, environmental optimization, troubleshooting and maintenance with confidence.

Capacity	<ul style="list-style-type: none"> • 50 x iPDU Group Support (Just 1 IP for 32 iPDU level) • 1600 x iPDU Support • 5 x Concurrent User
Power Quality Measurements (kWh, kW, kVA, Power Factor, Amp)	<ul style="list-style-type: none"> • Inlet Power Monitoring • Branch Circuit Power Monitoring • Outlet Level Monitoring
Power Outlet Control	<ul style="list-style-type: none"> • Outlet Level Switching • Outlet Scheduling
Alarming	<ul style="list-style-type: none"> • Circuit Breaker (MCB) Monitoring • Rising Threshold & Alert • Overload Threshold & Alert
Environmental Monitoring	<ul style="list-style-type: none"> • Temperature (°C / °F) • Humidity (%) • Smoke Detection • Door Open / Close Detection
Reporting	<ul style="list-style-type: none"> • PDU log • Outlet log • Sensor log • Event log

2. Web Based GUI PPS-04-S


A web-based GUI is integrated with Z IP PDU or external IP dongle (IPD-03-S). It is ideal for users who simply require the power monitoring and input switching under a single PDU daisy chain (up to 32 PDU levels).

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

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

Accessories


A range of accessories and peripherals designed to enhance the functionality of intelligent PDUs.



IPD-03-S (For Serial PDU)

Dual LAN PDU IP Dongle


- Dual LAN Network Failover
- Auto-negotiable 2 x Gigabit Ethernet standard
- Enterprise IP Authentication & Remote Management Protocols
- Supports up to 32 daisy chained iPDUs
- Simultaneous multiple access via free management software IPM-04, web GUI & DCIM
- DCIM Support - via SNMP V2 / V3 or REST API
- USB Wifi Port for connection to Wifi kit (IPD-WIFI) with standards 802.11 g/n/ac
- Detachable design



Z-TH01-2M / 4M

Temperature & Humidity Sensor


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



Z-T01-2M / 4M

Temperature Sensor


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



Z-S01-1M / 3M

Smoke Sensor


- Once smoke alarm triggered, red LED lights on with continuous beep sound
- 1M or 3M cord



Z-W01-3M

Water Sensor


- Fluid leakage detection
- 5M rope round the rack bottom to detect any fluid flowing to the rack area
- IP65 cable joint connectors provided
- 3M cord



Z-DSW

Mechanical Door Sensor (Pair)


- Low cost / precise
- Cost efficient integration to new rack
- Size (52 x 22.5 x 30.75 mm)
- 2M cord
- Connect directly to handles



Z-DIR

IR Door Sensor (Pair)


- Light weight with magnetic base
- No custom cutting required on doors
- Mini size (33 x 19 x 7 mm)
- 2M cord
- Connect directly to handles



IPD-WIFI

WiFi Kit

- WiFi kit with 1M cord
- 802.11 g/n/ac WiFi
- Low-profile design wireless athena
- Magnetic base design for tool-less affix



IP-ED-01

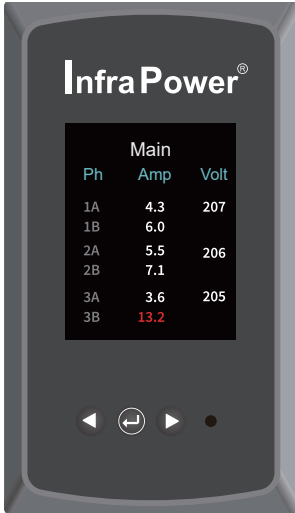
4.3" Door Mount Display Panel

- 1 smart display panel support 2 iPDUs
- Viewable while doors in closed position
- Resistive touchscreen
- Displays power, temp., humid., water leakage, smoke or door status
- Alarm & log

User can meet end to end equipment and management requirements using InfraPower 2000 PDUs whilst meeting budget and application demands. Metered PDUs (1-Phase MD & 3-Phase MK) allow local power monitoring. User can prevent circuit overloads during equipment installation and plan the capacity based on actual power consumption.

MK Metered PDU

1-Phase & 3-Phase



1.8" Color Display

The sharp & highly visible display of 1.8" LCD provides local data of:

- Energy Consumption (kWh)
- Power (KW)
- Power Factor
- Current (Amp)
- Voltage (V)

Billing Grade Meter Accuracy

The +/- 1% accuracy of the MK PDU meter is vital for billing accuracy, energy efficiency, capacity planning and performance monitoring.

Hot-swappable Meter Design

Easily replace meter without interrupting critical operations, ensuring maximum uptime and flexibility. Simplify maintenance and minimize downtime.

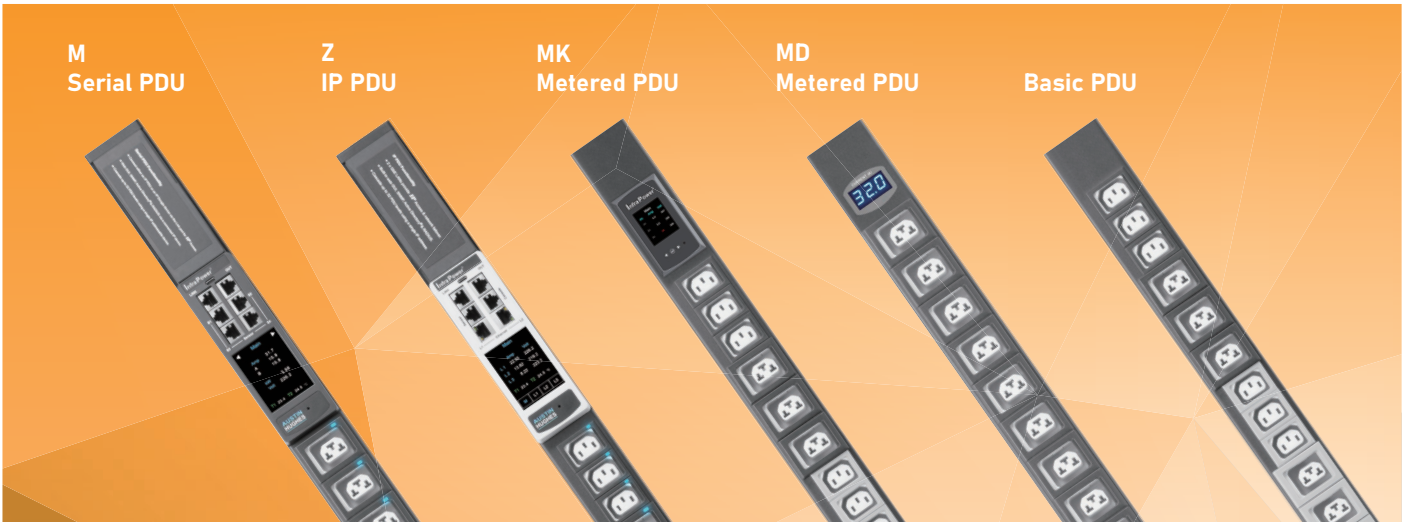
MD Metered PDU

1-Phase



- Local metering
- 3-digit ture RMS ammeter
- Circuit Amp measurement
- Accuracy :
+/- (3% of the reading + 5 last digits)
- Blue light LED

Austin Hughes offers cutting-edge rack PDUs for your IT environment, including a comprehensive range of 1-phase to 3-phase rack PDUs. InfraPower Power Distribution Units encompass Intelligent PDUs, Metered PDUs, and Basic PDUs. Offered in many sizes and configurations, our Rack PDUs provide the voltage, current, outlet number and type of connections required to fit any need.



InfraPower Rack PDU Features		Intelligent 2000		Metered		Basic
		Z IP	M Serial	MK	MD	
Outlet Switching + Strip/ Circuit/ Outlet Power Monitoring Over IP		Z-2400 (ZSi)	M-2400 (MSi)			
Outlet Switching + Strip/ Circuit Power Monitoring Over IP		Z-2300 (ZS)	M-2300 (MS)			
Strip/ Circuit/ Outlet Level Power Monitoring Over IP		Z-2200 (Zi)	M-2200 (Mi)			
Strip / Circuit Level Power Monitoring Over IP		Z-2100 (Z)	M-2100 (M)			
Strip / Circuit Level Power Monitoring via Local Meter		●	●	●		
Circuit Breaker Monitoring & Trip Alarming		●	●			
Phase Balance % for 3-Phase PDUs		●	●			
Embedded Dual 100/1000 LAN IP		●				
Hot-Swappable Meter with 2.8" Color Touchscreen LCD		●	●			
Hot-Swappable Meter with 1.8" Color Touchscreen LCD				●		
Billing Grade Meter Accuracy		± 0.5%	± 0.5%	± 1%		
3-digit RMS Current Meter with Accuracy, ±3%					●	
Field Replaceable ACDC Power Module		●	●			
PDU Cascade Up to 32 Levels		●	●			
Serial Console Port for PDU Configuration		●				
USB-C Function Port for WIFI, Firmware Update or Meter Backup Power Source		●				
USB-C Function Port for Meter Backup Power Source			●			
No. of Sensor Ports (Support Single or Daisy Chain Sensors**)		1**	4**			
Sensor Support : Temperature-humidity / Temperature / Smoke / Door Sensors		●	●			
DCIM support : SNMP V2 / V3 & Rest API		●	●			
Free Management Software (Max. 1600 PDUs)		●	●			
Configuration Range :	110V, 208V, 230V, 400V, 415V and more Volt inputs	●	●	●	●	●
	1 Phase, 2 Phase & 3 Phase PDU	●	●	●	●	●
	10A to 100A Amp inputs	●	●	●	●	●
	Up to 48 outlets for standard models	●	●	●	●	●
	0U, 1U & 2U form factor for standard models	●	●	●	●	●
	Dual Feed Models	●	●	●	●	●
Outlets :	X19 with C13 & C19 Connectivity & Slide-Lock	●	●		●	●
	L13 (C13) & L19 (C19) with Slide-Lock	●	●	●	●	●
	C13 & C19	●	●	●	●	●
	US Nema, UK / SCH / FR	●	●	●	●	●
	Fused IEC	●	●	●	●	●
	International, South Africa, Australian, etc	●	●		●	●
Safety Devices :	Hydraulic MCB / Resettable Fuse	●	●	●		
Options :	ELCR / Surge Protector / EMI Filter	●	●	●		
	RCM (Residual Current Monitoring Module)	●	●			
	Temp + Humid / Temp / Water / Smoke / Door Sensors	●	●			
	Door Mount PDU Panel with 4.3" Color LCD	●	●			
	WiFi Kit (direct connection to PDU)	●				
	PDU IP Dongle		●			
Operating Temperature -5 to 60°C		●	●	●	●	●

Horizontal Rackmount PDU

As a complete rack PDU solution provider, Austin Hughes design and manufacture 1-Phase & 3-Phase horizontal rack mount PDU, up to 100A/125A.



100A/125A High Power PDU

Austin Hughes offers 100A/ 125A High Power rack PDU to meet the increased computational demand for AI applications, High-performance computing clusters in datacenters.



TAA Compliant

When working under a federal contract, it is highly important for your business and your supply chain partners to abide by the rules outlined in the TAA.

Here at Austin Hughes, a leading global PDU manufacturer, we are able to provide TAA-compliant data center PDU solution because we manufacture and assemble our parts in strategic TAA-certified locations such as the United States, UK, etc.



AUSTIN HUGHES®

Austin Hughes has an extensive distribution network, including the Americas, EMEA, APAC & ASEAN. Contact your nearest sales office for details of local representation

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