InfraPower™

AUSTIN HUGHES®
POWERING IT

Enclosure Power Management Solutions

- Basic PDU's
- Metered (MD) PDU's
- Intelligent PDU's with:
  - Strip Level Monitoring (W)
  - Strip Level Monitoring & Socket Switching (WS)
  - Socket Level Monitoring & Socket Switching (WSi)
- Single and Three Phase

MANAGE

CONTROL

AUSTIN®
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POWERING IT

MONITOR

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InfraPower | PDU Range

Basic PDU:

Cost efficient and reliable rack mount power distribution units which simply deliver / distribute power from outside the cabinet to the IT equipment.

Metered (MD Series) PDU:

MD Series PDUs allow true RMS current local monitoring via a digital RMS ammeter. The blue LED display is easy-to-read from a distance and allows rapid access to the aggregate load on the circuit.

Full range of **Automatic Transfer Switches (ATS)** also available.

Intelligent (W Series) PDUs:

Rack mount PDU's with digital local touchscreen display and IP network connectivity.

W Model: Strip Level Monitoring. Reporting the entire strip data, Amperes, kWh, Volts, Power Factor and kW centrally.

WS Model: Strip Level Monitoring and Socket Switching. The above Monitored (W) functionality in addition to IP network connectivity to enable users to switch or control individual outlets or IT equipment within the cabinet.

WSi Model: Socket Level Monitoring and Socket Switching. IP network connectivity that allows users to switch individual outlets and meter individual outlet or equipment consumption.

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Features	WSi Switched Outlet kWh PDU	WS Switched kWh PDU	W Monitored	MD Metered	Basic Basic
Outlet Measurement	✓				
Outlet Switch ON / OFF	✓	✓			
Latching Relay	✓	✓			
kWh Measurement	✓	✓	✓		
Hot-pluggable Meter	✓	✓	✓		
2.8" Touchscreen	✓	✓	✓		
DC Module	✓	✓	✓		
SNMP Hardware	✓	✓	✓		
Sensor Port x 2 (Temp & Humidity)	✓	✓	✓		
Management Software	✓	✓	✓		
16 x PDU in Single Daisy Chain	✓	✓	✓		
One IP Access 16 x PDU Levels	✓	✓	✓		
Aggregate Amp Measurement	✓	✓	✓		
Local Ammeter	✓	✓	✓	✓	
Individual Fuse Option	✓	✓	✓	✓	✓
Vertical & Horizontal Mounting	✓	✓	✓	✓	✓
Multiple Outlet Configuration	✓	✓	✓	✓	✓
Tool-less Mounting	✓	✓	✓	✓	✓
Voltage: 110V / 208V / 250V	✓	✓	✓	✓	✓
Three Phase - Option	✓	✓	✓	✓	✓
Fuse / Circuit Breaker - Option	✓	✓	✓	✓	✓
Surge Protector - Option	✓	✓	✓	✓	✓
EMI Filter - Option	✓	✓	✓	✓	✓

Need help choosing a PDU model?

Find out more

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Field Replaceable DC Module

IP Dongle (SNMP)
Hot pluggable IP dongle provides IP remote access to the PDUs using a single IP address chain. Only one IP dongle is required to access a maximum of 16 PDUs in a daisy chain. Simply integrate the IP dongle to the 1st PDU, then the entire daisy chain group can be remotely accessed over IP.

FREE
Management Software

Hot Swappable Meter
Field replaceable RMS current meter with 2.8" colour LCD display with touch screen functionality. The sharp and highly visible display provides local data of:
• current (AMP)
• voltage (Volt)
• power (KW)
• energy consumption (KWh),
• power factor of the entire PDU
This data has a metering accuracy to within +/- 1%.

Environmental Sensor Ports
2 x environmental plug in ports for temperature and humidity monitoring; all data is then displayed locally on the PDU.

Accidental Release Sleeves
IEC Sleeves offer added protection against the unintentional removal of cables from the PDU C13 or C19 outlets – see '**Accessories**'

Latching Relays*
To protect mission critical equipment from unplanned downtime, socket switching must be controlled via bistable/latching relays. Ensuring an 'always on' operational performance and socket status returning to a pre power outage after a planned or unplanned shutdown.

Coloured Chassis
A simple way to enhance cable management and visualisation of the power sources. Allows differentiation of primary and redundant power feeds (A & B) if required. The most common combinations are Red & Blue or Black & Grey White. Other colours are available.

PDU Power Feed Entry
Bottom feed entry as standard. Optional Top feed entry.

Available in Single Phase & Three Phase

Multiple Outlet Configurations
Multiple outlet configurations per each individual PDU e.g. One Vertical PDU with 2xUK, 20xC13, 4xC19 outlets

Protection
Thermal Resettable Fuse
• Protected load segments for increased reliability
• Overload reset button
• Cost effective solution for safety operation

Circuit Breakers (Option)
• Protected load segments for increased reliability
• Overload switch
• Designed with fully shrouded protective cover to prevent accidental ON / OFF operation

*WS & WSi Model PDU's only

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InfraPower | PDU Part Code Builder

AH	V	02	3	20	1	04	2	2	7
AH	*	**	*	**	*	**	*	*	*
AUSTIN HUGHES	**Direction**	**Socket Type 1**		**Socket Type 2**		**Socket Type 3**		**Rating**	**Model Type**
		Qty	**Socket Type**	**Qty**	**Socket Type**	**Qty**	**Socket Type**		
AH	V = Vertical	02	3 = UK 45° Sockets	02	1 = C13 Sockets	02	2 = C19 Sockets	1 = 13A	0 = Basic
	H = Horizontal	04	4 = UK 135° Sockets	04	*If no C13 sockets required insert '000'*	04	*If no C19 sockets required insert '000'*	2 = 16A	1 = MD
		06	5 = UK 90° Sockets	06		06		3 = 32A	4 = W
		08	6 = CEE7/4 Schuko	08		08		4 = 10A	5 = WI
		10	7 = Nema Sockets	10		10		5 = 20A	6 = WS
		12	8 = CEE7/5 Schucko	12		12		6 = 30A	7 = WSi
		16	*If none of these socket types required insert '000'*	14				7 = 16A (3P)	
		20		16				8 = 32A (3P)	
		24		18				9 = 63A	
				20				*(3P = 3 Phase)*	
				24					
				28					
				32					
				36					

Request a Quotation

InfraPower | Options

Mounting

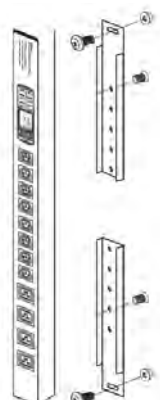Quick and tool-less integration simplifies PDU installation.

Universal mounting kits supports all cabinet models

- **Vertical Button Mounting Kit:** Designed for global branded cabinets with keyhole type mounting holes on the rear verticals
- **Vertical Bracket Mounting Kit:** Easy installation by mounting the PDU to the cabinet cable tray

Both a Vertical Button Mounting Kit & Vertical Bracket Mounting Kit are supplied as standard per PDU.

Vertical Button Mounting Kit

Vertical Bracket Mounting Kit

Power Feed Entry

As standard InfraPower PDUs have bottom power feed entry.

Customisation to top feed entry is available on request.

Three Phase PDUs

W Series Intelligent Power Distribution Units are available in Three Phase

- Phase voltage balance
- PDU cascading reducing data ports and network IP addresses
- Zero power consumption latching relay for outlet control
- Switched / Monitored PDU models
- Outlet / circuit level measurement
- Custom configurations available

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3	1	1	1		
*	*	*	*		
				Optional Extra	
Cord Length	**Input Plug**	**Feed Input**	**Colour**	**Protection**	**Extra Requirement**
1 = 1 Meter	1 = 60309 Commando	1 = Bottom	1 = Black RAL 9005	1 = Circuit Breakers	L = LSZH Input Cord
2 = 2 Meter	2 = C20 IEC320	2 = Top	2 = Blue Pantone 200c	2 = Individually Fused	E = External Earth Cord
3 = 3 Meter	3 = UK BS1363		3 = Red Pantone 300c	3 = EMI Filter	S = Special Requirement
4 = 4 Meter	4 = Schucko		4 = Grey White RAL 9002	4 = Resettable Individual Fuses	K = Locking Sockets
5 = 5 Meter	5 = Unterminated		5 = Yellow RAL 1018	5 = Surge Protection	T = Transfer Switch
6 = 6 Meter	6 = C14 IEC320		7 = Purple RAL 4006		
7 = 7 Meter	7 = L6 20P Nema		8 = Orange RAL 1007		
8 = 8 Meter	8 = L6-30P Nema		9 = Green RAL 6029		
9 = 9 Meter					
0 = 10 Meter					

Check out the InfraPower PDU Video

Coloured Power Distribution Units

Coloured PDU casings allow differentiation between primary and redundant power sources (generally A & B feeds) within the Server Cabinet.
Suggested combinations:

- Light Grey + Standard Black
- Blue + Red
- Orange + Purple
- Yellow + Green
- Other colours are available

Choose colour using PDU Part Code Builder above
(Black RAL 9005 as standard default)

Socket Configurations

Multiple socket configurations are available per PDU.

All sockets feature local port numbering using non-removable silk screen labelling for identification and circuit identification.
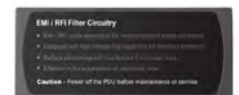
Protection

Resettable Fuse: Protected load segments for increased reliability.
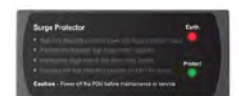Overload reset button

Circuit Breakers:
Protect load segments for increased liability, overload switch, designed with fully shrouded protective cover to prevent accidental on/off.

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

Surge Protection:
Enhances the device protection. Grounds unwanted voltages above safe threshold.

Choose Protection type using PDU Part Code Builder above
(Thermal Resettable Fuse as standard default)

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IP Dongle & Daisy Chain

Patented IP Dongle provides IP remote access to the PDUs by a true network IP address chain. Only 1 x IP dongle allows access to max. 16 PDUs in a single daisy chain.

Save the IP Address Cost of Your Data Center

InfraPower Manager Software (IPM-04) is supplied Free or utilise 3rd Party DCIM (via SNMP). Cost-efficient PDU management can be achieved by applying IP dongle & daisy chain.

1 x IP   **Up to 16 PDU's**

Max. cabling distance between 2 x cascaded PDU's up to 20 meters

InfraPower Manager Software (Free)

Ultra high density PDU Management can be achieved with InfraPower Manager, the associated software for W Series PDUs. Supporting remote management of multiple PDU daisy chain groups.

IPM-04: Supports up to 800 PDU's (50 PDU Groups)

IPM-04 provides the basic functions of:

- Monitoring or measurement of Amps, Volts, kW, kWh, Power factor and Temperature / Humidity
- Remote switching ON / OFF per individual power outlets
- Reporting
- Alarm setting
- PDU Outlet measurement
- Grouping and chart reporting (These functions are provided by higher software editions)

InfraPower Manager enhances the benefits of W Series PDUs by delivering a centralised remote management platform for the PDUs in multiple IP-access groups.

The administrator can remotely manage the PDUs and the environmental sensors connected by the web browser.

- Wide functionality
- Concise Monitoring Pages
- Mass scale PDU management
- Scalable solution
- Flexibility by Multiple Users
- Cost effective

To arrange a Software Demonstration please **Contact Us**

InfraPower™

IP Dongle

- Patented design
- Hot pluggable for easy integration
- Allows IP remote access to the PDUs by a single IP address
- One IP dongle supports max. 16
- PDUs in daisy chain
- Highly cost effective method to access the intelligent PDUs
- SNMP

IP Dongles	
AHAPDUIPD02S	IP Dongle for Vertical PDU
AHAPDUIPDH02S	IP Dongle for Horizontal PDU

Sensors

- External sensor available with 2M or 4M cord
- Plug and play
- Low profile design with magnetic base for easy affixing to the rack cabinet
- Pair of sensors can be connected to one single W series PDU meter

Temperature & Humidity Sensors	
AH-IG-T012M	Temperature Sensor, 2 Meter
AH-IG-T014M	Temperature Sensor, 4 Meter
AH-IG-TH012M	Temperature & Humidity Sensor, 2 Meter
AH-IG-TH014M	Temperature & Humidity Sensor, 4 Meter

Accidental Release Sleeves

Avoids accidental removal of power leads to active equipment by engineers working within rack PDU's C13 and C19 sockets. By using IEC sleeves, a power cable requires 12 Kg of force to remove.

Accidental Release Sleeves	
IEC_C13	C13 Cord Sleeves
IEC_C19	C19 Cord Sleeves

External Door Mount PDU Display

The external door mount PDU display provides a highly visible local display without the need to open the cabinet's rear door to read the PDU(s) information.

- External Door Mount PDU Display provides RJ-11 port x 2 for PDU amp. & Temperature monitoring
- The display will be connected back to each IP PDU via door and a 3m RJ-11 cable
- Once connected, the reading of PDU amps and temperature shows in the external door mount display

External Door Mount PDU Display	
AH-WS-DIS01	External PDU Display

Coloured Power Cords

Provide the simplest way to enhance cable management and visualise power sources.

C13-C14 Cords	
AHA111001	C13-C14 Black 1M
AHA112001	C13-C14 Black 2M
AHA113001	C13-C14 Black 3M
AHA111002	C13-C14 Blue 1M
AHA112002	C13-C14 Blue 2M
AHA113002	C13-C14 Blue 3M
AHA111005	C13-C14 Orange 1M
AHA112005	C13-C14 Orange 2M
AHA113005	C13-C14 Orange 3M

C19-C20 Cords	
AHA221001	C19-C20 Black 1M
AHA222001	C19-C20 Black 2M
AHA223001	C19-C20 Black 3M
AHA221002	C19-C20 Blue 1M
AHA222002	C19-C20 Blue 2M
AHA223002	C19-C20 Blue 3M
AHA221005	C19-C20 Orange 1M
AHA222005	C19-C20 Orange 2M
AHA223005	C19-C20 Orange 3M

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Automatic Transfer Switches

To compliment InfraPower PDU's a comprehensive range of Automatic Transfer Switches (ATS) are available.

InfraPower ATS provides redundant power for single corded equipment with auto switching relay for seamless power transfer.
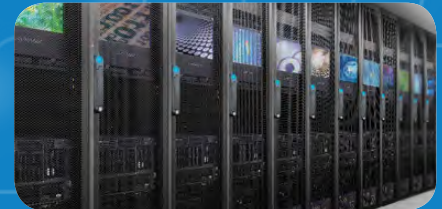
Find out more

In-Line Meters

Single and Three Phase In-Line Meters designed to allow Basic Power Distribution Units to be upgraded with local monitoring and remote management.

Find out more

Integrated Solutions

InfraPower Intelligent W Series PDUs can be incorporated into InfraSolutionX to enable PDU monitoring and control in addition to Smart Card Access and Environmental Management.

InfraSolutionX has SNMP for optional integration to the existing DCIM of Data Centres.

Find out more

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