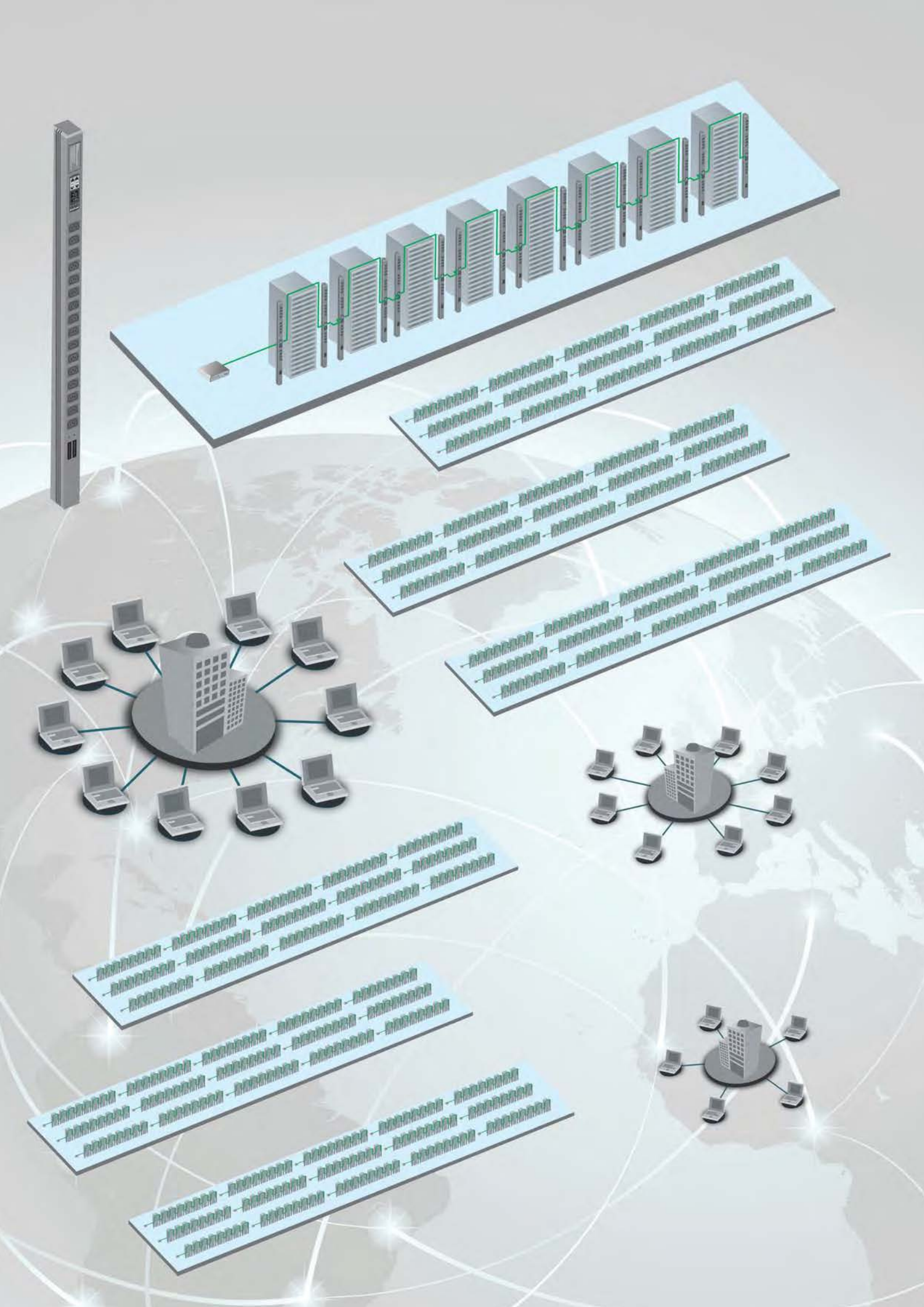




1-Phase Intelligent PDU
IEC Outlet
208V / 230V



Power Efficiency Management

With today's increasing demand for high technology power management solutions, PDU kWh measurement and the associated software allow data center managers to make key decisions regarding the most efficient use of power. The need to maximize power efficiency to reduce cost is high up the corporate agenda. For 24x7x365 operation, a small increase in efficiency can result in major savings in running cost. **W series** PDUs provide the kWh measurement for an effective planning on the power capacity. Models with outlet level kWh measurement are also available.



Uptime and Productivity Improvements

Uptime and productivity improvements are achieved through the remote management. W series PDUs support daisy chain connections allowing up to 16 PDUs to be cascaded via Cat6 cables. All the PDUs are remotely accessed via only one network IP address. The GUI software provides easy-to-learn tools for the PDU remote management. It is simply accessed via the web browser to access all the connected PDUs in anywhere around the world. Ultimately, this can help reducing manpower and travel costs by negating the need for staff to actually be at the equipment location.



Green Data Center Movement

Growth of data center development increases power requirements and hence causes not only operation cost issues but also environmental concerns. It needs to monitor, measure and manage power consumption in order to get you on the path toward power saving for green data center operation.

The kWh energy consumption measurement provided by W Series PDU solutions helps driving the green data center movement by enhancing the power distribution management on data center.



W Intelligent PDU series	Monitored		Switched	
	W	Wi	WS	WSi
Outlet AMP - kWh Measurement		✓		✓
Outlet Switch ON / OFF			✓	✓
Hot-Swap Meter	✓	✓	✓	✓
1.8" Color LCD	✓	✓	✓	✓
Circuit Amp - kWh Measurement	✓	✓	✓	✓
Temp-Humid Sensor port x 2	✓	✓	✓	✓
16 PDU Levels in Single Daisy Chain	✓	✓	✓	✓
One IP Access up to 16 PDU Levels	✓	✓	✓	✓
SNMP Capability v2 / v3	✓	✓	✓	✓
Free Management Software	✓	✓	✓	✓
Lockable IEC Outlet Model	✓	✓	✓	✓
Individually Fused Outlet Model	✓	✓	✓	✓
63A Model (only for 230V PDU)	✓	✓	✓	✓
Local Meter	✓	✓	✓	✓
Tool-less Mounting for Vertical PDU	✓	✓	✓	✓
0U / 1U / 2U Form Factors	✓	✓	✓	✓
Hydraulic MCB / Resettable Fuse Option	✓	✓	✓	✓
Voltage 230V / 208V / 110V	✓	✓	✓	✓
Operating Temperature Range -5°C to 60°C	✓	✓	✓	✓
Outlet Types : IEC C13	✓	✓	✓	✓
IEC C19	✓	✓	✓	✓
IEC C13 + C19	✓	✓	✓	✓
IEC Lockable	✓	✓	✓	✓
IEC Individually Fused	✓	✓	✓	✓
NEMA	✓	✓	✓	✓
UK / UK + IEC	✓	✓	✓	✓
SCH / SCH + IEC	✓	✓	✓	✓

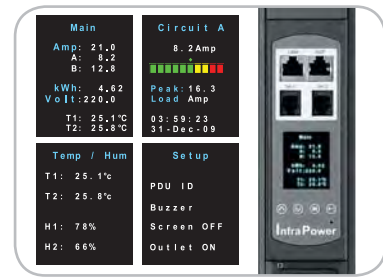
* For selective high density outlet & 63A configurations, 2.8" touchscreen display will be applied.

Field Replaceable Meter

The 1.8" LCD color display provides a sharp and highly visible reading of energy consumption, power, current, temp-humid, etc. Local setup can be made by using a membrane switch indicating 'up', 'down', 'enter' and 'back' options.

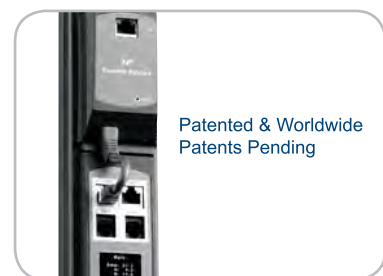
The field replaceable display design helps eliminating maintenance downtime by simply replacing a possible defective meter without a service interruption. The connection ports for the PDU daisy chain as well as the temperature & humidity sensors are conveniently positioned for easy access.

* For selective high density outlet & 63A configurations, 2.8" touchscreen display will be applied.



Reduce IP Address Costs within the Network

The patented hot pluggable IP dongle provides a highly cost effective method to access W series intelligent PDUs. It is designed to support daisy chain connections allowing up to 16 PDUs to be cascaded via Cat6 cables - all the PDUs are remotely accessed via a single network IP address.



Ultra Density PDU Management

W series PDUs are designed to support daisy chain connections, up to 16 PDUs can be remotely accessed via one single IP. InfraPower Manager, IPM-04, supports up to 50 IP groups, and hence centralized management for 800 PDUs can be achieved.



Software Functionality

Free IPM-04 allows an advanced PDU remote management for up to 800 PDUs. Features include kWh / Amp monitoring, outlet switched on / off, outlet measurement, outlet scheduling, temp & humid monitoring, reporting, alarm setting, etc. PPS-02-S preloaded by the IPD-02-S provides an easy and simple PDU monitoring for PDU technical management.



Broadest Portfolio of Intelligent PDUs

In addition to supplying cost-effective standard PDU models with a great delivery schedule, competitive custom PDU configurations for specific user requirements are also available on short lead-times.



Lockable IEC Outlet PDU

Lockable IEC Outlet PDU models are available to secure plugs and prevent accidental disconnection. It is compatible to generic IEC cords and hence cost saving in locking cables.



Fused IEC Outlet PDU

W Series PDUs are available with the option of individually fused outlets, to help prevent an overload of the active equipment and avoiding short circuiting the entire IEC outlet PDU.



63A PDUs

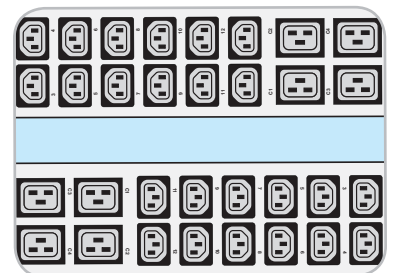
In part due to the popularity of ultra-thin blade servers, sometimes a tremendous amount of computing power is required for equipment mounted in a single rack. 63A models are available for such high power usage requirements.

* only available for 230V W Monitored models



High Density Outlets

IT market trends for high density server and networking applications are causing rack-mount equipment densities to increase. High Density Outlet PDUs are designed to cope with rising power distribution demands.



Colored PDU Casings & Power Cords

Colored PDU casings and power cables provide the simplest way to enhance the cable management and visualize the power sources. Users can simply distinguish the PDU from which power source according to the color of the PDU casing or power cable.



W - IEC Outlet Monitored kWh PDU

InfraPower®



W PDU - kWh as a Standard

The InfraPower W monitored PDU is a rackmount industrial grade PDU for mission critical data centers and remote install sites. The W PDU meter is designed with a 1.8" color LCD display. It provides a sharp and highly visible reading for the local strip level reading of current(Amp), voltage(Volt), power(kVA, kW), energy consumption(kWh), power factor, as well as temperature and humidity. This also allows remote monitoring with the use of an IP dongle via a simple, secure web based GUI management interface. W PDU can be cascaded up to a maximum of 16 PDUs using a low cost Cat6 patch cord allowing access control and monitoring via a single IP address over an Ethernet network. The real time monitoring provided by the W PDU cannot only help by reducing manpower and related travel costs, but can also help users with capacity planning and improving the overall efficiency of the data center.

Key Features

Temperature Humidity Monitoring	Power Factor Monitoring	Power (kVA, kW) Monitoring
Voltage (V) Monitoring	Current (A) Monitoring	Energy (kWh) Monitoring



cUL certified for specific configurations

Vertical

230V - 10A (C13) / 16A / 20A / 32A
208V - 20A / 30A

		Length
C13	C19	mm / inch
32		1800 / 70.9
28		1650 / 65.0
24		1425 / 56.1
20		1425 / 56.1
16		1200 / 47.2
12		1200 / 47.2
8		1200 / 47.2
	12	1200 / 47.2
	8	1200 / 47.2
	4	1200 / 47.2
36	6	1450 / 57.1 *
30	6	1450 / 57.1 *
28	4	1800 / 70.9
24	6	1650 / 65.0
24	4	1650 / 65.0
20	6	1650 / 65.0
20	4	1425 / 56.1
16	6	1425 / 56.1
16	4	1425 / 56.1
12	6	1200 / 47.2
12	4	1200 / 47.2
8	4	1200 / 47.2
8	2	1200 / 47.2

230V - 63A

		Length
C13	C19	mm / inch
32		1800 / 70.9
28		1800 / 70.9
24		1650 / 65.0
16		1200 / 47.2
	24	1800 / 70.9
	20	1650 / 65.0
	16	1425 / 56.1
24	8	1900 / 74.8
24	4	1800 / 70.9
20	8	1800 / 70.9
20	4	1650 / 65.0
16	8	1650 / 65.0
16	4	1425 / 56.1
12	8	1425 / 56.1
12	4	1425 / 56.1

* steel chassis

* 208V PDU bundled with MCB
230V PDU bundled with Resettable Fuse
Optional upgrade to MCB is available

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

		Lockable	Length
C13	C19		mm / inch
36			1525 / 60.0 *
32			1525 / 60.0 *
28			1800 / 70.9
24			1650 / 65.0
20			1425 / 56.1
16			1200 / 47.2
36	6		1525 / 60.0 *
30	6		1525 / 60.0 *
28	6		1525 / 60.0 *
28	4		1525 / 60.0 *
24	6		1525 / 60.0 *
24	4		1800 / 70.9
20	6		1800 / 70.9
20	4		1650 / 65.0
16	6		1650 / 65.0
16	4		1425 / 56.1
12	6		1425 / 56.1
12	4		1200 / 47.2

230V - 16A / 32A

		Individual Fused	Length
C13	C19		mm / inch
36			1525 / 60.0 *
32			1525 / 60.0 *
28			1800 / 70.9
24			1650 / 65.0
20			1425 / 56.1
16			1200 / 47.2
36	6		1525 / 60.0 *
30	6		1525 / 60.0 *
28	6		1525 / 60.0 *
28	4		1525 / 60.0 *
24	6		1525 / 60.0 *
24	4		1800 / 70.9
20	6		1800 / 70.9
20	4		1650 / 65.0
16	6		1650 / 65.0
16	4		1425 / 56.1
12	6		1425 / 56.1
12	4		1200 / 47.2

Horizontal

230V - 10A / 16A / 20A / 32A
208V - 20A / 30A

		Height
C13	C19	U
20		2U
16		2U
12		2U
8		1U
	12	2U
	10	2U
	8	2U
	6	1U
	4	1U
20	4	2U
16	4	2U
12	4	2U
6	2	1U
4	4	1U

Intelligent PDU Product Code

Austin Hughes has designed a simple but informative InfraPower product code builder in order to let our clients determine the desired PDU configuration to meet their needs.

Code Structure

C13 - W / GF / 2P+E / 3M / 9.84' / 3

C19 - W / GF / 2P+E / 3M / 9.84' / 3

C13 / C19 - W / GF / 2P+E / 3M / 9.84' / 3

V C13 - W / GF / 2P+E / 3M / 9.84' / 3

V C19 - W / GF / 2P+E / 3M / 9.84' / 3

V C13 / C19 - W / GF / 2P+E / 3M / 9.84' / 3

V C13 - W / GF / 2P+E / 3M / 9.84' / 3

V C19 - W / GF / 2P+E / 3M / 9.84' / 3

V C13 / C19 - W / GF / 2P+E / 3M / 9.84' / 3

V C13 - W / GF / 2P+E / 3M / 9.84' / 3

V C19 - W / GF / 2P+E / 3M / 9.84' / 3

V C13 / C19 - W / GF / 2P+E / 3M / 9.84' / 3

Digit	Indication	Examples
Form Factor	V = Vertical H = Horizontal	
Outlet nos	C13 : 36 / 32 / 28 / 24 / 20 / 16 / 12 / 8 C13 / C19 : 36 / 30 / 28 / 24 / 20 / 16 / 12 / 8 / 6 / 4 C19 : 24 / 20 / 16 / 12 / 10 / 8 / 4 C13 / C19 : 8 / 6 / 4 / 2	
Amp	230V : 10A / 16A / 20A / 32A / 63A 208V : 20A / 30A	
Circuit Protection	CR = Hydraulic Magnetic Circuit Breaker (MCB) F = Resettable Fuse	
Inlet	C14 : IEC320 C14 L620 : NEMA L6-20P C20 : IEC320 C20 L630 : NEMA L6-30P EN : IEC 60309 OE : Open end	
Cordset	3 = 3M / 9.84' (except 63A) 2 = 2M / 5.56' (63A only) * Custom length on request	
Bottom or top feed (only for vertical PDU)	B = Bottom feed T = Top feed	
Colored PDU casing (only for vertical PDU)	1 = Black 2 = White 3 = Red 4 = Blue	
LOCK	Lockable	For vertical PDU only
GF	Individually Fused	For vertical PDU only



WS PDU - Mission Critical Essential

Besides kWh and current remote monitoring, the ability to switch on / off per outlet is another key requirement for intelligent PDU. Especially for the data center with 24/7 operation, it needs the remote outlet switching function so that the unresponsive IT equipment can be rebooted remotely to minimize the downtime. As a result, switched PDU is an essential cabinet component for mission critical data center. InfraPower WS includes all the power monitoring features of W model. In addition, it allows individual outlet switch on / off remotely through the InfraPower management software. By applying the top edition of IPM-03, outlet switching on / off scheduling can be achieved for an advanced switching management.

Key Features

Temperature Humidity Monitoring	Power Factor Monitoring	Power (kVA, kW) Monitoring	
Voltage (V) Monitoring	Current (A) Monitoring	Energy (kWh) Monitoring	ON / OFF Outlet Switching



cUL certified for specific configurations

Vertical

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

C13	C19	Length mm / inch
32		1800 / 70.9
28		1650 / 65.0
24		1425 / 56.1
20		1425 / 56.1
16		1200 / 47.2
12		1200 / 47.2
8		1200 / 47.2
	12	1200 / 47.2
	8	1200 / 47.2
	4	1200 / 47.2
36	6	1775 / 69.9 *
30	6	1775 / 69.9 *
28	4	1800 / 70.9
24	6	1650 / 65.0
24	4	1650 / 65.0
20	6	1650 / 65.0
20	4	1425 / 56.1
16	6	1425 / 56.1
16	4	1425 / 56.1
12	6	1200 / 47.2
12	4	1200 / 47.2
8	4	1200 / 47.2
8	2	1200 / 47.2

230V - 63A

C13	C19	Length mm / inch
32		1587.5 / 62.5 *
28		1587.5 / 62.5 *
24		1437.5 / 56.6 *
16		1437.5 / 56.6 *
	24	1437.5 / 56.6 *
	20	1437.5 / 56.6 *
	16	1437.5 / 56.6 *
24	8	1587.5 / 62.5 *
24	4	1587.5 / 62.5 *
20	8	1587.5 / 62.5 *
20	4	1587.5 / 62.5 *
16	8	1437.5 / 56.6 *
16	4	1437.5 / 56.6 *
12	8	1437.5 / 56.6 *
12	4	1437.5 / 56.6 *

* steel chassis

* 208V PDU bundled with MCB
230V PDU bundled with Resettable Fuse
Optional upgrade to MCB is available

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

Lockable	C13	C19	Length mm / inch
	36		1775 / 69.9 *
	32		1775 / 69.9 *
	28		1800 / 70.9
	24		1650 / 65.0
	20		1425 / 56.1
	16		1200 / 47.2
36	6		1775 / 69.9 *
30	6		1525 / 60.0 *
28	6		1525 / 60.0 *
28	4		1525 / 60.0 *
24	6		1525 / 60.0 *
20	6		1800 / 70.9
20	4		1650 / 65.0
16	6		1650 / 65.0
16	4		1425 / 56.1
12	6		1425 / 56.1
12	4		1200 / 47.2

230V - 16A / 32A

Individual Fused	C13	C19	Length mm / inch
	36		1775 / 69.9 *
	32		1775 / 69.9 *
	28		1800 / 70.9
	24		1650 / 65.0
	20		1425 / 56.1
	16		1200 / 47.2
36	6		1775 / 69.9 *
30	6		1525 / 60.0 *
28	6		1525 / 60.0 *
28	4		1525 / 60.0 *
24	6		1525 / 60.0 *
24	4		1800 / 70.9
20	6		1800 / 70.9
20	4		1650 / 65.0
16	6		1650 / 65.0
16	4		1425 / 56.1
12	6		1425 / 56.1
12	4		1200 / 47.2

Horizontal

230V - 10A / 16A / 20A / 32A
208V - 20A / 30A

C13	C19	Height U
20		2U
16		2U
12		2U
8		1U
	12	2U
	10	2U
	8	2U
	6	1U
	4	1U
20	4	2U
16	4	2U
12	4	2U
6	2	1U
4	4	1U

Intelligent PDU Product Code

Austin Hughes has designed a simple but informative InfraPower product code builder in order to let our clients determine the desired PDU configuration to meet their needs.

Code Structure

C13 - WS / GF / LOCK
 C19 - WS / GF / LOCK
 C13 / C19 - WS / GF / LOCK
 V C13 - WS / GF / LOCK
 V C19 - WS / GF / LOCK
 V C13 / C19 - WS / GF / LOCK
 V C13 - WS / GF / LOCK
 V C19 - WS / GF / LOCK
 V C13 / C19 - WS / GF / LOCK
 V C13 - WS / GF / LOCK
 V C19 - WS / GF / LOCK
 V C13 / C19 - WS / GF / LOCK

Digit	Indication	Examples
Form Factor	V = Vertical H = Horizontal	
Outlet nos	C13 : 36 / 32 / 28 / 24 / 20 / 16 / 12 / 8 C13 / C19 : 36 / 30 / 28 / 24 / 20 / 16 / 12 / 8 / 6 / 4 C19 : 24 / 20 / 16 / 12 / 10 / 8 / 4 C13 / C19 : 8 / 6 / 4 / 2	
Amp	230V : 10A / 16A / 20A / 32A / 63A 208V : 20A / 30A	
Circuit Protection	CR = Hydraulic Magnetic Circuit Breaker (MCB) F = Resettable Fuse	
Inlet	C14 : IEC320 C14 C20 : IEC320 C20 EN : IEC 60309 OE : Open end	L620 : NEMA L6-20P L630 : NEMA L6-30P
Cordset	3 = 3M / 9.84' (except 63A) 2 = 2M / 5.56' (63A only) * Custom length on request	
Bottom or top feed (only for vertical PDU)	B = Bottom feed T = Top feed	
Colored PDU casing (only for vertical PDU)	1 = Black 2 = White 3 = Red 4 = Blue	
LOCK	Lockable	For vertical PDU only
GF	Individually Fused	For vertical PDU only

Wi - IEC Outlet Monitored kWh PDU with Outlet Measurement

InfraPower®



Wi PDU - Necessity for Co-location

For the data centers which are providing co-location services, the ability to remotely monitor kWh consumption per outlet is a necessity. Co-location rental requires outlet level kWh information to estimate the energy consumption of each co-located rack space, or even each rackmount equipment. The Wi PDU meter is designed with a 1.8" color LCD display. It provides a sharp and highly visible reading for the local individual outlet level reading of current(Amp), voltage(Volt), power(kVA, kW), energy consumption(kWh), power factor, as well as temperature and humidity. With the use of an IP dongle via a simple, secure web based GUI management interface, this allows remote individual socket monitoring. The Wi PDU can be cascaded up to a maximum of 16 PDUs using a low cost Cat6 patch cord allowing access control and monitoring via a single IP address over an Ethernet network. The real time monitoring provided by the Wi PDU can help users with capacity planning and improving the overall efficiency of the data center.

Key Features

Temperature Humidity Monitoring	Power Factor Monitoring	Power (kVA, kW) Monitoring	Outlet Level Measurement
Voltage (V) Monitoring	Current (A) Monitoring	Energy (kWh) Monitoring	



cUL certified for specific configurations

Vertical

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

		Length
C13	C19	mm / inch
32		1800 / 70.9
28		1650 / 65.0
24		1425 / 56.1
20		1425 / 56.1
16		1200 / 47.2
12		1200 / 47.2
8		1200 / 47.2
	12	1200 / 47.2
	8	1200 / 47.2
	4	1200 / 47.2
36	6	1775 / 69.9 *
30	6	1775 / 69.9 *
28	4	1800 / 70.9
24	6	1650 / 65.0
24	4	1650 / 65.0
20	6	1650 / 65.0
20	4	1425 / 56.1
16	6	1425 / 56.1
16	4	1425 / 56.1
12	6	1200 / 47.2
12	4	1200 / 47.2
8	4	1200 / 47.2
8	2	1200 / 47.2

230V - 63A

		Length
C13	C19	mm / inch
32		1587.5 / 62.5 *
28		1587.5 / 62.5 *
24		1437.5 / 56.6 *
16		1437.5 / 56.6 *
	24	1437.5 / 56.6 *
	20	1437.5 / 56.6 *
	16	1437.5 / 56.6 *
24	8	1587.5 / 62.5 *
24	4	1587.5 / 62.5 *
20	8	1587.5 / 62.5 *
20	4	1587.5 / 62.5 *
16	8	1437.5 / 56.6 *
16	4	1437.5 / 56.6 *
12	8	1437.5 / 56.6 *
12	4	1437.5 / 56.6 *

* steel chassis

* 208V PDU bundled with MCB
230V PDU bundled with Resettable Fuse
Optional upgrade to MCB is available

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

		Lockable	Length
C13	C19		mm / inch
36			1775 / 69.9 *
32			1775 / 69.9 *
28			1800 / 70.9
24			1650 / 65.0
20			1425 / 56.1
16			1200 / 47.2
36	6		1775 / 69.9 *
30	6		1525 / 60.0 *
28	6		1525 / 60.0 *
28	4		1525 / 60.0 *
24	6		1525 / 60.0 *
20	6		1800 / 70.9
20	4		1650 / 65.0
16	6		1650 / 65.0
16	4		1425 / 56.1
12	6		1425 / 56.1
12	4		1200 / 47.2

230V - 16A / 32A

		Individual Fused	Length
C13	C19		mm / inch
36			1775 / 69.9 *
32			1775 / 69.9 *
28			1800 / 70.9
24			1650 / 65.0
20			1425 / 56.1
16			1200 / 47.2
36	6		1775 / 69.9 *
30	6		1525 / 60.0 *
28	6		1525 / 60.0 *
28	4		1525 / 60.0 *
24	6		1525 / 60.0 *
24	4		1800 / 70.9
20	6		1800 / 70.9
20	4		1650 / 65.0
16	6		1650 / 65.0
16	4		1425 / 56.1
12	6		1425 / 56.1
12	4		1200 / 47.2

Horizontal

230V - 10A / 16A / 20A / 32A
208V - 20A / 30A

		Height
C13	C19	U
20		2U
16		2U
12		2U
8		1U
	12	2U
	10	2U
	8	2U
	6	1U
	4	1U
20	4	2U
16	4	2U
12	4	2U
6	2	1U
4	4	1U

Intelligent PDU Product Code

Austin Hughes has designed a simple but informative InfraPower product code builder in order to let our clients determine the desired PDU configuration to meet their needs.

Code Structure

C13 - Wi / GF / LOCK

C19 - Wi / GF / LOCK

C13 / C19 - Wi / GF / LOCK

V C13 - Wi / GF / LOCK

V C19 - Wi / GF / LOCK

V C13 / C19 - Wi / GF / LOCK

V C13 - Wi / GF / LOCK

V C19 - Wi / GF / LOCK

V C13 / C19 - Wi / GF / LOCK

V C13 - Wi / GF / LOCK

V C19 - Wi / GF / LOCK

V C13 / C19 - Wi / GF / LOCK

Digit	Indication	Examples
	Form Factor	V = Vertical H = Horizontal
	Outlet nos	C13 : 36 / 32 / 28 / 24 / 20 / 16 / 12 / 8 C13 / C19 : 36 / 30 / 28 / 24 / 20 / 16 / 12 / 8 / 6 / 4 C19 : 24 / 20 / 16 / 12 / 10 / 8 / 4 C13 / C19 : 8 / 6 / 4 / 2
	Amp	230V : 10A / 16A / 20A / 32A / 63A 208V : 20A / 30A
	Circuit Protection	CR = Hydraulic Magnetic Circuit Breaker (MCB) F = Resettable Fuse
	Inlet	C14 : IEC320 C14 L620 : NEMA L6-20P C20 : IEC320 C20 L630 : NEMA L6-30P EN : IEC 60309 OE : Open end
	Cordset	3 = 3M / 9.84' (except 63A) 2 = 2M / 5.56' (63A only) * Custom length on request
	Bottom or top feed (only for vertical PDU)	B = Bottom feed T = Top feed
	Colored PDU casing (only for vertical PDU)	1 = Black 2 = White 3 = Red 4 = Blue
LOCK	Lockable	For vertical PDU only
GF	Individually Fused	For vertical PDU only



WSI Outlet Level Switched kWh PDU is the most feature rich model in InfraPower W Series PDU family. It combines all the W PDU series features : Monitoring of current, voltage, power, kWh energy consumption; Environmental temp. & humidity monitoring; Outlet level measurement ; plus individual outlet remote switch on / off. Same as other models in W series, 16 x WSi in daisy chain only require 1 x IP for remote access. WSi is the sophisticated PDU model designed for data center professionals with desire on high level PDU specification. By using the InfraPower management software IPM-03, WSi achieves the highly featured power distribution management for energy efficiency initiatives and capacity planning.

Temperature Humidity Monitoring	Power Factor Monitoring	Power (kVA, kW) Monitoring	Outlet Level Measurement
Voltage (V) Monitoring	Current (A) Monitoring	Energy (kWh) Monitoring	ON / OFF Outlet Switching



gUL certified for specific configurations

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

		Length
C13	C19	mm / inch
32		1800 / 70.9
28		1650 / 65.0
24		1425 / 56.1
20		1425 / 56.1
16		1200 / 47.2
12		1200 / 47.2
8		1200 / 47.2
	12	1200 / 47.2
	8	1200 / 47.2
	4	1200 / 47.2
36	6	1775 / 69.9*
30	6	1775 / 69.9*
28	4	1800 / 70.9
24	6	1650 / 65.0
24	4	1650 / 65.0
20	6	1650 / 65.0
20	4	1425 / 56.1
16	6	1425 / 56.1
16	4	1425 / 56.1
12	6	1200 / 47.2
12	4	1200 / 47.2
8	4	1200 / 47.2
8	2	1200 / 47.2

230V - 63A

		Length
C13	C19	mm / inch
32		1587.5 / 62.5*
28		1587.5 / 62.5*
24		1437.5 / 56.6*
16		1437.5 / 56.6*
	24	1437.5 / 56.6*
	20	1437.5 / 56.6*
	16	1437.5 / 56.6*
24	8	1587.5 / 62.5*
24	4	1587.5 / 62.5*
20	8	1587.5 / 62.5*
20	4	1587.5 / 62.5*
16	8	1437.5 / 56.6*
16	4	1437.5 / 56.6*
12	8	1437.5 / 56.6*
12	4	1437.5 / 56.6*

* steel chassis

* 208V PDU bundled with MCB
230V PDU bundled with Resettable Fuse
Optional upgrade to MCB is available

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

Lockable		Length
C13	C19	mm / inch
36		1775 / 69.9 *
32		1775 / 69.9 *
28		1800 / 70.9
24		1650 / 65.0
20		1425 / 56.1
16		1200 / 47.2
36	6	1775 / 69.9 *
30	6	1525 / 60.0 *
28	6	1525 / 60.0 *
28	4	1525 / 60.0 *
24	6	1525 / 60.0 *
20	6	1800 / 70.9
20	4	1650 / 65.0
16	6	1650 / 65.0
16	4	1425 / 56.1
12	6	1425 / 56.1
12	4	1200 / 47.2

230V - 16A / 32A









Individual Fused		Length
C13	C19	mm / inch
36		1775 / 69.9 *
32		1775 / 69.9 *
28		1800 / 70.9
24		1650 / 65.0
20		1425 / 56.1
16		1200 / 47.2
36	6	1775 / 69.9 *
30	6	1525 / 60.0 *
28	6	1525 / 60.0 *
28	4	1525 / 60.0 *
24	6	1525 / 60.0 *
24	4	1800 / 70.9
20	6	1800 / 70.9
20	4	1650 / 65.0
16	6	1650 / 65.0
16	4	1425 / 56.1
12	6	1425 / 56.1
12	4	1200 / 47.2








230V - 10A / 16A / 20A / 32A
208V - 20A / 30A








		Height
C13	C19	U
20		2U
16		2U
12		2U
8		1U
	12	2U
	10	2U
	8	2U
	6	1U
	4	1U
20	4	2U
16	4	2U
12	4	2U
6	2	1U
4	4	1U









Austin Hughes has designed a simple but informative InfraPower product code builder in order to let our clients determine the desired PDU configuration to meet their needs.








Code Structure








  C13 -  - WSi /  _  /   -  








  C19 -  - WSi /  _  /   -  








  C13 /  C19 -  - WSi /  _  /   -  







V  C13 -  - WSi / GF /  _  /   -  









V  C19 -  - WSi / GF /  _  /   -  

V  C13 /  C19 -  - WSi / GF /  _  /   -  

V  C13 -  - WSi /  _  /   -   / LOCK

V  C19 -  - WSi /  _  /   -   / LOCK

V  C13 /  C19 -  - WSi /  _  /   -   / LO

Digit	Indication	Examples
	Form Factor	V = Vertical H = Horizontal
	Outlet nos	C13 : 36 / 32 / 28 / 24 / 20 / 16 / 12 / 8 C13 / C19 : 36 / 30 / 28 / 24 / 20 / 16 / 12 / 8 / 6 / 4 C19 : 24 / 20 / 16 / 12 / 10 / 8 / 4 C13 / C19 : 8 / 6 / 4 / 2
	Amp	230V : 10A / 16A / 20A / 32A / 63A 208V : 20A / 30A
	Circuit Protection	CR = Hydraulic Magnetic Circuit Breaker (MCB) F = Resettable Fuse
	Inlet	C14 : IEC320 C14 L620 : NEMA L6-20P C20 : IEC320 C20 L630 : NEMA L6-30P EN : IEC 60309 OE : Open end
	Cordset	3 = 3M / 9.84' (except 63A) 2 = 2M / 5.56' (63A only) * Custom length on request
	Bottom or top feed (only for vertical PDU)	B = Bottom feed T = Top feed
	Colored PDU casing (only for vertical PDU)	1 = Black 2 = White 3 = Red 4 = Blue
LOCK	Lockable	For vertical PDU only
GF	Individually Fused	For vertical PDU only

High Density PDU Management

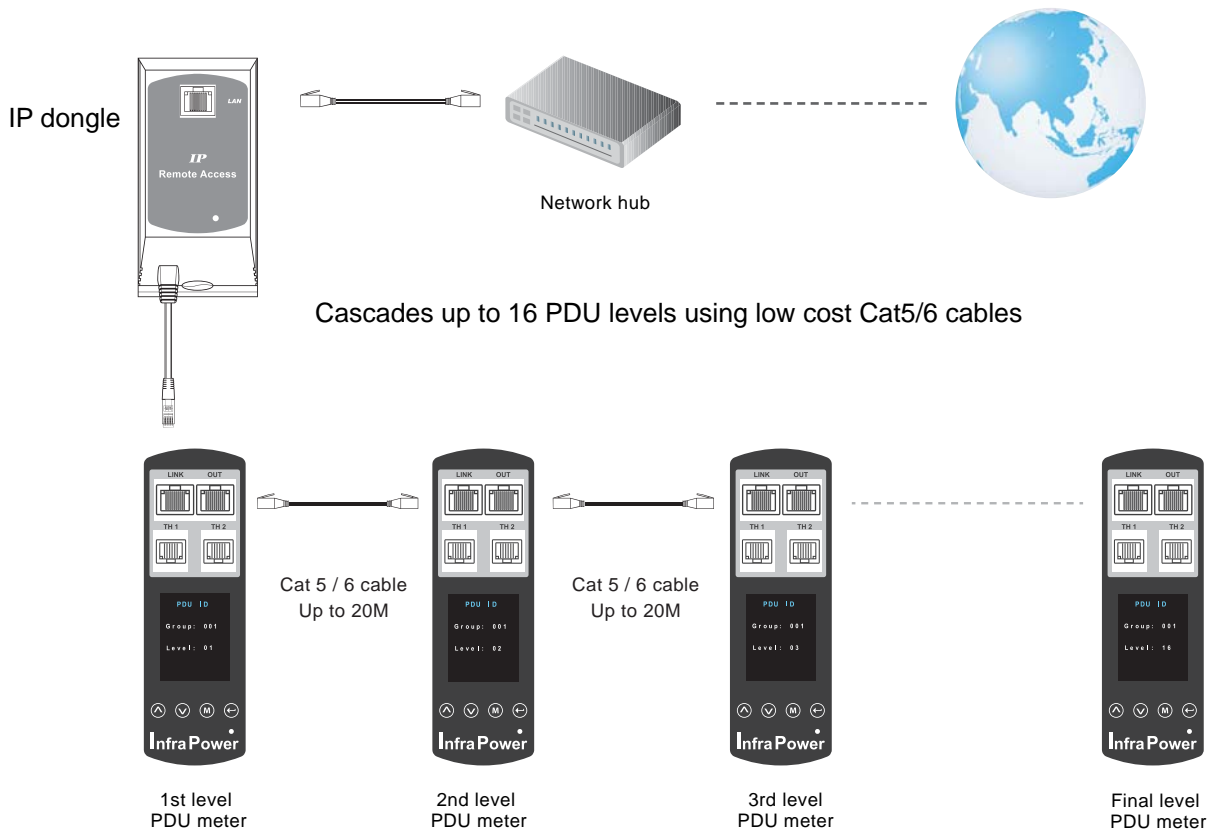
InfraPower features a high density flexible PDU system coupled with an equally flexible management software.

The W series PDUs support daisy chain connections and up to 16 PDUs can be cascaded via Cat6 cables. All the PDUs in the daisy chain can be accessed by one single network IP address.



PDU Daisy Chain Cascades up to 16 Levels

The W meter built-in not only provides the local power monitoring, but also the connection ports for the PDU daisy chain. For daisy chain connection, each PDU just simply to be connected in series to the next by Cat5/6 cables. Maximum 16 PDUs are supported in one daisy chain group.



IP Dongle Access to 16 PDU Levels

The patented 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.

The hot-pluggable design facilitates the IP dongle installation. Simply integrate the IP Dongle to the 1st PDU, then the entire daisy chain group can be remote accessed over IP.

Hence, administrator can remotely access all PDUs in the daisy chain group by one single IP via the IP Dongle.

IP Dongle models with SNMP support are available.



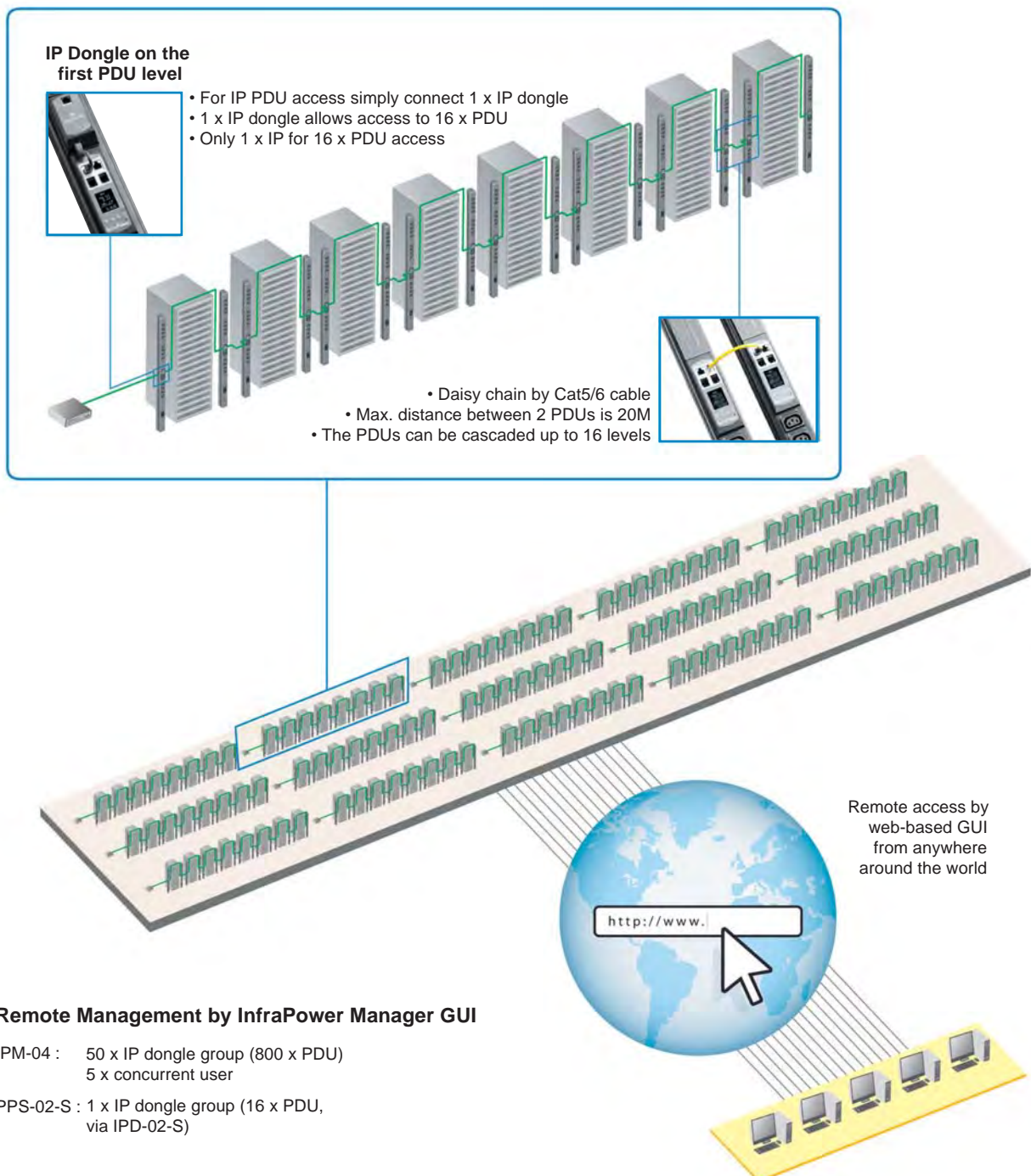
Management Software

InfraPower provides **FREE** software editions - IPM-04 / PPS-02-S

Each edition supports different capacity of PDU management and concurrent users.

Ultra High Density PDU Remote Management

W Series combines the edges of high efficient hardware connection and software remote management for an Ultra High Density PDU Remote Management.



W Meter - Advanced & Sophisticated

All W series PDUs are supplied with a W meter that provides the **cascade ports for daisy chain** up to 16 x PDUs. Furthermore, for **IP PDU access**, simply connect 1 x IP Dongle for all daisy chain PDUs. This allows use of a single IP address throughout the power network. **Two sensor ports** are integrated for temperature & humidity monitoring. Creatively, the 1.8" color LCD display offers a real time local monitoring and detailed PDU status.



By Field Replaceable Meter

For mission critical data centers where no amount of downtime or disruption is acceptable. The field replaceable 'W' Meter can be simply swapped without the need to power down.

Local Management by Meter

Display for PDU Monitoring <ul style="list-style-type: none"> Amp, Volt & Power Factor kWh Energy Consumption Active & Apparent Power Temp. & Humidity 	Display 1 Main Amp: 21.0 A: 8.2 B: 12.8 kWh: 4.62 Volt: 220.0 T1: 25.1°C T2: 25.8°C	Display 2 PDU ID Group: 240 Level: 16	Display 3 Temp / Hum T1: 25.1°C T2: 25.8°C H1: 78% H2: 66%	Display 4 Circuit A 8.2 Amp Peak: 16.3 Load Amp 03:59:23 31-Dec-09	Display 5 Circuit B 12.8 Amp Peak: 17.2 Load Amp 23:59:40 31-Jan-11
	Display 6 Outlet Amp / kWh (Wi and WSi series PDUs only) • Outlet Amp • Outlet kWh Std. Outlet C19 Outlet	Display 6.1 Outlet 01 IEC C13 1.0 Amp 0.22 kWh	Display 6.2 Outlet 02 IEC C13 3.0 Amp 0.66 kWh	Display 6.3 Outlet 03 IEC C13 4.0 Amp 0.88 kWh	Display 6.4 Outlet 04 IEC C13 5.0 Amp 1.10 kWh
W Meter provides the buttons to select the displays <div> <div> Up </div> <div> Down </div> <div> Enter </div> <div> Back </div> </div>				Display 7 Power Factor 0.9 Active Power 4.15kW Apparent Power 4.62kVA	Display 8 Energy Cumulative kWh 99999.99 From 23:59:00 30-Nov-06
Display for Local PDU Setting <ul style="list-style-type: none"> PDU Level Meter buzzer Meter screen PDU Outlet ON 	Display 9 Setup PDU ID Buzzer Screen OFF Outlet ON	Display 9.1 PDU ID Group: 240 Level: 01	Display 9.2 Buzzer Turn ON Turn OFF	Display 9.3 Screen OFF Auto: 60 OFF Min Turn OFF	Display 9.4 Outlet ON All ON

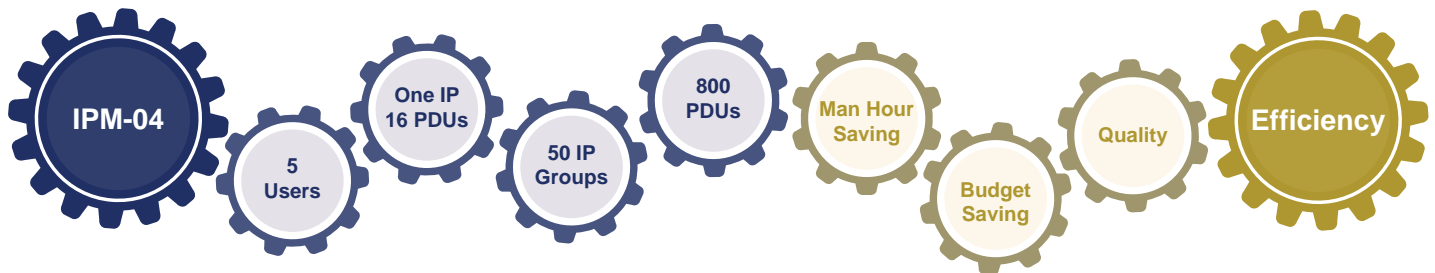
* For selective high density outlet & 63A configurations, 2.8" touchscreen display will be applied.

IPM-04 - Free but Powerful

InfraPower Manager IPM-04 is the free, powerful and user friendly PDU management software provided with W Series PDUs.

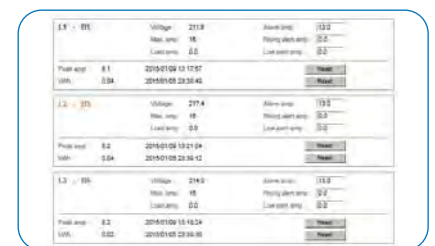
The Administrator can remotely manage the PDUs and the temperature / humidity sensors via the web browser. The Windows based software consolidates management of max. 800 single & three phase PDUs via 50 IP dongles. 5 concurrent user access licences are part of the IPM-04 bundle, for achieving the demand of multi-user requirements in data center operations.

IPM-04 provides complete PDU monitoring / control and reporting functions for your data center.



Features		
Capacity	IP Dongle Group (Just 1 for 16 PDU levels)	50
	PDU Number	800
	Concurrent Users	5
Enhanced Features	Outlet Level kWh & Amp Measurement	✓
	Outlet Scheduling	✓
	Energy Consumption (kWh) Monitoring	✓
	Apparent Power (kVA) Monitoring	✓
	Power Factor Measurement	✓
	Circuit Breaker (MCB) Monitoring	✓
Basic Features	Aggregate Current (Amp) Monitoring	✓
	Individual Outlet Switch ON / OFF	✓
	Temp-Humid Monitoring	✓
	Alarm Threshold Setting	✓
	Rising Alert Threshold	✓
	Remote Access via Web	✓
	Graphic User Interface	✓
	Reporting	✓
PDU Series Support	Single & 3 Phase W - Monitored PDU	✓
	Single & 3 Phase WI - Monitored PDU (Outlet Measurement)	✓
	Single & 3 Phase WS - Switched PDU	✓
	Single & 3 Phase WSI - Switched PDU (Outlet Measurement)	✓

PDU Monitoring



Temp. & Humid. Monitoring



Reporting



IP Dongle for Vertical PDU IP Dongle for Horizontal PDU

- Patented design
- Hot pluggable for easy integration
- Allows IP remote access to the PDUs by a single network IP
- One IP dongle supports max. 16 PDUs in daisy chain
- Highly cost effective method to access the intelligent PDUs
- SNMP capability v2 / v3



IPD-02-S
IPD-H02-S

Temp. & Humid. Sensor Temp. Sensor

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



IG-TH01-2M / 4M
IG-T01-2M / 4M

MCB

- Hydraulic magnetic circuit breaker
- Overload switch
- Designed to prevent accidental on / off operation
- Safety Regulatory :
UL / cUL / TUV / CE
- **230V**
10A - 1-pole 10A MCB x 1
16A - 1-pole 16A MCB x 1
20A - 1-pole 20A MCB x 1
32A - 1-pole 16A MCB x 2
63A - 1-pole 16A MCB x 4



- **208V**
15A - 1-pole 16A MCB x 1
20A - 1-pole 20A MCB x 1
30A - 1-pole 16A MCB x 2

Resettable Fuse

- Protect load segments for increased reliability
- Overload reset buttons
- Safety Regulatory :
UL / cUL / CSA / TUV / CCC / VDE
- **230V**
10A - 1-pole 10A Fuse x 1
16A - 1-pole 16A Fuse x 1
20A - 1-pole 20A Fuse x 1
32A - 1-pole 16A Fuse x 2
63A - 1-pole 16A Fuse x 4



- **208V**
15A - 1-pole 16A Fuse x 1
20A - 1-pole 20A Fuse x 1
30A - 1-pole 16A Fuse x 2

Surge Protector

- Enhances the device protection
- Grounds unwanted voltages above safe threshold



- Surge suppression** : 2,700 Joules
- Max surge current** : 75,000 Amps
- Max surge voltage** : 6,000 Volts
- Response Time** : 1 nanosecond
- Earth Red LED** : Normal - on
Faulty - off
- Protect Green LED** : Normal - on
Faulty - off

EMI Filter

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



- **230V**
16A - EMI filter x 1
20A - EMI filter x 1
32A - EMI filter x 2
- **208V**
15A - EMI filter x 1
20A - EMI filter x 1
30A - EMI filter x 2

Colored Power Cords

- Enhance cable management and visualize power sources

C13 - C14 6ft (1.0 mm²)

- EC-6PC1314-B Blue
- EC-6PC1314-R Red
- EC-6PC1314-O Orange
- EC-6PC1314-G Light Grey



C13 - C14 10ft (1.0 mm²)

- EC-10PC1314-B Blue
- EC-10PC1314-R Red
- EC-10PC1314-O Orange
- EC-10PC1314-G Light Grey

C19 - C20 6ft (1.5 mm²)

- EC-6PC1920-B Blue
- EC-6PC1920-R Red

Colored PDU Casing

- Visualize power sources

Color	Part No.
Blue	CC-B
Red	CC-R
Light Grey	CC-LG



Suggested Combination :

- Blue + Red
- Light Grey + Standard Black

IEC Secure Sleeves

Sleeve attached to C14 power cord inlet :
IPP-SS-C13 (pack of 200)

Sleeve attached to C20 power cord inlet :
IPP-SS-C19 (pack of 100)

- Secure the power cord connections to the PDU IEC outlets
- Simple and cost efficient



IPP-SS-C13
IPP-SS-C19

External PDU Display

- Plug & Play
- Support two PDU displays with amp. and temp.
- Adjustable Mounting Kit for easy installation to cabinet door
- Bundled 3m RJ-11 cable x 2
- For 2.8" touchscreen meter only



IP-ED-02

Vertical Button Mounting Kit

- Quick and Tool-less integration simplifies PDU installation
- Designed for particular global branded cabinet with key hole type mounting holes on rear verticals



VMS

Vertical Bracket Mounting Kit

- Universal mounting kit supports all cabinet models
- Easy integration by mounting the PDU to the cabinet cable tray



VMB

Founded in 1995, **Austin Hughes Electronics Ltd** is a design and manufacturing group that offers a broad range of solutions based around 19 inch rackmount technology. These solutions include InfraSolution remote access control and locking, InfraPower intelligent remote management power solutions, CyberView LCD Keyboard and KVM drawers & InfraCool intelligent remote cooling system.

Austin Hughes has ISO14001 and ISO9001 approved design, manufacturing, assembly and test facilities in Hong Kong and China. Austin Hughes supports a worldwide customer base, through its global locations in the Americas, EMEA and APAC and through its extensive authorized channel partner support network.

APAC

Austin Hughes Electronics Ltd.

Unit 3608-12, Cable TV Tower
9 Hoi Shing Road, Tsuen Wan
Hong Kong

Email: inquiry@austin-hughes.com

China

Austin Hughes Electronics (China) Ltd.

Hexi Road No.2, Jinxia Industrial Area
Changan Town, Dongguan City
Guangdong Province 523850
China

Americas

Austin Hughes Solutions Inc.

41320 Boyce Road, Fremont
CA 94538
USA

Email: inquiry@austin-hughes.com

EMEA

Austin Hughes Europe Ltd.

Unit 1, Chancery Gate Business Centre
Manor House Avenue
Southampton, SO15 0AE
United Kingdom

Email: info@austin-hughes.eu



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

www.austin-hughes.com

Please ask for details of other products from Austin Hughes. Every effort has been made to ensure that the information contained herein is correct. There is a possibility that the image(s) shown may not be exactly the same as the final product. The company reserves the right to modify product specifications without prior notice and assumes no responsibility for any error which may appear in this publication.

All brand names, logo and registered trademarks are properties of their respective owners.

Copyright 2017 Austin Hughes Electronics Ltd. All rights reserved.

Distributed by:

Distributor by country on application

InfraPower-W-IEC-208V-230V-SinglePhase-Q117V1