

Austin Hughes - Leading Edge Solutions



Rack Solutions

- Power
- Security
- Airflow
- Sensor
- Screen
- KVM

IT Solutions

- Web Power Reboot
- Professional LCD

Leading Edge Solutions

Design. Manufacturing. Global Services.

Founded in 1995, Austin Hughes is a design and manufacturing group that offers a broad range of solutions based around 19 inch rack mount and IT technologies. Providing world class expertise, quality products and unrivalled service to our clients globally.

We support a worldwide customer base through global locations in the Americas, EMEA, APAC and ASEAN which is complimented by an extensive authorized channel partner network in all regions. Our experienced teams are committed to providing a truly harmonised support structure. Our expertly trained sales and technical teams fully cater for customer specific requirements on all our solutions with exemplary pre and post sale services.

At Austin Hughes we are committed to sustainable manufacturing and continually assessing our processes to reduce our energy consumption and the use of hazardous materials across our global facilities. We provide rack mount solutions that help manage power capacity, reduce downtime and energy costs and improve energy efficiency for our clients, enabling them to make informed capacity planning decisions and improve operational efficiency. Our solutions are Reach, RoHS and PFOC compliant, and are manufactured in accordance with the strictest BSI ISO 14001 quality achievement.



InfraPower®

Rack Power Management

- >> Intelligent, Metered & Basic PDUs
- >> Intelligent & Metered ATS
- >> In-Line Meter
- >> Lockable IEC Outlets & Color Power Cords

InfraCool®

Rack Airflow Control

- >> Door Mount Fan Panel, Intelligent or Basic
- >> 1U Rack Mount Fan Tray, Intelligent or Basic
- >> Raised Floor Mount Fan Panel, Intelligent or Basic



InfraGuard

Rack Sensor System

- >> Temperature + Humidity
- >> Temperature
- >> Smoke
- >> Shock
- >> Water Leakage
- >> Door Open/ Close
- >> Alarm Beacon
- >> LED Light Bar

InfraSolution®

Rack Access Control

- >> S700 Standalone SmartCard & NumPad Access
- >> S800 Standalone SmartCard Access
- >> X800 Networked SmartCard Access



CyberView™

Rack KVM & Screen

- >> KVM Switch
- >> LCD Console Drawer
- >> LCD Display Panel & Drawer
- >> Multiple LCD Display Drawer

UltraView

Professional LCD

- >> 4K - 55", 43", 32", 28", 23", 17", 15" & 13"
- >> FHD - 55", 43", 32", 28", 23", 21", 17", 15" & 13"
- >> FHD 144Hz - 27" & 17"
- >> WUXGA - 24" & 17"
- >> 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 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.

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				✓	✓	✓	✓
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				✓	✓	✓	✓
SNMP Capability V1 / V2 / V3				✓	✓	✓	✓
Phase Balance % for 3-Phase PDUs			✓	✓	✓	✓	✓
Local Meter		✓	✓	✓	✓	✓	✓
Resettable Fuse / Hydraulic MCB	✓	✓	✓	✓	✓	✓	✓
Options : ELCR / Surge Protector / EMI Filter	✓	✓	✓	✓	✓	✓	✓
RCM (Residual Current Monitoring Module)				✓	✓	✓	✓
Temp., Humidity, Smoke & Door Sensors				✓	✓	✓	✓
Door Mount PDU Panel w/ 4.3" Color LCD				✓	✓	✓	✓
WiFi Kit (Supports Max. 32 Daisy Chained PDUs)				✓	✓	✓	✓
Tool-less Mounting for Vertical PDU	✓	✓	✓	✓	✓	✓	✓
0U / 1U / 2U Form Factors	✓	✓	✓	✓	✓	✓	✓
Operating Temperature -5 to 60°C	✓	✓	✓	✓	✓	✓	✓
Outlet : US NEMA / C13 / C19 / UK / SCH / FR	✓	✓	✓	✓	✓	✓	✓
Lockable IEC	✓	✓	✓	✓	✓	✓	✓
Fused IEC	✓	✓	✓	✓	✓	✓	✓
Dual Feed PDU model	✓	✓	✓	✓	✓	✓	✓
Custom PDUs on Request	✓	✓	✓	✓	✓	✓	✓



1 Phase

230V 16A / 20A / 32A

Outlet			PDU Chassis	
UK	C13	C19	Vertical	Rackmount
24			✓	
20			✓	
16			✓	
12			✓	
10			✓	
8			✓	✓
7			✓	✓
6			✓	✓
8	16	4	✓	
8	8	4		✓
8	8	2		✓
8	6	4		✓
4	20	4	✓	
4	20	4	✓	
4	16	4	✓	
4	12	4	✓	
4	8	4	✓	

Outlet			PDU Chassis	
SCH / FR	C13	C19	Vertical	Rackmount
20			✓	
16			✓	
12			✓	
8			✓	✓
7				✓
6				✓
4	20	6	✓	
4	20	4	✓	
4	16	4	✓	
4	12	4	✓	
4	8	4	✓	
8	8	4		✓
8	8	2		✓
8	6	4		✓

230V 16A / 20A / 32A

Outlet		PDU Chassis	
C13	C19	Vertical	Rackmount
36	6	✓	
30	6	✓	
28	6	✓	
28	4	✓	
24	6	✓	
24	4	✓	
21	3	✓	
20	6	✓	
20	4	✓	✓
20	2	✓	
16	4	✓	✓
16	2	✓	
12	12	✓	
12	4	✓	✓
12	2	✓	
8	4	✓	
8	2	✓	✓
6	2		✓
4	4		✓
36		✓	
32		✓	
28		✓	
24		✓	✓
20		✓	✓
16		✓	✓
12		✓	✓
10		✓	✓
8		✓	✓
6			✓
4			✓
	12		✓
	10		✓
	8		✓
	6		✓
	4		✓

208V 20A / 30A

110V 15A / 20A / 30A

Outlet		PDU Chassis	
US NEMA		Vertical	Rackmount
36		✓	
32		✓	
28		✓	
24		✓	✓
20		✓	✓
16		✓	✓
12		✓	✓
10		✓	✓
8		✓	✓

Inlet & Cordset

Inlet (1-PH 230V)		Amp	Cordset	
			mm²	length
	60309	32A	4	3 M
	Open end	20A	2.5	3 M
	60309	16A	1.5	3 M
	C20			
	BS1363 UK	13A	1.5	3 M
	Schuko			
	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	30A	10	10 FT
	5-30P			
	L5-20P	20A	12	10 FT
	5-20P			
	5-15P	15A	14	10 FT

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	30A	10	6.6 FT
	L21-30P			
	L15-20P	20A	12	6.6 FT
	L21-20P			

3 Phase

400V 16A / 32A

Outlet		PDU Chassis	
UK		Vertical	Rackmount
24		✓	
21		✓	
18		✓	

Outlet		PDU Chassis	
SCH / FR		Vertical	Rackmount
24		✓	
21		✓	
18		✓	

400V 16A / 32A / 63A

208V 20A / 30A / 50A / 60A

Outlet		PDU Chassis	
C13	C19	Vertical	Rackmount
36	12	✓	
36	6	✓	
30	12	✓	
30	6	✓	
24	12	✓	
24	6	✓	
21	3	✓	
18	6	✓	✓
12	12	✓	
12	6	✓	✓
6	3		✓
48		✓	
42		✓	
36		✓	
30		✓	
24		✓	✓
18		✓	✓
12			✓
	24	✓	
	18	✓	
	12	✓	✓
	9		✓
	6		✓

* Rackmount PDU chassis available for 400V 16A/32A & 208V 20A/30A standard configurations



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



Custom configurations available on request

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



iPDU

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

Volt / Bal		
Volt	226.2	L1
	219.2	L2
	223.2	L3
Bal %	101.5	L1
	98.3	L2
	100.1	L3

PDU ID	
Group :	050
Level :	16

L3 Power	
Factor	0.50
Active	0.92 kW
Apparent	1.84 kVA
71,877.22 kWh	
1 Jan 21 / 23:59:40	

◀ Outlet ▶

B1

◀ 01 ▶

Amp 10.9

kW 1.23

B1	B3	B5
B2	B4	B6

TH	
T1	23.4 °C
T2	24.5
H1	63.4 %
H2	56.5

System	
Time	23:59:40
Date	15 Jan 15
F/W	WS-400V-48-V7
Serial no.	20315150588-1120-P001
Model no.	VP24C13/12C18
	>32A-WS-CR_EN/2B-1

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.



IPD-03-S
PDU IP Dongle - Dual LAN
Up to 32 levels in daisy chain



Dual LAN Network Failure

- ▶ 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
- ▶ 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

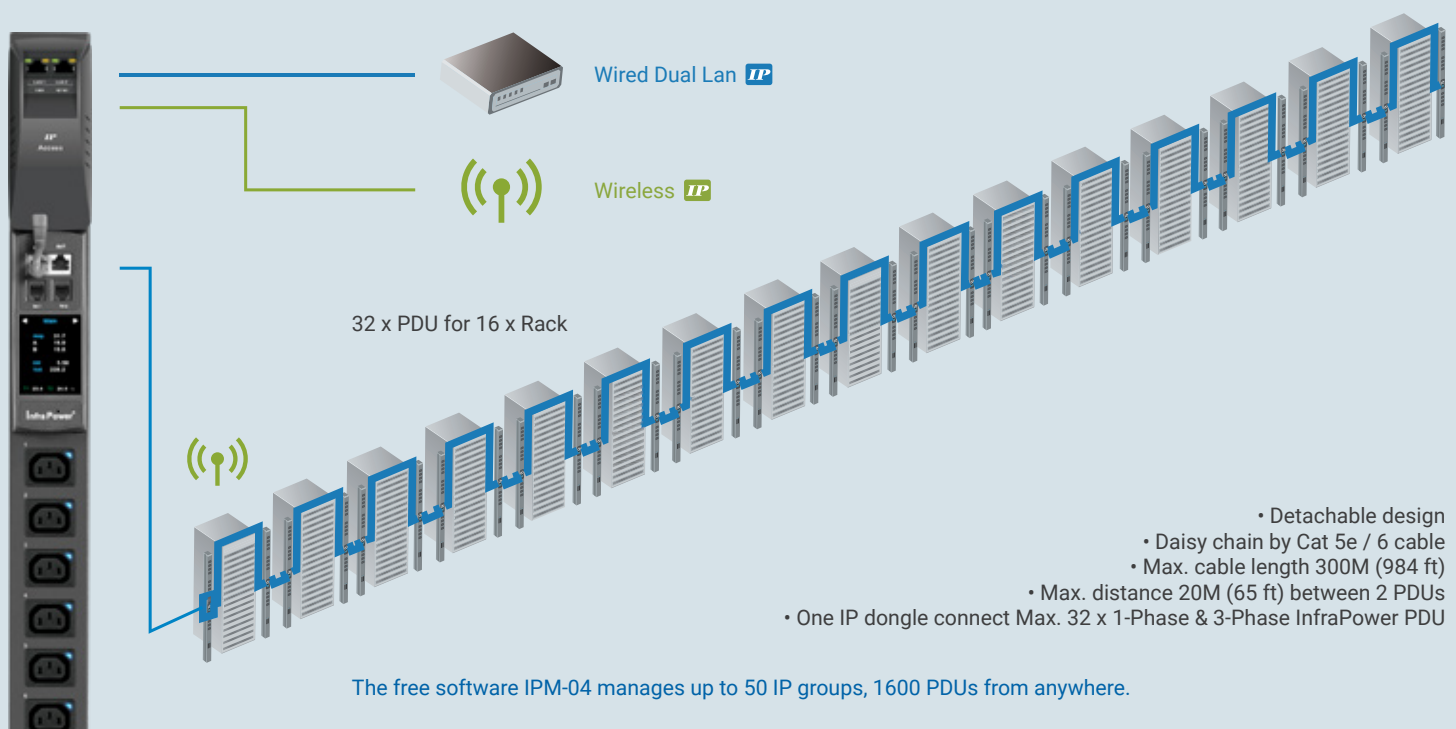
- ▶ Receive alerts via SNMP, email (SMTP), and syslog when predefined thresholds are exceeded for both iPDU and environmental sensor events.
- ▶ Common SNMP MIBs (Management Information Base) across all iPDU families

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 software 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.



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.



Free Download



Built-in



via SNMP



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 users who simply require the power monitoring and input switching over IP.

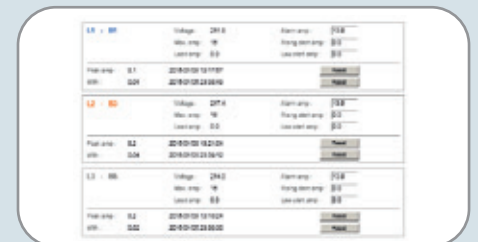
3rd Party DCIM via SNMP V2/V3

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 integration and hence user can remotely manage the PDU via their DCIM.

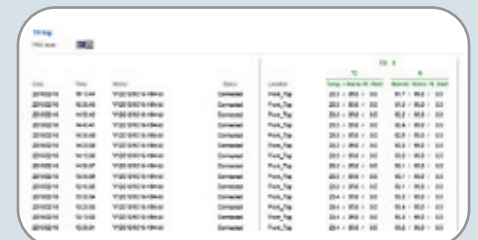
IPM-04 Managment Software

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	✓
Circuit breaker monitoring	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)	✓

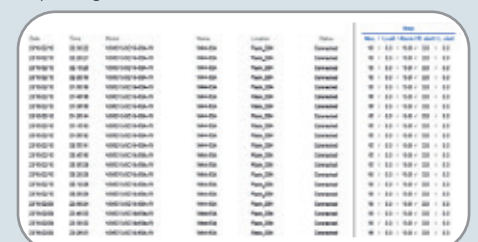
PDU Monitoring



Temp. & Humid. Monitoring

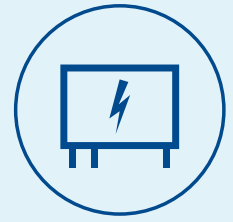


Reporting



Outlet ON/OFF Switching & Latching Relay

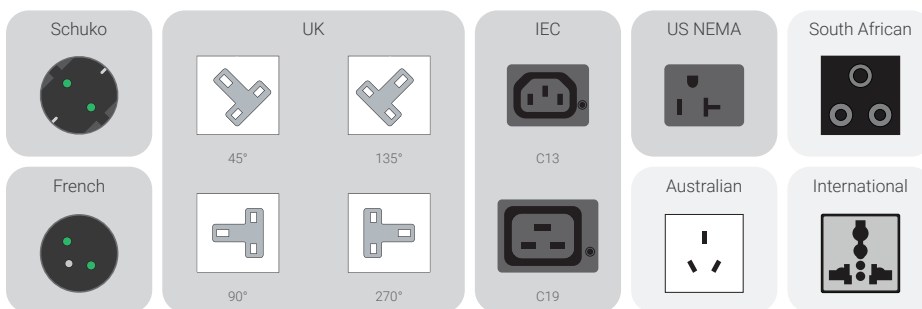
Outlet LEDs are built-in for WS & WSi PDU models with outlet switching functionality. Outlet switching is controlled via latching relays. Ensuring an 'always on' operational performance and outlet status returning to a pre-power outage after a planned or unplanned shutdown. Power consumption during normal/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



Broadest Outlet Selection for Rack PDU

Standard InfraPower PDU configurations cover the most popular outlets in rack PDU market : IEC, US NEMA, UK BS1363, German Schuko & French outlets.

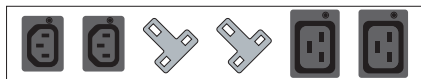
For project based custom requirements, specific outlets (e.g. Australian, South African or International) are also available.



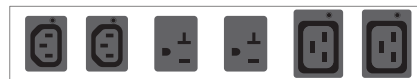
Multiple Outlet Configurations

Multiple outlets provide flexibility on variety of power connection to different devices.

UK + IEC



US NEMA + IEC



Schuko + IEC



French + IEC



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

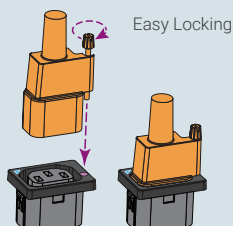
C13



Switched Outlet
Built in LED



Regular Outlet
No LED



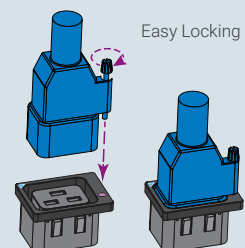
C19

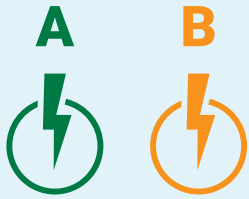


Switched Outlet
Built in LED



Regular Outlet
No LED





Colored PDU Power Feed Differentiation

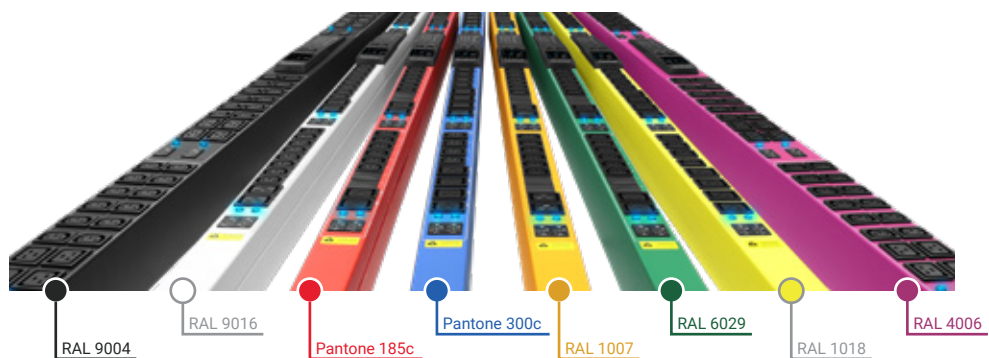
The use of colors at rack PDU and cord levels has become a huge market trend with most organizations favouring different colors in the rack for the A & B primary and redundant feeds into equipment. Colored PDU chassis & power cords are available to achieve such power source visualization & cable management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



Colored UK Power Cord

- Enhance cable management and visualize power sources

- Selection : Blue / Red

UK - C13 (0.75 mm²): 3ft / 6ft



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:
0.5M / 1M / 2M



C19 - C20:
0.5M / 1M



W series PDU meter includes a pair of connection ports for sensors & peripherals. It provides a simple and affordable solution for customers to monitor 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, temperature, humidity, smoke or door status
- Alarm
- Viewable while doors in closed position

- Resistive touchscreen
- Resolution 480 x 272
- 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 with 1M or 3M cord
- When smoke alarm is triggered the sensor activates the red LED light and audible alarm sounds continuously

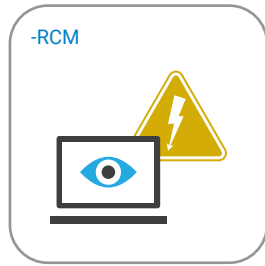
IP-DSW-2M/4M



Door Sensor

- Mechanical door sensor with 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.



Residual Current Monitor (RCM)

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



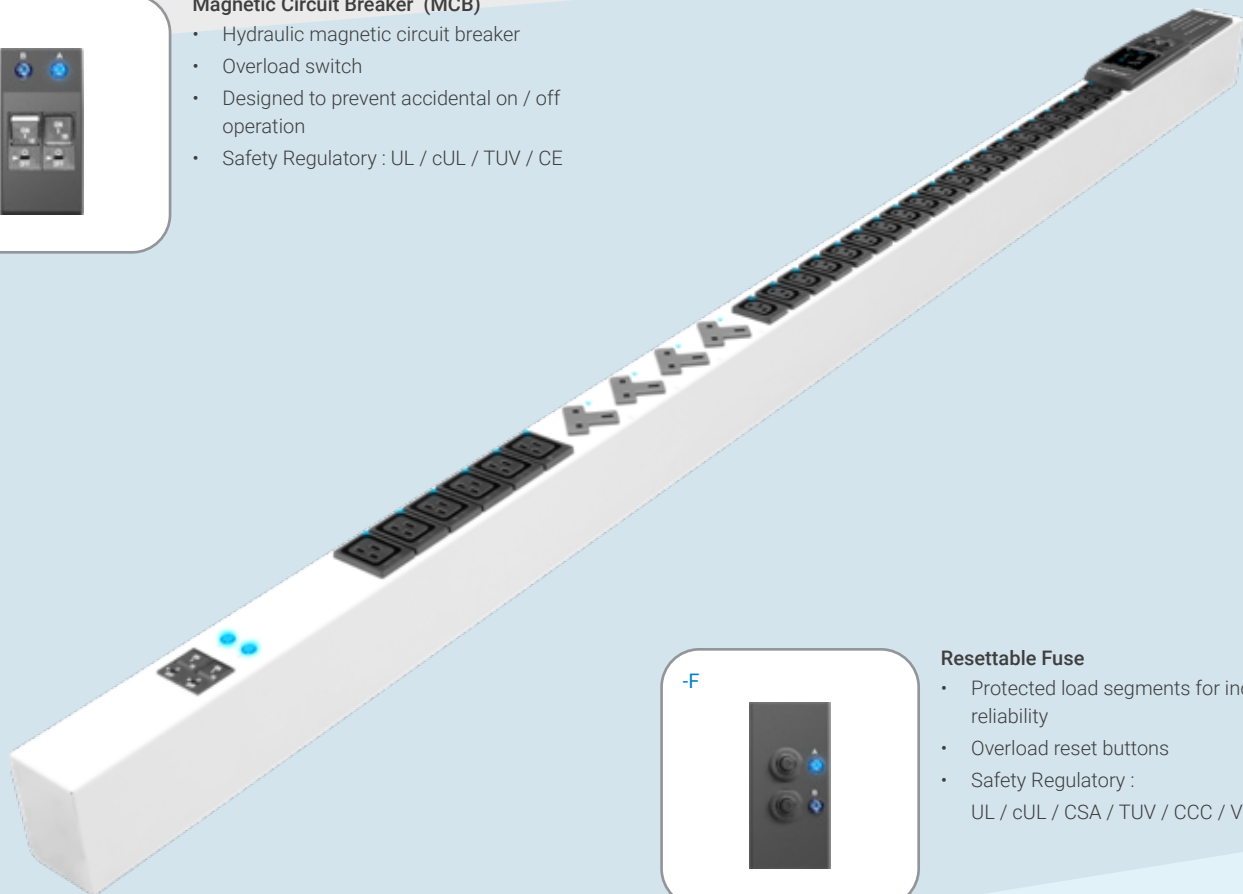
Earth-leakage Circuit Breaker

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



Magnetic Circuit Breaker (MCB)

- Hydraulic magnetic circuit breaker
- Overload switch
- Designed to prevent accidental on / off operation
- Safety Regulatory : UL / cUL / TUV / CE



Resettable Fuse

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



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 Filter

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



◀ 60mm ▶ | ◀ 54mm ▶



Vertical 0U - Slim Design

For efficient rack mounting, InfraPower vertical PDU steel chassis for single outlet row is designed with a slim profile
 > 54mm for IEC / US NEMA Outlet PDUs
 > 60mm for UK / Schuko Outlet PDUs

Bottom/ Top Power Feed

When selecting a rack PDU it is important to consider the power input feed route through the rack enclosure.

As standard InfraPower PDUs are supplied as bottom fed. For installations where the power feed is positioned at the top of the rack, the option of top feed PDUs is available.

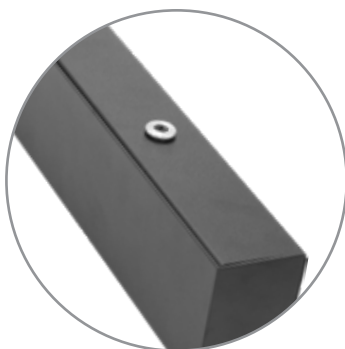


Horizontal 1U/ 2U

PDUs are available to be mounted either vertically (0U) or horizontally (1U/2U) inside the rack. Most PDU manufacturers focus on 0U PDUs, with limited options for horizontal PDUs. Austin Hughes offers a wide range of InfraPower 1U/2U rackmount PDUs including custom configurations to meet client needs.

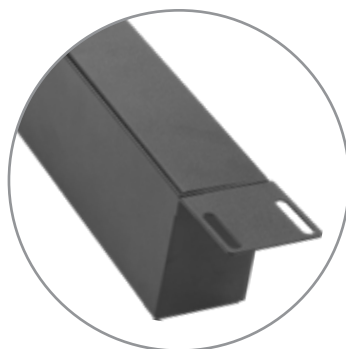
Vertical Button Mounting Kit

Quick and tool-less integration. Designed for global branded racks with key hole type mounting holes. Included with vertical PDU.



Vertical Bracket Mounting Kit

Universal mounting kit supports all IT rack models. Easy integration by mounting the PDU to the rack cable tray. Included with vertical PDU.



Horizontal Rackmount Kit

Design for 19" Rackmount. Included with 1U/2U PDU.

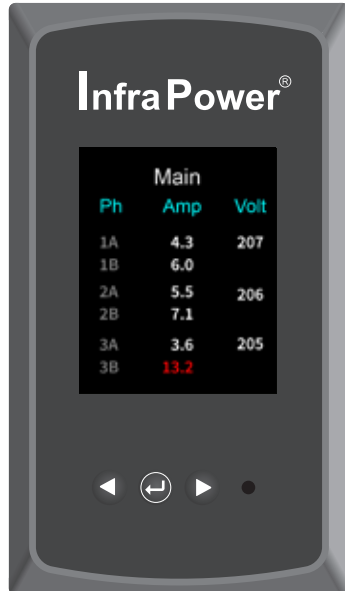


InfraPower Basic PDUs are designed for cost efficient and reliable power distribution in data center.

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.

User can meet end to end equipment and management requirements using InfraPower PDUs whilst meeting budget and application demands.

3 Phase MK Metered PDU



MK Meter

..... Hot-Swappable Meter

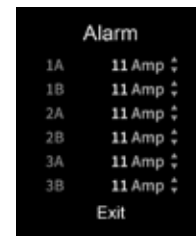
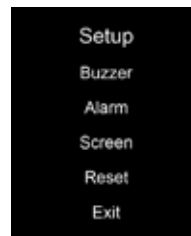
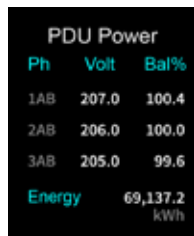
..... 1.8" Color LCD Display

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

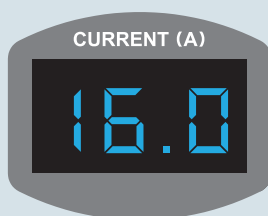
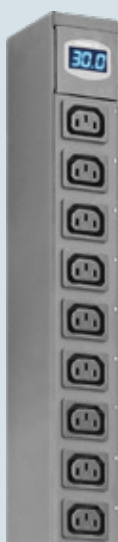
..... Display Selection Buttons

* 1-Phase MK meter available on request

Meter Reading & Setting



1 Phase MD Metered PDU



MD Meter

- 1 Phase Local Metering
- True RMS ammeter
- Circuit Amp Measurement
- Blue light LED

1 Phase / 3 Phase Basic PDU



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

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.



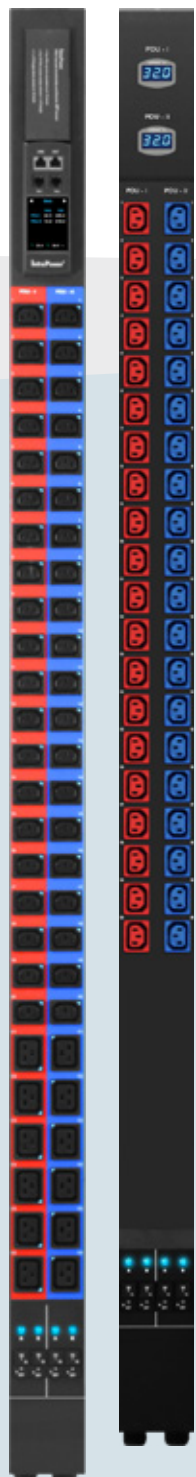
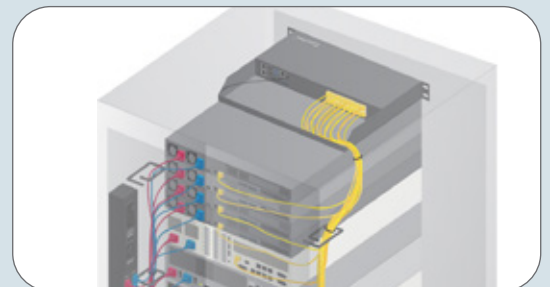
Save Network IP Cost

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.



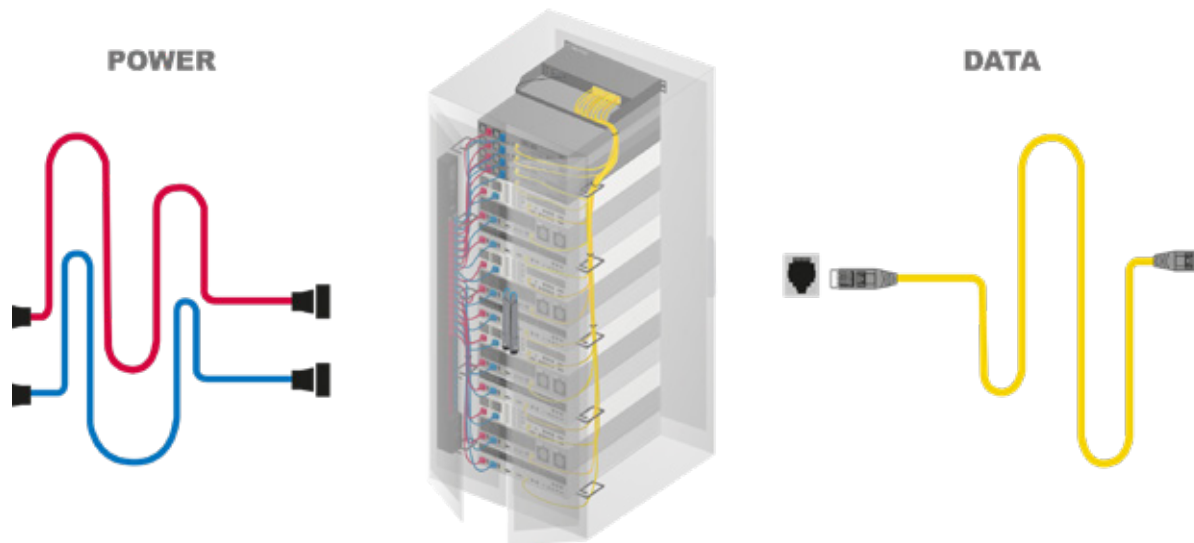
Facilitate Cable Management

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.



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

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		✓

208V 20A / 30A

3 Phase

400V 16A / 32A

Outlet nos			PDU Chassis	
C13	C19		Vertical	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	✓	

208V 20A / 30A

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

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

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

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	30A	10	6.6 FT
	L21-30P			
	L15-20P	20A	12	6.6 FT
	L21-20P			



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



Custom configurations available on request



REACH

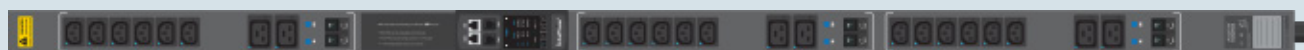
RoHS3
COMPLIANCE

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 / UK / Schuko / FR Outlet	Qty	Refer to P.3 for Qty	No Code Required for Nothing
3b		Name	US = US NEMA ; UK45/135/90/270 = UK ; SCH = German Schuko CEE 7/3 ; FR = French CEE 7/5	
4a	C13 Outlet (if any)	Qty	Refer to P.3 for Qty	No Code Required for Nothing
4b		Name	C13 = IEC C13	
5a	C19 Outlet (if any)	Qty	Refer to P.3 for Qty	No Code Required for Nothing
5b		Name	C19 = IEC C19	
6	Amp Rating		Single Phase 230V : 10A / 13A / 16A / 20A / 32A ; 208V : 20A / 30A ; 110V : 15A / 20A / 30A	
			Three Phase 400V : 16A / 32A / 63A ; 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 / No Code Required if No MCB or Fuse / ELCB = Earth-leakage Circuit Breaker	
9	Inlet		Single Phase EN = 60309 / 6mmEN = 60309 with 6mm² cordset / OE = Open-end / C20 = C20 / UK = UK / SCH = Schuko 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		1 = Black (Standard for Single Feed) / 2 = White / 3 = Red / 4 = Blue / 5 = Green / 6 = Orange / 7 = Yellow / 8 = Purple	
13	Extra Options		SPT = Surge Protector / EMI = EMI Filter / RCM = Residual Current Monitor	

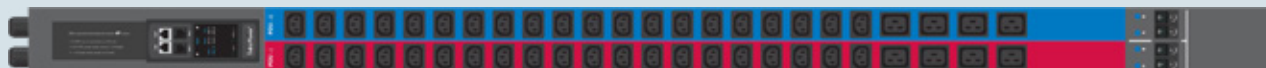
Example 1:

Part Code : VP18C13/6C19-32A-WSi/CR_EN/2B-1
 Model : WSi iPDU with Circuit Monitoring + Outlet Monitoring + Outlet Switching
 Configuration : Single Feed, Vertical, Three Phase, C13 x 18 + C19 x 6, 32A, MCB, 60309 Inlet, 2M 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 Cordset, Top Feed, Standard Dual Feed PDU Chassis Colors (Red Layout for PDU-I + Blue Layout for PDU-II)



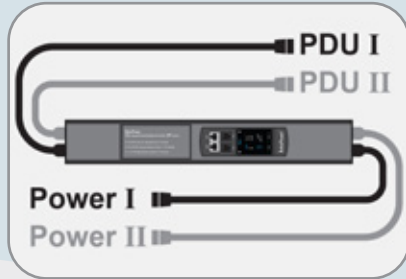
Example 3:

Part Code : H8UK90-32A-MD/F_EN/3B-2
 Model : MD Metered PDU
 Configuration : Single Feed, Horizontal Rackmount, Single Phase, UK (90°) x 8, 32A, Fuse, 60309 Inlet, 3M Cordset, White Chassis



For legacy sites where basic rack PDUs have been previously installed, Inline Meters provide an ideal upgrade solution to enable real-time power monitoring. InfraPower Inline Meter is the most effective PDU enhancement approach which can be retrofitted to basic PDUs to enable local monitoring plus remote management.

Power Feed - Single or Dual



Display & Mounting - Vertical or Horizontal



Save IP Cost - Max 32 Cascade Levels



Single Phase

Dual Feed Inline Meter

230V Model	Amp	Inlet (Male)	Outlet (Female)
DEW-16A_EN	16A → 16A	16A EN x 2	16A EN x 2
DEW-32A_EN	32A → 32A	32A EN x 2	32A EN x 2

208V Model	Amp	Inlet (Male)	Outlet (Female)
DEW-20A_L620	20A → 20A	L6-20P x 2	L6-20C x 2
DEW-30A_L630	30A → 30A	L6-30P x 2	L6-30C x 2

110V Model	Amp	Inlet (Male)	Outlet (Female)
DEW-15A_515	15A → 15A	15A 5-15P x 2	15A 5-15R x 2
DEW-20A_520	20A → 20A	20A 5-20P x 2	20A 5-20R x 2
DEW-20A_L520	20A → 20A	20A L5-20P x 2	20A L5-20R x 2
DEW-30A_530	30A → 30A	30A 5-30P x 2	30A 5-30R x 2
DEW-30A_L530	30A → 30A	30A L5-30P x 2	30A L5-30R x 2

* 1.5m cordset standard for inlet & outlet. Specific cordset length available.

** Bundled Inline Meter mounting kit supports rackmount or vertical mount.

Single Feed Inline Meter

230V Model	Amp	Inlet (Male)	Outlet (Female)
EW-16A_EN	16A → 16A	16A EN	16A EN
EW-32A_EN	32A → 32A	32A EN	32A EN

208V Model	Amp	Inlet (Male)	Outlet (Female)
EW-20A_L620	20A → 20A	L6-20P	L6-20C
EW-30A_L630	30A → 30A	L6-30P	L6-30C

110V Model	Amp	Inlet (Male)	Outlet (Female)
EW-15A_515	15A → 15A	15A 5-15P	15A 5-15R
EW-20A_520	20A → 20A	20A 5-20P	20A 5-20R
EW-20A_L520	20A → 20A	20A L5-20P	20A L5-20R
EW-30A_530	30A → 30A	30A 5-30P	30A 5-30R
EW-30A_L530	30A → 30A	30A L5-30P	30A L5-30R

Three Phase

Dual Feed Inline Meter

400V Model	Amp	Inlet (Male)	Outlet (Female)
DPW-16A_EN	16A → 16A	16A EN x 2	16A EN x 2
DPW-32A_EN	32A → 32A	32A EN x 2	32A EN x 2
DPW-63A_EN	63A → 63A	63A EN x 2	63A EN x 2

208V Model	Amp	Inlet (Male)	Outlet (Female)
DPW-20A_L15-20P	20A → 20A	20A L15-20P x 2	20A L15-20C x 2
DPW-20A_L21-20P	20A → 20A	20A L21-20P x 2	20A L21-20C x 2
DPW-20A_L15-30P	20A → 20A	30A L15-30P x 2	30A L15-30C x 2
DPW-30A_L21-30P	30A → 30A	30A L21-30P x 2	30A L21-30C x 2
DPW-50A_CS8365C	50A → 50A	50A CS8365 x 2	50A CS8364 x 2
DPW-60A_EN	60A → 60A	60A EN x 2	60A EN x 2

* 1.5m cordset standard for inlet & outlet. Specific cordset length available.

** Bundled Inline Meter mounting kit supports rackmount or vertical mount.

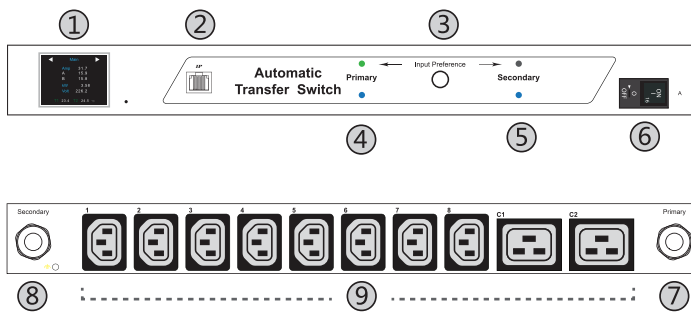
Single Feed Inline Meter

400V Model	Amp	Inlet (Male)	Outlet (Female)
PW-16A_EN	16A → 16A	16A EN	16A EN
PW-32A_EN	32A → 32A	32A EN	32A EN

208V Model	Amp	Inlet (Male)	Outlet (Female)
PW-20A_L15-20	20A → 20A	L15-20P	L15-20C
PW-20A_L21-20	20A → 20A	L21-20P	L21-20C
PW-30A_L15-30	20A → 20A	L15-30P	L15-30C
PW-30A_L21-30	30A → 30A	L21-30P	L21-30C
PW-50A_CS8365C	50A → 50A	CS8365	CS8364
PW-60A_L530	60A → 60A	60A EN	60A EN

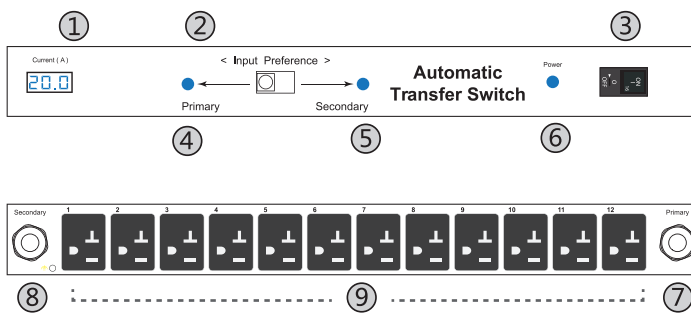
Most data centers provide power source redundancy in order to ensure critical devices have no power related downtime. Many rackmount IT devices, however, are not designed to take advantage of power redundancy. For single-corded devices, the InfraPower Automatic Transfer Switch (ATS) is a perfect fit to provide power failover. It includes dual power inlets for connection to both a primary power source and a redundant, secondary power source.

Intelligent ATS Over IP



- ① 2.0" color LCD
- ② IP Port
- ③ Input Preference Switch
- ④ Power LED - primary input
- ⑤ Power LED - secondary input
- ⑥ Circuit Breaker
- ⑦ Primary Input attached with 3M cord & inlet plug
- ⑧ Secondary Input attached with 3M cord & inlet plug
- ⑨ Outlets

Metered ATS



- ① Local Current Meter
- ② Input Preference Switch
- ③ Circuit Breaker
- ④ Power LED - primary input
- ⑤ Power LED - secondary input
- ⑥ Power LED - outlets
- ⑦ Primary Input attached with 3M cord & inlet plug
- ⑧ Secondary Input attached with 3M cord & inlet plug
- ⑨ Outlets

ATS Series	Metered MD	Monitored W	Switched	
			WS	WSi
Outlet Level Measurement Over IP				✓
Outlet ON / OFF Switch Over IP			✓	✓
Input & Circuit Monitoring Over IP		✓	✓	✓
Input Switching Over IP		✓	✓	✓
Input Switching Locally	✓	✓	✓	✓
Local Meter Monitoring	✓	✓	✓	✓
Transfer Time	10 - 16ms	10ms	10ms	10ms
Power Source Switching Notification		✓	✓	✓
Alarm Alert		✓	✓	✓
Reporting & Logs		✓	✓	✓
Free Management Software		✓	✓	✓
Web Based GUI		✓	✓	✓
SNMP Capability V1 / V2 / V3		✓	✓	✓
Single Circuit & Dual Circuit Models	✓	✓	✓	✓
Hydraulic-magnetic Miniature Circuit Breaker (MCB)	✓	✓	✓	✓
Mounting Bracket w/ Cord Retention Tray Included	✓	✓	✓	✓
1-Phase : 230V / 208V / 110V	✓	✓	✓	✓
3-Phase : 400V (16A, 32A) / 208V (20A, 30A)	✓	✓	✓	✓
Outlet Type : US NEMA / C13 / C19 / UK / SCH / FR	✓	✓	✓	✓
IEC309 16A / 32A	✓	✓	✓	✓
L620R / L630R	✓	✓	✓	✓
Outlet # 1 - 24	✓	✓	✓	✓
Custom ATS on Request	✓	✓	✓	✓

Remote Management Over IP

ATS 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 ATS offers 3 kinds of remote management solutions for users' selection.



Free Download



Built-in



via SNMP



Free Management Software IPM-04

IPM-04 is the free, powerful and user friendly management software provided with intelligent ATS. The Administrator can remotely manage the ATS via the web browser. It provides power input switching, ATS monitoring, alarm and reporting functions. The Windows based software consolidates management of max. 50 ATS. Up to 5 concurrent user access is bundled in order to achieve the demand of multi-user requirements in data center operations.

Single circuit ATS : Monitoring & Input Switching



Dual circuit ATS : Monitoring & Input Switching



Reporting / Log



Web-based GUI

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

3rd Party DCIM via SNMP V2 / V3

ATS supports SNMP V2 / V3 integration for clients requiring remote management of the ATS using their existing DCIM (Data Center Infrastructure Management) in order to centralize the management for monitoring power, cooling and environmental factors across facilities and IT systems.

Functions & Features	IPM-04	GUI
No. of ATS support	50	1
Concurrent users	5	1
Input switching over IP	✓	✓
Power source switching notification	✓	✓
Input sources detection	✓	✓
Individual outlet switch on / off (WS & WSi)	✓	✓
Outlet level measurement (WSi)	✓	✓
Energy consumption (kWh) monitoring	✓	✓
Apparent power (kVA) monitoring	✓	✓
Power factor measurement	✓	✓
Voltage (Volt) monitoring	✓	✓
Aggregate current (Amp) monitoring	✓	✓
Circuit breaker monitoring	✓	✓
Alarm alert	✓	✓
Reporting & logs	✓	
SNMP V1 / V2 / V3		✓

1U ATS - Single Circuit



MD ATS



W iATS



WS / WSi iATS

2U ATS - Single Circuit



MD ATS



W iATS



WS / WSi iATS

2U ATS - Dual Circuit



MD ATS



W iATS



WS / WSi iATS

Specifications	MD	W / WS / WSi
Nominal input voltage	110V / 208V / 230V	
Acceptable input voltage	±10% nominal	
Input frequency	50 / 60Hz	
Inlet	L5-30P / L5-20P / 5-15P / L6-30P / L6-20P / C14 / C20 / 60309 / UK / Open-end	
Outlet	Nema / L620R / L630R / C13 / C19 / 60309 / UK / Schuko / French	
Local meter	3-digital LED current meter	Field replaceable color LCD
Overload protection	Hydraulic-magnetic Miniature Circuit Breaker (MCB)	
Transfer time	10 - 16ms typical	10ms typical
Electrical endurance	1 x 10 ⁵ operations	
Temperature	Operating : -5 to 60°C degree (23 to 140°F degree) / Storage : -25 to 65°C degree (13 to 149°F degree)	
Humidity	Operating : 0~95%, non-condensing / Storage : 0~95%, non-condensing	

1U ATS - Single Circuit					Amp		
Outlets	MD ATS	W iATS	WS iATS	WSi iATS	110V	208V	230V
NEMA x 10 NEMA x 12	ATS-H10US ATS-H12US	ATS-H10US-W ATS-H12US-W	ATS-H10US-WS ATS-H12US-WS	ATS-H10US-WSi ATS-H12US-WSi	15 / 20A		
C13 x 8 C13 x 10 C13 x 12 C19 x 6 C19 x 8 C13 x 8 + C19 x 1 C13 x 8 + C19 x 2	ATS-H8C13 ATS-H10C13 ATS-H12C13 ATS-H6C19 ATS-H8C19 ATS-H8C13 / 1C19 ATS-H8C13 / 2C19	ATS-H8C13-W ATS-H10C13-W ATS-H12C13-W ATS-H6C19-W ATS-H8C19-W ATS-H8C13 / 1C19-W ATS-H8C13 / 2C19-W	ATS-H8C13-WS ATS-H10C13-WS ATS-H12C13-WS ATS-H6C19-WS ATS-H8C19-WS ATS-H8C13 / 1C19-WS ATS-H8C13 / 2C19-WS	ATS-H8C13-WSi ATS-H10C13-WSi ATS-H12C13-WSi ATS-H6C19-WSi ATS-H8C19-WSi ATS-H8C13 / 1C19-WSi ATS-H8C13 / 2C19-WSi		20A	10 / 16 / 20A
IEC309 16A x 1 L620R x 1	ATS-H1EN16A ATS-H1L620R	ATS-H1EN16A-W ATS-H1L620R-W	ATS-H1EN16A-WS ATS-H1L620R-WS	ATS-H1EN16A-WSi ATS-H1L620R-WSi		20A	16A
UK x 8	ATS-H8UK	ATS-H8UK-W	ATS-H8UK-WS	ATS-H8UK-WSi			10 / 13 / 16 / 20A

2U ATS - Single Circuit					Amp		
Outlets	MD ATS	W iATS	WS iATS	WSi iATS	110V	208V	230V
NEMA x 16 NEMA x 20 NEMA x 24	ATS-H16US ATS-H20US ATS-H24US	ATS-H16US-W ATS-H20US-W ATS-H24US-W	ATS-H16US-WS ATS-H20US-WS ATS-H24US-WS	ATS-H16US-WSi ATS-H20US-WSi ATS-H24US-WSi	15 / 20A		
C13 x 16 C13 x 20 C13 x 24 C19 x 10 C19 x 12 C13 x 16 + C19 x 2 C13 x 16 + C19 x 4	ATS-H16C13 ATS-H20C13 ATS-H24C13 ATS-H10C19 ATS-H12C19 ATS-H16C13 / 2C19 ATS-H16C13 / 4C19	ATS-H16C13-W ATS-H20C13-W ATS-H24C13-W ATS-H10C19-W ATS-H12C19-W ATS-H16C13 / 2C19-W ATS-H16C13 / 4C19-W	ATS-H16C13-WS ATS-H20C13-WS ATS-H24C13-WS ATS-H10C19-WS ATS-H12C19-WS ATS-H16C13 / 2C19-WS ATS-H16C13 / 4C19-WS	ATS-H16C13-WSi ATS-H20C13-WSi ATS-H24C13-WSi ATS-H10C19-WSi ATS-H12C19-WSi ATS-H16C13 / 2C19-WSi ATS-H16C13 / 4C19-WSi		20A	10 / 16 / 20A
Schuko x 8 French x 8	ATS-H8SCH ATS-H8FR	ATS-H8SCH-W ATS-H8FR-W	ATS-H8SCH-WS ATS-H8FR-WS	ATS-H8SCH-WSi ATS-H8FR-WSi			10 / 16 / 20A

2U ATS - Dual Circuit					Amp		
Outlets	MD ATS	W iATS	WS iATS	WSi iATS	110V	208V	230V
NEMA x 16 NEMA x 20 NEMA x 24	ATS-H16US ATS-H20US ATS-H24US	ATS-H16US-W ATS-H20US-W ATS-H24US-W	ATS-H16US-WS ATS-H20US-WS ATS-H24US-WS	ATS-H16US-WSi ATS-H20US-WSi ATS-H24US-WSi	30A		
C13 x 16 C13 x 20 C13 x 24 C19 x 8 C19 x 10 C19 x 12 C13 x 16 + C19 x 2 C13 x 16 + C19 x 4	ATS-H16C13 ATS-H20C13 ATS-H24C13 ATS-H8C19 ATS-H10C19 ATS-H12C19 ATS-H16C13 / 2C19 ATS-H16C13 / 4C19	ATS-H16C13-W ATS-H20C13-W ATS-H24C13-W ATS-H8C19-W ATS-H10C19-W ATS-H12C19-W ATS-H16C13 / 2C19-W ATS-H16C13 / 4C19-W	ATS-H16C13-WS ATS-H20C13-WS ATS-H24C13-WS ATS-H8C19-WS ATS-H10C19-WS ATS-H12C19-WS ATS-H16C13 / 2C19-WS ATS-H16C13 / 4C19-WS	ATS-H16C13-WSi ATS-H20C13-WSi ATS-H24C13-WSi ATS-H8C19-WSi ATS-H10C19-WSi ATS-H12C19-WSi ATS-H16C13 / 2C19-WSi ATS-H16C13 / 4C19-WSi		30A	32A
L630R x 1	ATS-H1L630R	ATS-H1L630R-W	ATS-H1L630R-WS	ATS-H1L630R-WSi		30A	
IEC309-16A x 2 IEC309-32A x 1	ATS-H2EN16A ATS-H1EN32A	ATS-H2EN16A-W ATS-H1EN32A-W	ATS-H2EN16A-WS ATS-H1EN32A-WS	ATS-H2EN16A-WSi ATS-H1EN32A-WSi			32A

230V ATS

Inlet	Amp	Cordset	
		mm ²	length
60309	32A	4	3 M
Open end	20A	2.5	3 M
C20	16A	1.5	3 M
BS1363 UK	13A	1.5	3 M
C14	10A	1.5	3 M

208V ATS

Inlet	Amp	Cordset	
		AWG	length
L6-30P	30A	10	10 FT
L6-20P	20A	12	10 FT


110V ATS

Inlet	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

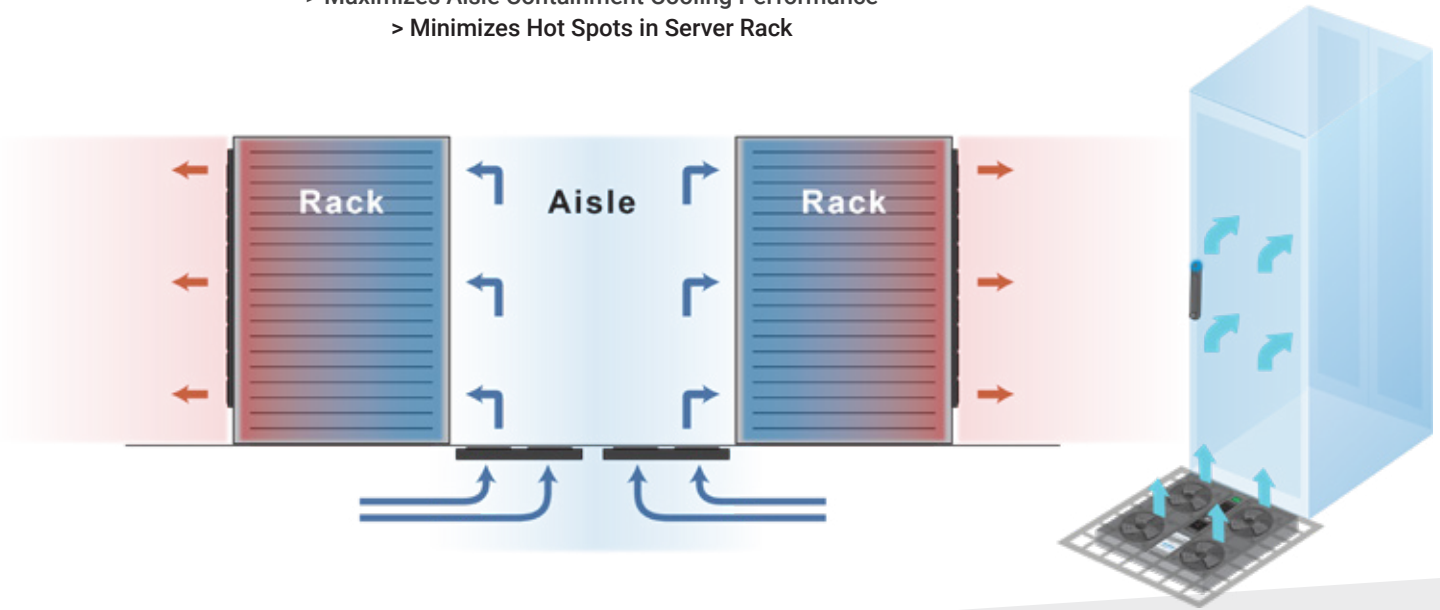
** Customization available on request

Thermal management presents big challenges for today's data centers, chief among which is cooling equipment in enclosed racks. InfraCool intelligent cooling solutions provide appropriate airflow, while helping minimize operational costs associated with data center energy consumption. Make InfraCool an integral part of your rack cooling strategy today.



Fan Series	Door Mount Fan Panel	1U Fan Tray			Raised Floor Mount Fan
Intelligent Master	MRF-33.9	✕	MRF-1.6	MRF-1.9	WF-66.4
Intelligent Expansion	RF-33.9	✕	RF-1.6	RF-1.9	
Basic	F-33.9	F-1.3	F-1.6	F-1.9	F-66.4
Fan Number	9	3	6	9	4 (EC Fan)
Total CFM	972	324	648	972	2172
Airflow	<div><div>Front Door Cool Air In</div><div>Rear Door Hot Air Out</div></div>	<div><div>Top Exhaust hot air out</div><div>Equipment Cooling</div><div>Bottom Cool air in</div></div>	<div><div>Front Door Cool Air In</div></div>		
Temp. Port	1	1			2
Temp. Sensor	1	1			2
Intelligent Fan Features:					
16 Daisy Chain Levels	✓	✓			✕
Auto Fan Speed Control	✓	✓			✕
2.8" Touchscreen	✕	✕			✓
Control Panel	✓	✓			✕
Individual Fan On/Off	✓	✓			✓
Alarm Temp. Setting	✓	✓			✓
Unit CFM Setting	✓	✓			✕
Temperature Monitoring	✓	✓			✓
Fan Status Monitoring	✓	✓			✓
CFM Status Monitoring	✓	✓			✕

- > Maximizes Aisle Containment Cooling Performance
- > Minimizes Hot Spots in Server Rack



Intelligent Model WF-66.4



Benefits

- ▶ Allows remote access over IP
- ▶ Remote fan On / Off and status monitoring
- ▶ Support SNMP V2 / V3 centralized management platforms
- ▶ Free WF-04-S software for remote fan management
- ▶ 2.8" touchscreen color LCD
- ▶ Fan status & alarm alert
- ▶ Quad EC (Electronically Communicated) fans
- ▶ Fan CFM : 526 CFM
- ▶ Unit CFM : Over 2104 CFM
- ▶ Bundled with 2 x temperature sensor with 4M wire
- ▶ Bundled with raised floor mounting kit

Connection Ports (at Side of Fan Unit)



Temperature Sensor (Pair)

- Bundled with Intelligent Fan
- Magnetic base
- Plug & Play
- 4M wire



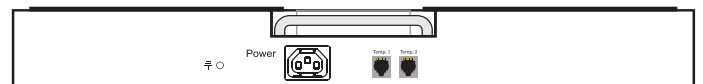
Basic Model F-66.4



Benefits

- ▶ Quad EC (Electronically Communicated) fans
- ▶ Fan CFM : 526 CFM
- ▶ Unit CFM : Over 2104 CFM
- ▶ Adjustable CFM levels
- ▶ Unit or individual fan on / off
- ▶ 2 x front temperature LED
- ▶ Bundled with 2 x temperature sensor with 4M wire
- ▶ Bundled with raised floor mounting kit

Connection Ports (at Side of Fan Unit)



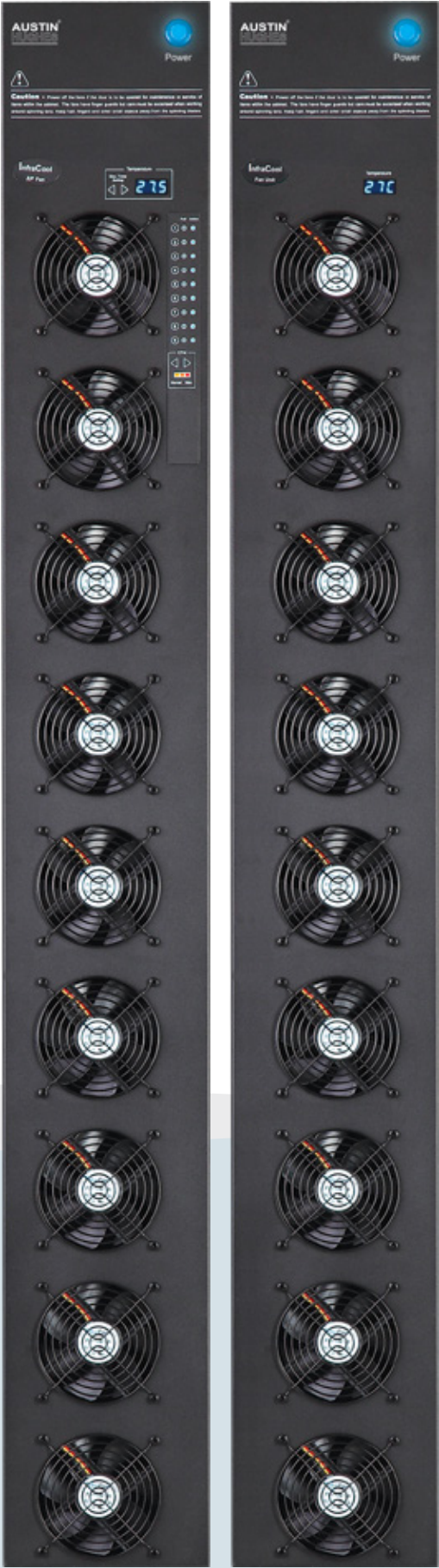
Temperature Sensor (Pair)

- Bundled with Basic Fan
- Plug & Play
- 4M wire



Intelligent Model:
Master IP **MRF-33.9**
Expansion **RF-33.9**

Basic Model:
F-33.9

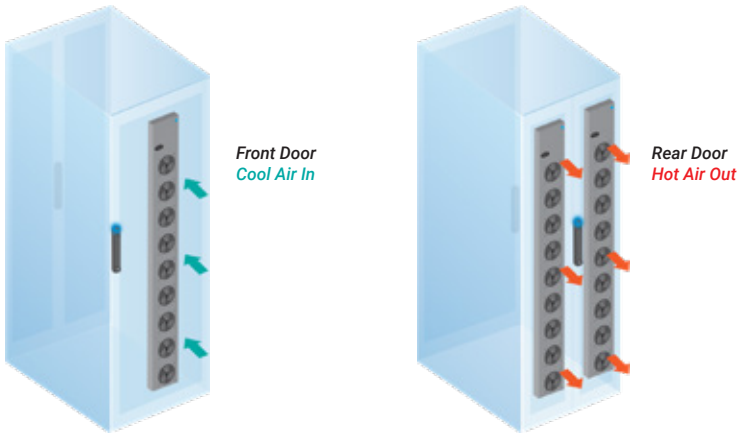


Benefits

- ▶ 33U door mount without occupying rack space
- ▶ Easy installation with common tools
- ▶ Designed for low noise & high airflow performance
- ▶ Thin & light weight design only 5 kgs / 11 lbs
- ▶ Improves extraction of heat from high density rack
- ▶ No. of Fans: 9
- ▶ Individual Fan CFM: 108 CFM
- ▶ Unit CFM (approx.): 972 CFM
- ▶ Bundle 1 x temperature sensor with 2M wire
- ▶ Front temperature LED
- ▶ 48V, 24V or 12VDC power option

Extra Benefits by Intelligent Fan Models

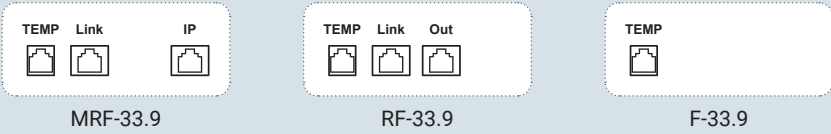
- ▶ Cascade ports for daisy chain up to 16 levels via Cat6 cable
- ▶ 1 x intelligent master fan unit allows access to 16 fan unit levels over internet
- ▶ Free ICM-02 management software remote access up to 480 fan units
- ▶ Auto & manual CFM setting reduces power consumption
- ▶ Temperature sensing technology adjusts the fan speeds accordingly
- ▶ Unit or individual fan on / off (remote or local)



Model	Installation	Airflow	Purpose
MRF-33.9A	Rear door outside	Extract airflow	Exhaust air out from rack
RF-33.9A	Front door inside	Intake airflow	Cool air in from aisle
F-33.9A	Front door inside	Intake airflow	Cool air in from aisle
MRF-33.9B	Rear door inside	Extract airflow	Exhaust air out from rack
RF-33.9B	Front door outside	Intake airflow	Cool air in from aisle
F-33.9B	Front door outside	Intake airflow	Cool air in from aisle

* Package includes the material of clear polycarbonate plastic to block off the remaining open perforated area of the door to eliminate bypass air.

Connection Ports (at Top of Fan Panel)



Temperature Sensor (Pair)

Bundled with Intelligent Fan

- Magnetic base
- Plug & Play
- 2M wire



Bundled with Basic Fan

- Plug & Play
- 2M wire

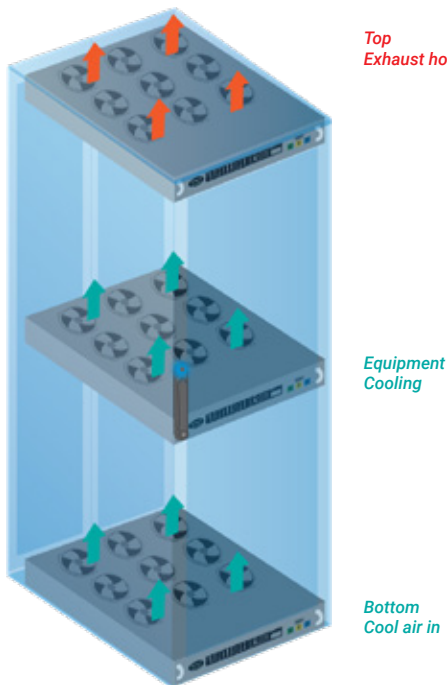


Benefits

- ▶ 1U rackmount
- ▶ Designed for low noise & high airflow performance
- ▶ Individual Fan CFM: 108 CFM
- ▶ Basic models : 3, 6 or 9 fans / 324, 648 or 972 CFM
- ▶ Intelligent models : 6 or 9 fans / 648 or 972 CFM
- ▶ Bundle 1 x temperature sensor with 2M wire
- ▶ Front temperature LED
- ▶ 48V, 24V or 12VDC power option

Extra Benefits by Intelligent Fan Models

- ▶ Cascade ports for daisy chain up to 16 levels via Cat6 cable
- ▶ 1 x intelligent Master IP fan unit allows access to 16 fan unit levels over internet
- ▶ Free ICM-02 management software remote access up to 480 fan units
- ▶ Auto & manual CFM setting reduces power consumption
- ▶ Temperature sensing technology adjusts the fan speeds accordingly
- ▶ Unit or individual fan on / off (remote or local)



Intelligent Model : Master IP MRF-1.9 / 1.6



Available with 9 or 6 Fans

Intelligent Model : Expansion RF-1.9 / 1.6



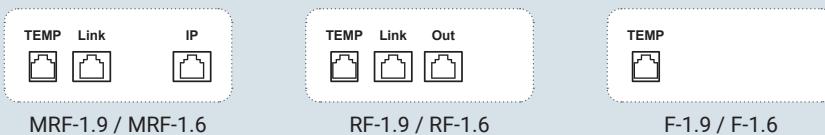
Available with 9 or 6 Fans

Basic Model : F-1.9 / 1.6 / 1.3



Available with 9, 6 or 3 Fans

Connection Ports (at Front of Fan Unit)



Temperature Sensor (Pair)

Bundled with Intelligent Fan

- Magnetic base
- Plug & Play
- 2M wire



Bundled with Basic Fan

- Plug & Play
- 2M wire



To maintain optimum operational conditions in data centers, getting instant notification of environmental fluctuations is vital. InfraGuard offers a wide range of sensors for complete environmental monitoring of IT racks.

EC-300M - Master Control Box
(1st Level)



EC-300 - Expansion Control Box
(2nd - 16th Level)



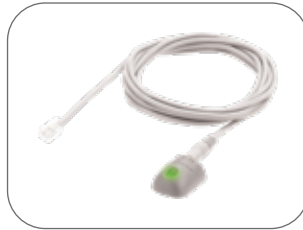
Temp. + Humid. Sensor



- One sensor for temperature & humidity
- Low profile and light weight design with a magnetic base for easy affixing to rack

Part no. :
IG-TH01-2M with 2M cord
IG-TH01-4M with 4M cord

Temp. Sensor



- Detection for temperature
- Low profile and light weight design with a magnetic base for easy affixing to rack

Part no. :
IG-T01-2M with 2M cord
IG-T01-4M with 4M cord

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

Part no. :
IG-W01-3M with 3M cord

Smoke Sensor



- Safely operated smoke detection

Part no. :
IG-S01-1M with 1M cord
IG-S01-3M with 3M cord

Shock Sensor



- Alert the physical vibration on the rack

Part no. :
IG-V01-1M with 1M cord
IG-V01-3M with 3M cord

LED Beacon



- Highly visible for alerting user to alarm status

Part no. :
IG-FB03-1M with 1M cord
IG-FB03-3M with 3M cord

Inductive Door Sensor



- Light weight, mini size & adhesive
- No custom cutting required on doors
- Easy for existing rack retrofit or integration to new rack

Part no. :
IG-DSI-2M with 2M cord
IG-DSI-4M with 4M cord

Mechanical Door Sensor



- Low cost
- Precise
- Cost efficient integration to new rack
- Custom cutting required on door

Part no. :
IG-DSW-2M with 2M cord
IG-DSW-4M with 4M cord

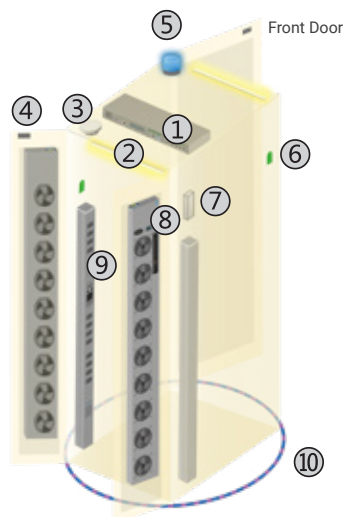
LED Light Bar



- Auto ON / OFF by door sensor detection
- Manual ON / OFF by software remote
- Magnetic base for easy affixing to rack
- Dimension (W x D x H) : 20 x 300 x 12 mm

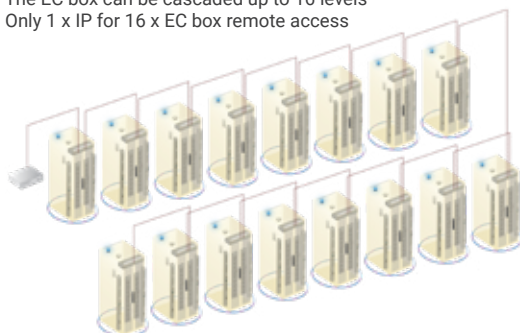
Part no. :
CLB-IX-002 with 2M cord
CLB-IX-003 with 3M cord

One Box One Rack



Item	Rack
1 EC Box	1
2 LED Light Bar	2
3 Smoke Sensor	1
4 Door Sensor	2
5 Flashing LED Beacon	1
6 Temp. & Humid. Sensor	2
7 Shock Sensor	1
8 Fan Unit	2
9 PDU	2
10 Water Sensor	1

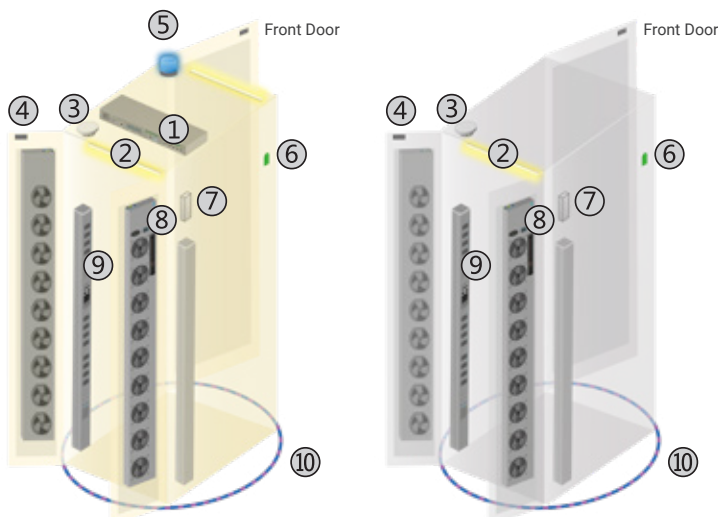
- EC 300M as the 1st level Master IP EC box
- The EC box can be cascaded up to 16 levels
- Only 1 x IP for 16 x EC box remote access



Free Software IGM-03

- Supports 30 IP addresses
- 480 EC boxes & 480 IT server racks
- Thousands of rack sensors & 1920 iPDUs & iFans

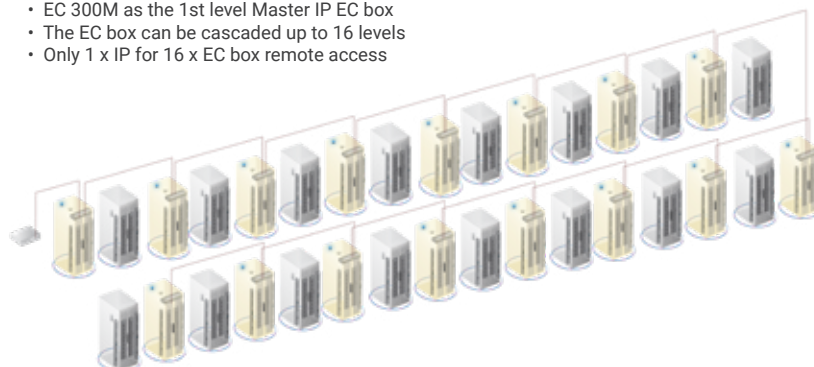
One Box Two Rack



Item	Rack 1	Rack 2
1 EC Box	1	-
2 LED Light Bar	1	1
3 Smoke Sensor	1 *	1 *
4 Door Sensor	2	2
5 Flashing LED Beacon	1	-
6 Temp. & Humid. Sensor	1	1
7 Shock Sensor	1 *	1 *
8 Fan Unit	2	2
9 PDU	2	2
10 Water Sensor	1	1

* either smoke sensor or shock sensor

- EC 300M as the 1st level Master IP EC box
- The EC box can be cascaded up to 16 levels
- Only 1 x IP for 16 x EC box remote access



Free Software IGM-03

- Supports 30 IP addresses
- 480 EC boxes & 960 IT server racks
- Thousands of rack sensors & 1920 iPDUs & iFans

Rack Environmental Management Over IP

Remote management helps reducing manpower and hence improving uptime and productivity. InfraGuard offers two remote environmental management solutions for users' selection.



via SNMP





Free Download



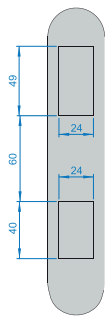
To satisfy high level data center security requirements, Austin Hughes has launched a standalone rack access solution with alloy swing handles & 2.8" touchscreen control panel. The InfraSolution S-700 series provides an innovative yet affordable solution for secure rack access in 21st century data centers.



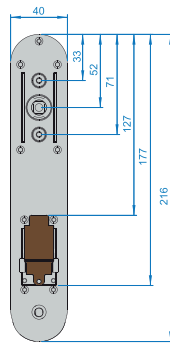
S-700P	Features	S-700M
	✓ Standalone, patented design	✓
	✓ Dual security: SmartCard + NumPad	✓
	✓ Rugged alloy swing handle	✓
	✓ Sophisticated control panel w/ touchscreen	✓
	✓ Proximity 26-bit SmartCard compatible	✗
	✗ MiFARE 26-bit SmartCard compatible	✓
	✓ Dual locking system (electronic and mechanical lock)	✓
	✓ Electronic lock released by SmartCard & NumPad	✓
	✓ Rack access status and alarm indication by LED	✓
	✓ Individually keyed lock options available	✓
	✓ Left side opening standard (optional right side open)	✓
		

Universal Mounting Cut-out

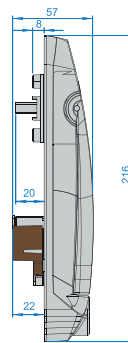
Cut-out



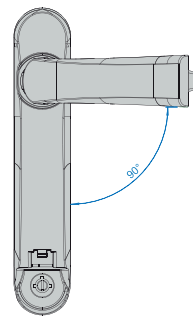
Back View



Side View



Front View



Unit : mm

Handle LED



Door Closed



Door Open

Silver white LED



Red LED

Alarm for Unauthorized Access

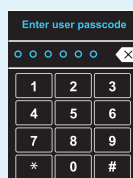
- Red LED flashing
- Alarm "beep" sound

Two-factor Authentication - Dual Security

Step 1: SmartCard Touch



Step 2: Passcode Input



Open



Control Panel

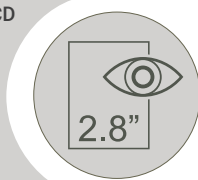
Touchscreen Color LCD

- Resistive touch
- Sophisticated & stylish
- User friendly



Display & Monitoring via 2.8" LCD

- Rack information
- Door status
- Alarm notifications
- Temp. / humid. values
- PDU Amp. values



NumPad

- Passcode assignment
- Passcode authentication
- Add / delete user cards

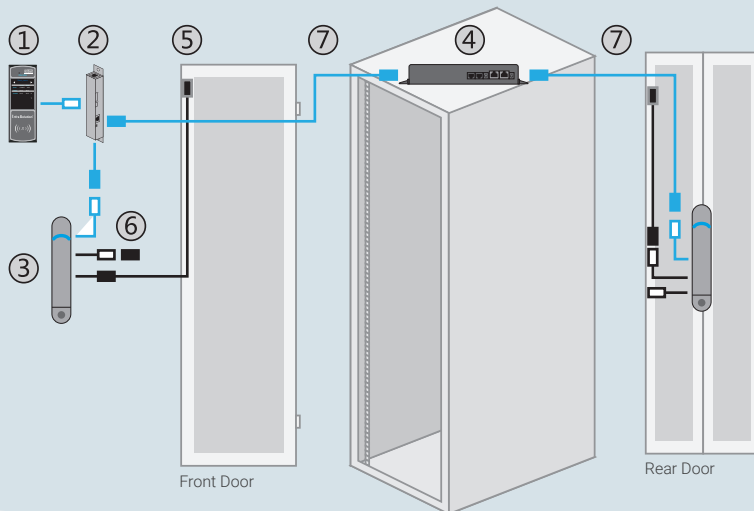


SmartCard Sensor

- Proximity 26-bit
- MIFARE 26-bit :
 - Classic
 - DESFire EV1 / EV2
 - Plus S / Plus X
 - Plus EV1



Installation Diagram



- 1 Control panel
- 2 Connector box
- for data input / configuration
- 3 S-700 SmartCard handle
- Proximity or MIFARE
- 4 Junction box
- data communication with control panels & handles
- provides connectors for light bar & W3 PDU integration
- built-in power adapter
- 5 Door sensor with 2m cable
- for front & rear doors
- 6 Temp. / TH sensor connector
- 7 Cat5 cable
- For connection between junction box & handle / control panel
- Cable length can be customized subject to rack size
- NOT provided

Software

Via the **Free** utility (ISU-01), administrators can change admin / user passcodes and assign smartcards. A maximum of 50 user card credentials can be managed per control panel. Setup is easy via the optional data input cable (ISW-USB-1.8).





Data Input Cable
ISW-USB-1.8

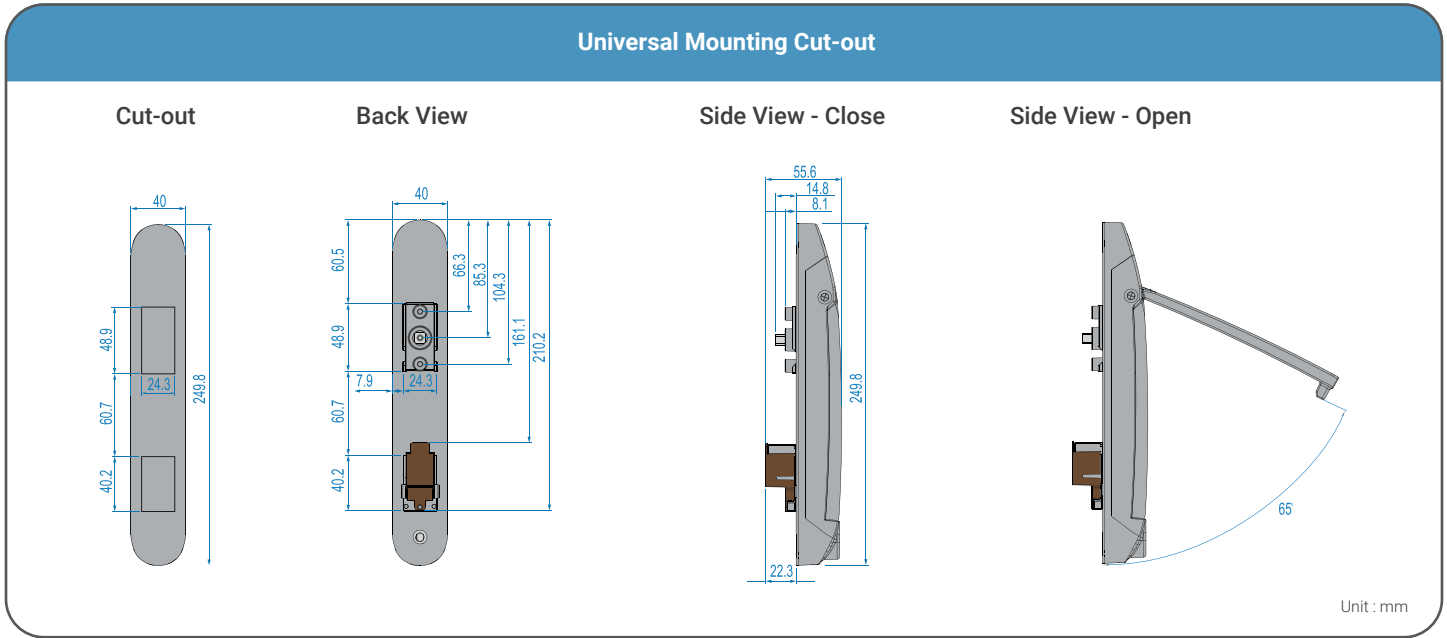


The patented S-800 SmartCard handle is designed for total rack access control and management.



For 100% accurate detection of exactly which door opened, InfraSolution S-800 is equipped with high quality, durable, precision door sensors for both doors.




S-800P	Features			S-800M
	✓	Standalone, patented design	✓	
	✓	Proximity 26-bit SmartCard compatible	✗	
	✗	MiFARE 26-bit SmartCard compatible	✓	
	✓	Dual locking system (electronic and mechanical lock)	✓	
	✓	Electronic lock released by SmartCard	✓	
	✓	Rack access status and alarm indication by LED	✓	
	✓	Individually keyed lock options available	✓	
	✓	Left side opening standard (optional right side open)	✓	




Handle LED



Door Closed



Door Open



Alarm for Unauthorized Open

- Red LED flashing
- Alarm "beep" sound

* Only available while handles equipped with door sensors

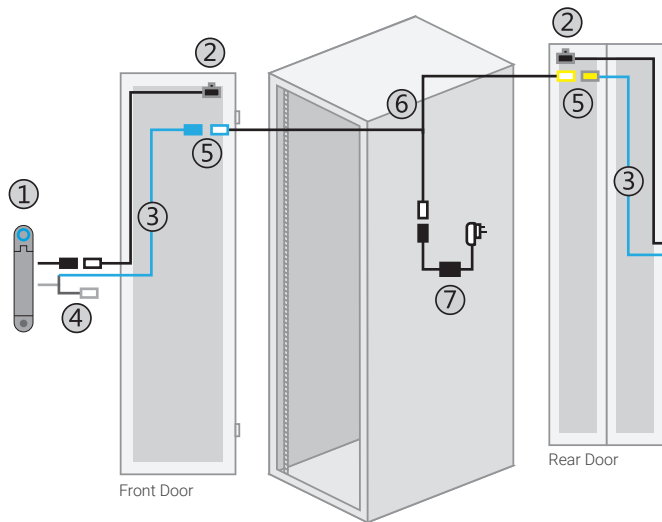
MiFARE

Proximity

Silver white LED

Red LED

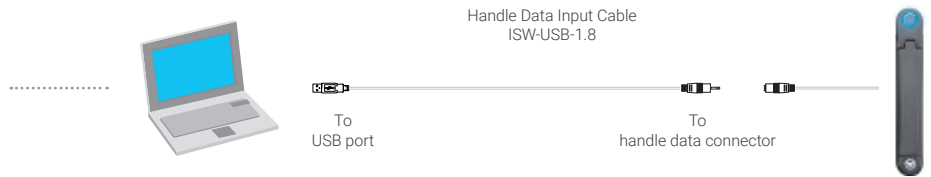
Installation Diagram



- 1 S-800P Proximity or S-800M MiFARE smartcard handle :
2pcs for front & rear door, with cables to connect 2, 3, 4
- 2 Optional door sensor with cable :
2pcs for front & rear door (2m)
- 3 Power cable (door section) :
2pcs for front & rear door (2m)
- 4 Data input connector
(for handle activation / data input / configuration)
- 5 Joint connector of 3 & 6
- 6 Y-Power cable (rack section)
- 7 Universal Auto switching 2.5A power adapter & 6' power cord

Software

Via the **Free** utility (ISU-01), administrators can change admin / user passcodes and assign smartcards. A maximum of 50 user card credentials can be managed per control panel. Setup is easy via the optional data input cable (ISW-USB-1.8).



Door Sensor for S-700 & S-800

IR Door Sensor (Pair)

Part no. : S-DIR



- No custom cutting required on doors
- Light weight / adhesive
- Magnetic base for easy setup
- Mini size (33 x 19 x 7 mm)
- With 2m cord

Inductive Door Sensor (Pair)

Part no. : S-DSI



- No custom cutting required on doors
- Light weight / adhesive
- Easy for existing rack retrofit
- Mounting bracket bundled
- Mini size (32.5 x 12.2 x 9.2 mm)
- With 2m cord

Mechanical Door Sensor (Pair)

Part no. : S-DSW





- Custom cutting required on doors
- Low cost / precise
- Cost efficient integration to new rack
- Size (52 x 22.5 x 30.75 mm)
- With 2m cord

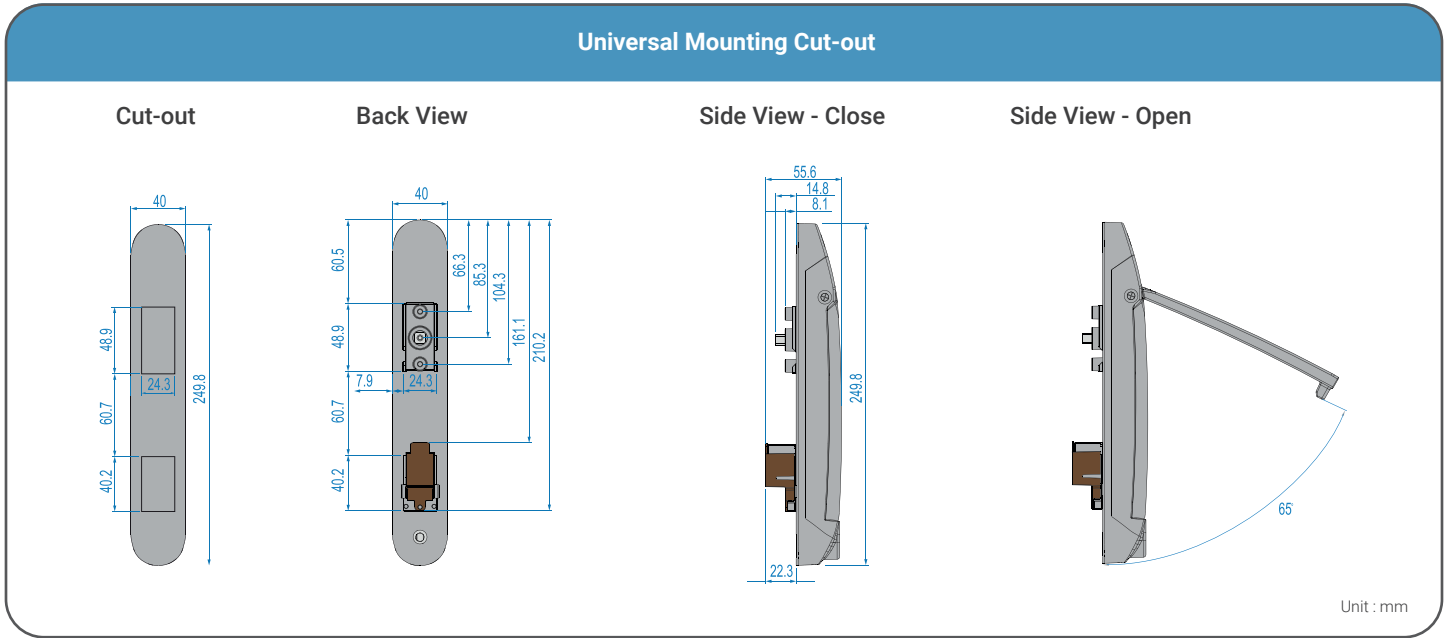
The patented X-800 SmartCard handle is designed for total rack access control and management.

The X-2000 control box, designed for rack SmartCard Access + PDU/Fan/Environmental Management, consolidates the smartcard access components and management of other integrated rack devices such as smart PDUs, cooling fans and environmental sensors in a single rack appliance. To facilitate centralized management, all control boxes can be connected via wired networks.

For 100% accurate detection of exactly which door opened, InfraSolution X-800 is equipped with high quality, durable, precision door sensors for both doors.



X-800P	Features			X-800M
	✓	Networked, patented design	✓	
	✓	Proximity 26-bit SmartCard compatible	✗	
	✗	MiFare 26-bit SmartCard compatible	✓	
	✓	Dual locking system (electronic and mechanical lock)	✓	
	✓	Electronic lock released by SmartCard	✓	
	✓	Rack access status and alarm indication by LED	✓	
	✓	Individually keyed lock options available	✓	
	✓	Left side opening standard (optional right side open)	✓	




Handle Unlocking

The InfraSolution X-800 handle offers three ways to release the lock - Software Remote, SmartCard or Mechanical Key.

By Software Remotely

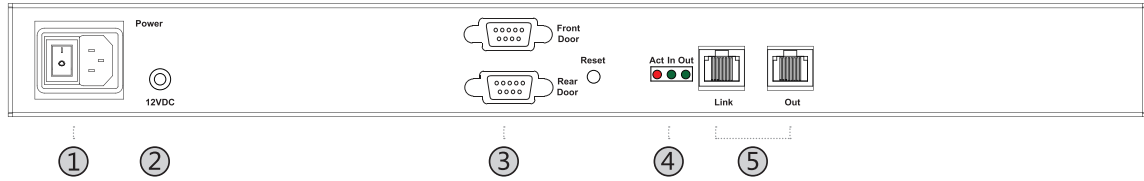
By SmartCard

By Mechanical Key

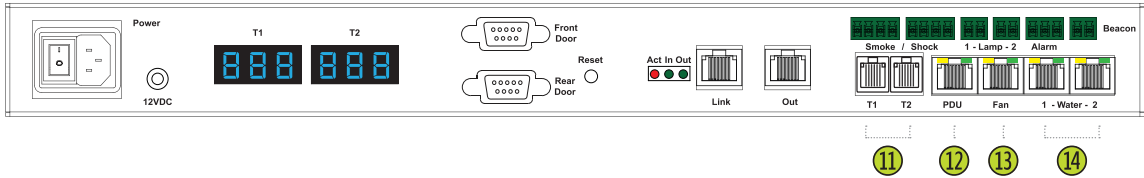


Control Box

X-1000

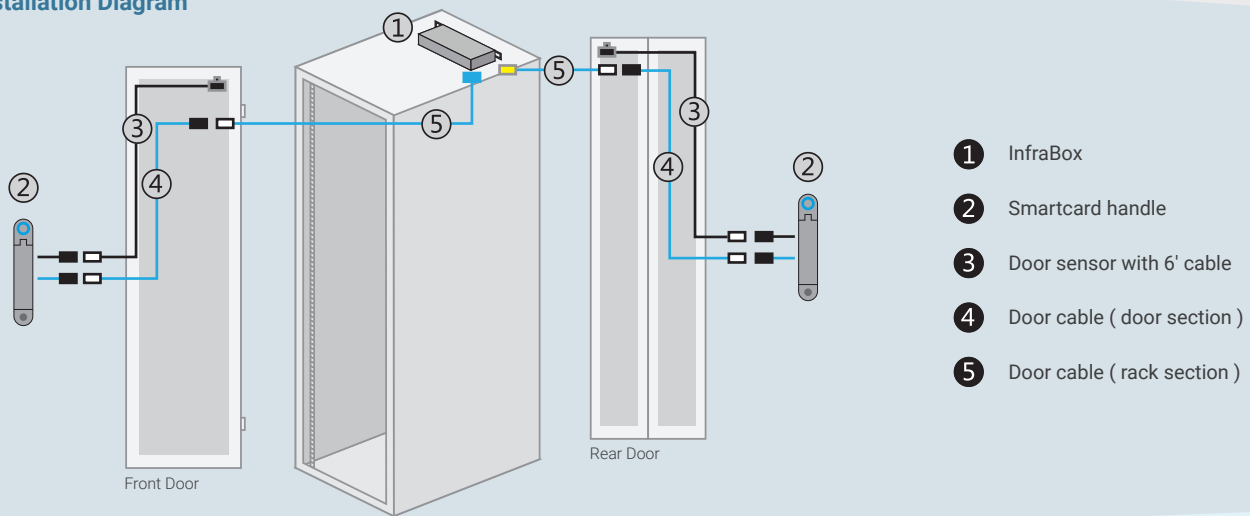


X-2000

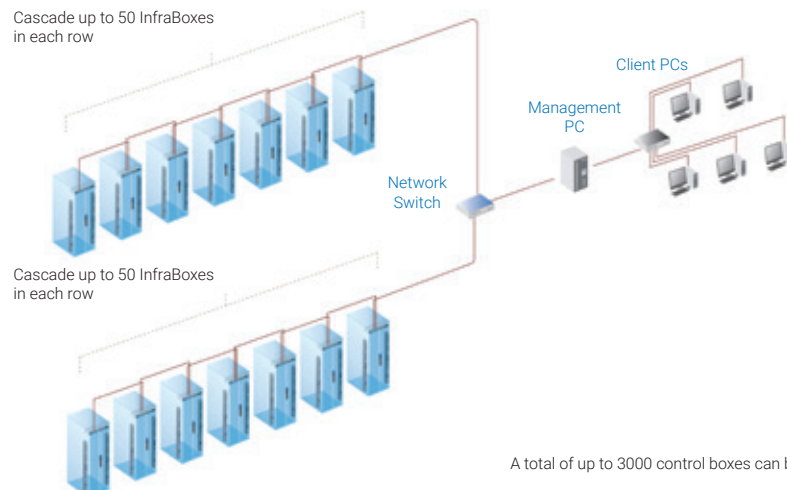


- | | | |
|---|--------------------------------------|--|
| ① Power input | ⑥ Temp. LED display x 2 | ⑪ Temp. & Humid. sensor port x 2 |
| ② Dual power input (option) | ⑦ Smoke / Shock sensor port x 2 | ⑫ PDU port x 1 (RJ-45, Daisy Chain up to 4 PDU's) |
| ③ Door cable DB-9 connector x 2
Connect to the front and rear handle | ⑧ LED Light Bar port x 2 | ⑬ Fan unit port x 1 (RJ-45, Daisy chain up to 2 fan units) |
| ④ "Act in Out" LED | ⑨ Port for 3rd party alarm board x 1 | ⑭ Water sensor port x 2 |
| ⑤ Daisy chain RJ45 port x 2 (Link & Out) | ⑩ LED beacon port x 1 | |

Installation Diagram



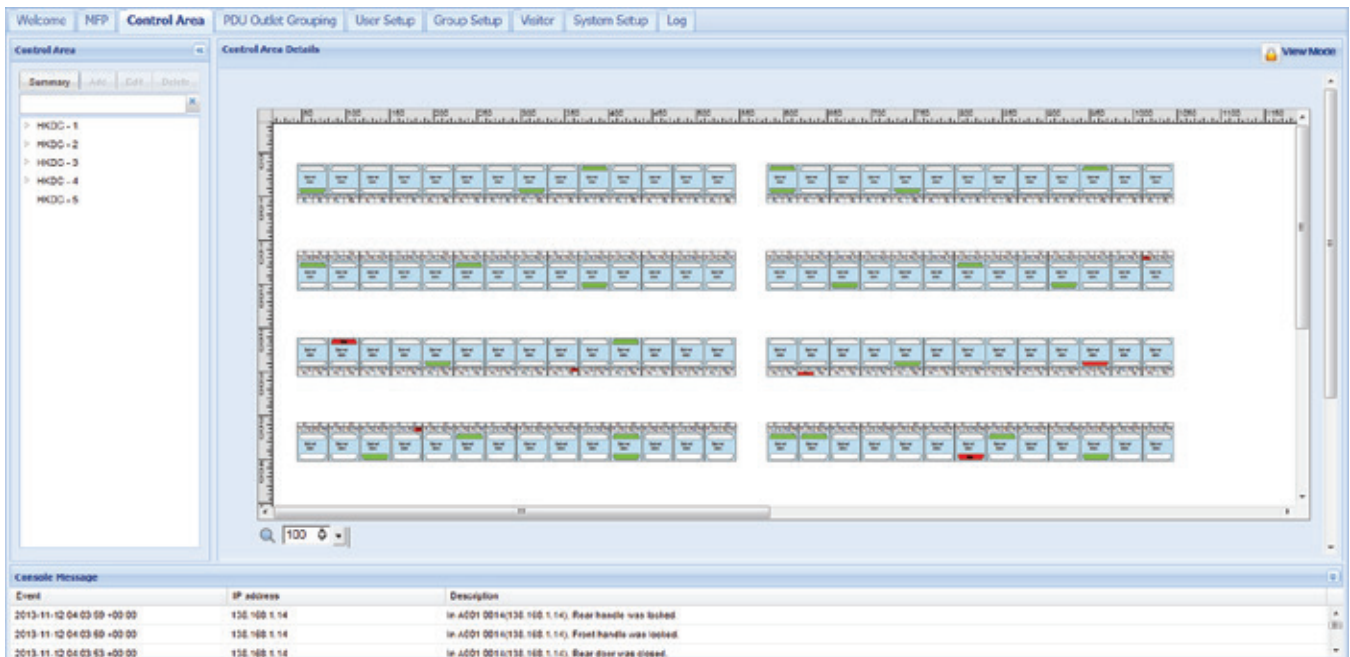
InfraBox Connection Diagram



A total of up to 3000 control boxes can be managed on the network

InfraSolution X Manager X-ISM is a LICENSED rack management software to monitor up to 3000 racks remotely.

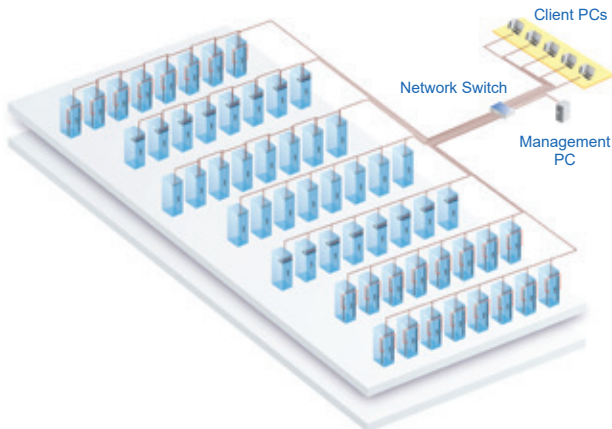
Each InfraBox connects a pair of Smartcard handles for secure rack access control and a variety of sensors to provide an integrated environmental monitoring solution. To enhance the functionality, up to 1920 PDUs and 960 Fan Units can be monitored through InfraSolution X Manager. To meet the requirements of today's multi-user, multi-tasking data center operations, up to 100 concurrent users can access the management software remotely.



Features		X-ISM
Capacity	InfraBox	3000
	Concurrent Users	100
System Setup	Backup/Restore Options	✓
	Time Rules	✓
	Alarm Mail Server Settings	✓
	Audio and Visual Alarm Output Setting	✓
Cabinet Overview Door	Door Status, PDUs, Sensor & Fan Units	✓
	Remotely Open Door	✓
	Last Door Open & Closed Record	✓
Sensor/Peripheral	Status Monitoring	✓
	Temp-Humid Alarm Threshold Settings	✓
PDU	Energy Consumption kWh/Amp Monitoring	✓
	Outlet Level Measurement	✓
	PDU Outlet Scheduling	✓
	Outlet ON/OFF Switching	✓
	Amp Alarm Threshold Settings	✓
	Amperage High/Low Alert Threshold Settings	✓
	Temp-Humid Monitoring	✓
Fan Unit	CFM & Temp. Monitoring	✓
	Unit CFM (Fan Speed) Settings	✓
	Auto CFM Control Settings	✓
	Individual Fan Kit ON/OFF	✓
	Fan Unit ON/OFF	✓
Chart/Event/Reporting	System & Device Event Reporting	✓
	Temp-Humid Historical Trending Charts	✓

Application 1 - Data Center

Via cascading (up to 50 per group) through a network switch, InfraSolution X-800 can be scalable up to 3000 racks. Numerous InfraBoxes can coexist in the same network. Users can manage and remotely access all racks under a centralized and user-friendly GUI.

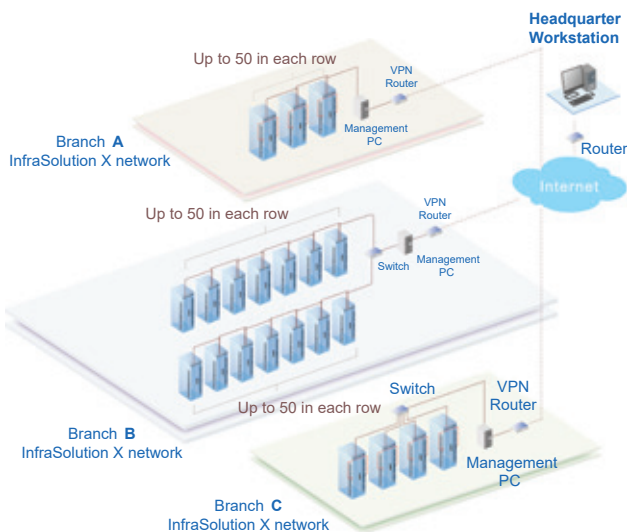


- Connect the 1st InfraBox in each daisy chain to the network switch
- Connect the management PC and client PCs via the network switch
- Up to 3000 Infraboxes/Racks

Application 3 - Branches

For a global or expanding company, it is vital to be able to remotely access and monitor the network of their nationwide or worldwide branches. InfraSolution X provides an ideal solution to keep an eye on rack access security and environmental conditions in remote or branch locations from a central headquarters.

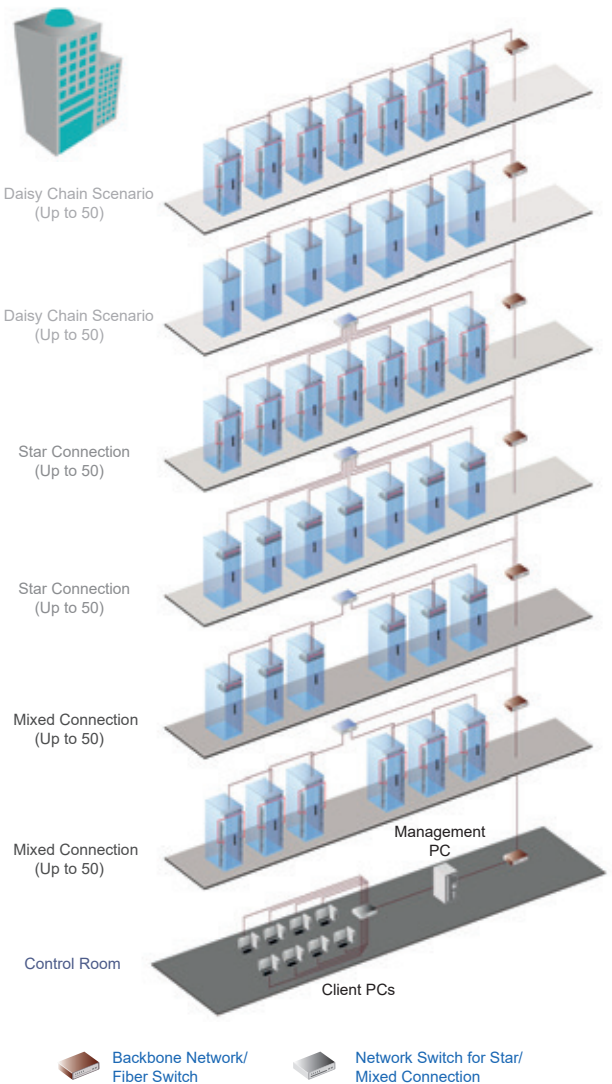
An InfraSolution X software license is required for each remote site/management PC



Application 2 - Intelligent Building

It is essential for multi-storey, intelligent smart buildings to use centralized management for control of mechanical and electrical systems such as security, power, ventilation, and lighting.

The InfraSolution X system allows equipment to be distributed throughout a building by simply deploying over an Ethernet network. To keep capital costs down, InfraSolution X can also be cascaded between boxes - up to 100m over a Cat5/6 cable. Signal weakness issues, over longer distances between InfraBoxes, can be solved by inserting network hubs with repeater functionality.



Setup Scenario integrated with the Intelligent Building

- Connect the InfraSolution X network on each floor via the network ethernet / fiber switch
- Up to 3000 Infraboxes/Racks



4K 60Hz KVM

- 4K KVM with 8 ports in 1U
- KVM cables support DP & HDMI video input
- USB hub ports share peripheral devices among computers
- Local console & KVM ports support 4K, 2K and 1080p resolutions
- Port switching via front button & keyboard hotkeys
- Multi platform, hot pluggable, no software or drivers required



2K KVM

- 2K KVM with 8 ports in 1U
- KVM cables support DVI-D & HDMI video input
- Local console & KVM ports support 2K and 1080p resolutions
- Port switching via front button & keyboard hotkeys
- Multi platform, hot pluggable, no software or drivers required



DVI-D KVM

- DVI-D KVM with 12 ports in 1U
- Port switching via front button & keyboard hotkeys
- Multi platform, hot pluggable, no software or drivers required



Combo Cat6 KVM

- Cat6 KVM with 8, 16 or 32 ports in 1U
- Cat6 dongles available for USB-C, DP, HDMI, DVI-D or VGA video input
- IP / Remote console options
- Port switching via OSD, front button, keyboard hotkeys
- Multi lingual OSD menu
- Multi platform, hot pluggable, no software or drivers required
- Cascade up to 8 KVM switches to control as many as 256 servers



Matrix Cat6 KVM

- Cat6 KVM with 16 or 32 ports in 1U
- Simultaneous & independent access for up to 4 consoles
- Cat6 dongles available for USB Type-C, DP, HDMI, DVI-D or VGA video input
- IP / Remote console options
- Port switching via OSD, front button, keyboard hotkeys
- Multi lingual OSD menu
- Multi platform, hot pluggable, no software or drivers required
- Cascade up to 8 KVM switches to control as many as 256 servers



Combo DB-15 KVM

- DB-15 KVM with 8 or 16 ports in 1U
- IP / Remote console options
- Port switching via OSD, front button, keyboard hotkeys
- Multi lingual OSD menu
- Multi platform, hot pluggable, no software or drivers required
- Cascade up to 8 KVM switches to control as many as 128 servers



USB Hub DB-15 KVM

- DB-15 KVM with 8 or 16 ports in 1U
- IP / Remote console options
- USB hub ports share peripheral devices among computers
- Port switching via OSD, front button, keyboard hotkeys
- Multi lingual OSD menu
- Multi platform, hot pluggable, no software or drivers required

KVM Series	4K 60Hz	2K	DVI-D	Combo Cat6	Matrix Cat6	Combo DB-15	USB Hub DB-15
KVM Port	HDMI + USB	HDMI + USB	DVI-D + USB	RJ-45	RJ-45	DB-15	DB-15
Server-side Video	DP / HDMI	DVI-D / HDMI	DVI-D	USB-C DP / HDMI DVI-D / VGA	USB-C DP / HDMI DVI-D / VGA	VGA	VGA
Server-side KB / MS	USB	USB	USB	USB	USB	USB / PS2	USB
Number of Ports	8	8	12	32 / 16 / 8	32 / 16	16 / 8	16 / 8
Resolutions Supported	3840 x 2160 1920 x 1200 1600 x 1200	2560 x 1440 1920 x 1200 1600 x 1200	1920 x 1080 1920 x 1200 1600 x 1200	1920 x 1080 1920 x 1200 1600 x 1200	1920 x 1080 1920 x 1200 1600 x 1200	1920 x 1080 1920 x 1200 1600 x 1200	1920 x 1080 1920 x 1200 1600 x 1200
Server-side Audio	Digital (DP / HDMI)	Digital (HDMI)	Stereo				
USB Device Port	2 x USB 2.0						2 x USB 2.0
Max. Distance (to Server)	2M	2M	4.5M	40M	40M	4.5M	4.5M
Cascade Levels				8	8	8	
Simultaneous Users (max. 4)					✓		
On-Screen Menu				✓	✓	✓	✓
IP Access Option				✓	✓	✓	✓
DC Power Option: 12V / 24V / 48V / 125V	✓	✓	✓	✓	✓	✓	✓
Multi Lingual OSD Menu				✓	✓	✓	✓
1U Standalone KVM	✓	✓	✓	✓	✓	✓	✓
KVM integration to LCD Console Drawer	✓	✓	✓	✓	✓	✓	✓

KVM Cable

4K 60Hz KVM

CK-6P



DP KVM cable
6 ft

CK-6H



HDMI KVM cable
6 ft

2K KVM

CH-6D



DVI-D KVM cable
6 ft

CH-6H



HDMI KVM cable
6 ft

DVI-D KVM

CI - 6 / 15



DVI-D KVM cable
6 / 15 ft

DB-15 KVM

CB - 6 / 10 / 15



VGA KVM cable
6 / 10 / 15 ft

Cat6 KVM Dongle

DG-100C



USB-C dongle

DG-100P



DP-USB dongle

DG-100H



HDMI-USB dongle

DG-100SD



DVI-USB dongle

DG-100S



VGA-USB dongle


RKP117 / 119
1U 17" / 19" LCD Console Drawer
Benefits

- ▶ 1U 17" / 19" LCD console drawer
- ▶ 1280 x 1024 native resolution
- ▶ 16.7M colors
- ▶ 104-key keyboard with either touchpad or trackball
- ▶ Short depth design of 470mm and 510mm respectively
- ▶ One man installation design
- ▶ Modern, molded front handle with two point lock

Options

- DVI-D / HDMI 1.2 video input
- 3G / HD / SD-SDI Broadcast-grade input
- S-Video + Composite (BNC)
- Audio input & output
- DC power: 12V / 24V / 48V / 125V
- Touchscreen: Capacitive 1-pt / Resistive 1-pt
- MAC or SUN Micro keyboard options


N117 / 119
1U 17" / 19" LCD Console Drawer
Benefits

- ▶ 1U 17" / 19" LCD console drawer
- ▶ 1280 x 1024 native resolution
- ▶ 16.7M colors
- ▶ 104-key keyboard with either touchpad or trackball
- ▶ Short depth design of 500mm
- ▶ One man installation design
- ▶ Modern, molded front handle with two point lock

Options

- DVI-D / HDMI 1.2 video input
- S-Video + Composite (BNC)
- DC power: 12V / 24V / 48V / 125V
- MAC or SUN Micro keyboard options


D117 / 119
1U Dual Slide 17" / 19" LCD Console Drawer
Benefits

- ▶ 1U 17" / 19" LCD console drawer
- ▶ Dual slide - LCD and keyboard slide independently
- ▶ 1280 x 1024 native resolution
- ▶ 16.7M colors
- ▶ 104-key keyboard with touchpad
- ▶ One man installation design
- ▶ Modern, molded front handle with two point lock

Options

- DVI-D / HDMI 1.2 video input
- S-Video + Composite (BNC)
- Audio input & output
- DC power: 12V / 24V / 48V / 125V
- MAC or SUN Micro keyboard options

KVM Kit Options

- **2K KVM**
8 ports
(Resolution related to LCD specification)

- **Combo Cat6 KVM**
8 / 16 / 32 ports
IP & Remote options

- **Combo DB-15 KVM**
8 / 16 ports
IP & Remote options

- **DVI-D KVM**
12 ports

- **Matrix Cat6 KVM**
16 / 32 ports
IP & Remote options

- **USB-Hub DB-15 KVM**
8 / 16 ports
IP & Remote options



RP-717 / 819 / 920

7U / 8U / 9U Display Panel

Benefits

- ▶ 7U 17" / 8U 19" / 9U 20" LCD display panel
- ▶ 1280 x 1024 native resolution (RP-717 / 819)
- ▶ 1600 x 1200 native resolution (RP-920)
- ▶ 16.7M colors
- ▶ DVI-D + VGA video input

Options

- HDMI 1.2 video input
- 3G / HD / SD-SDI Broadcast-grade input
- S-Video + Composite (BNC)
- Audio input & output
- DC power: 12V / 24V / 48V / 125V
- MCS Multi display OSD controller
- MIL-type or lockable connector
- Touchscreen: Capacitive 1-pt (RP-717 / 819)
Resistive 1-pt
- 17", 19" Sunlight readable panel



RP-W819QD

8U 19" Widescreen Quad Display Panel

Benefits

- ▶ 8U 19" widescreen LCD Quad display panel
- ▶ 1440 x 900 native resolution
- ▶ 16.7M colors
- ▶ VGA + Quad Display (Composite BNC x 4) video input

Options

- DC power : 12V / 24V / 48V / 125V



RP-117 / 119

1U Display Drawer

Benefits

- ▶ 1U 17" / 19" LCD display drawer
- ▶ 1280 x 1024 native resolution
- ▶ 16.7M colors
- ▶ DVI-D + VGA video input
- ▶ Short depth design of 500mm
- ▶ One man installation design
- ▶ Modern, molded front handle with two point lock

Options

- HDMI 1.2 video input
- S-Video + Composite (BNC)
- Audio input & output
- DC power: 12V / 24V / 48V / 125V
- Touchscreen: Capacitive 1-pt / Resistive 1-pt
- 17", 19" Sunlight readable panel



RP-120

1U 20" Display Drawer

Benefits

- ▶ 1U 20" LCD display drawer
- ▶ 1600 x 1200 native resolution
- ▶ 16.7M colors
- ▶ DVI-D + VGA video input
- ▶ One man installation design
- ▶ Modern, molded front handle with two point lock

Options

- HDMI 1.2 video input
- S-Video + Composite (BNC)
- Audio input & output
- DC power: 12V / 24V / 48V / 125V


F117
1U 17" FHD LCD Console Drawer
Benefits

- ▶ 1U 17" LCD console drawer
- ▶ 1920 x 1080 native resolution
- ▶ 16.7M colors (8-bit)
- ▶ DVI-D + VGA video input / USB KB / MS
- ▶ 104-key keyboard with either touchpad or trackball
- ▶ Short depth design of 460mm
- ▶ One man installation design
- ▶ New enhanced aesthetics with molded front handle

Options

- Front USB hub port for device access
- HDMI 1.4 video input
- 3G / HD / SD-SDI Broadcast-grade input
- Audio input & output
- DC power: 12V / 24V / 48V / 125V
- MAC or SUN Micro keyboard options
- 2-post rack mounting brackets (ORB-2.1)
- Touchscreen: Resistive 1-pt
- 17" Sunlight readable panel


F1417
1U 17" Ultra Short Depth FHD LCD Console Drawer
Benefits

- ▶ 1U 17" LCD console drawer
- ▶ 1920 x 1080 native resolution
- ▶ 16.7M colors (8-bit)
- ▶ DVI-D + VGA video input / USB KB / MS
- ▶ Ideal for open rack / short depth rack
- ▶ 104-key keyboard with either touchpad or trackball
- ▶ Ultra Short depth design of 400mm
- ▶ One Man installation design
- ▶ Modern, molded front handle with two point lock

Options

- HDMI 1.4 / DP 1.0 video input
- 3G / HD / SD-SDI Broadcast-grade input
- Composite (BNC)
- DC power : 12V / 24V / 48V / 125V
- MAC or SUN Micro keyboard options
- Touchscreen : Resistive 1-pt


F121
1U 21" FHD Large LCD Console Drawer
Benefits

- ▶ 1U 21" LCD console drawer
- ▶ 1920 x 1080 native resolution
- ▶ 16.7M colors
- ▶ DVI-D + VGA video input / USB KB / MS
- ▶ 104-key keyboard with either touchpad or trackball
- ▶ One man installation design
- ▶ Modern, molded front handle with two point lock

Options

- Front USB hub port for device access
- HDMI 1.3 video input
- 3G / HD / SD-SDI Broadcast-grade input
- Audio input & output
- DC power: 12V / 24V / 48V / 125V
- MAC or SUN Micro keyboard options

Model (left side open)	Model (right side open)
F121	F121R

KVM Kit Options

- **2K KVM**
8 ports
(Resolution related to LCD specification)

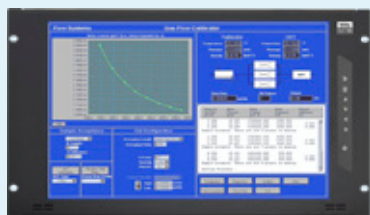
- **DVI-D KVM**
12 ports

- **Combo Cat6 KVM**
8 / 16 / 32 ports
IP & Remote options

- **Matrix Cat6 KVM**
16 / 32 ports
IP & Remote options

- **Combo DB-15 KVM**
8 / 16 ports
IP & Remote options

- **USB-Hub DB-15 KVM**
8 / 16 ports
IP & Remote options



RP-F617

6U 17" FHD Display Panel

Benefits

- ▶ 6U 17" LCD display panel
- ▶ 1920 x 1080 native resolution
- ▶ 16.7M colors (8-bit)
- ▶ DVI-D + VGA video input

Options

- HDMI 1.3 video input
- 3G / HD / SD-SDI Broadcast-grade input
- Audio input & output
- DC power: 12V / 24V / 48V / 125V
- MCS Multi display OSD controller
- MIL-type or lockable connector
- Touchscreen: Resistive 1-pt
- 17" Sunlight readable panel



RP-F821

8U 21" FHD Display Panel

Benefits

- ▶ 8U 21" LCD display panel
- ▶ 1920 x 1080 native resolution
- ▶ 16.7M colors
- ▶ DVI-D + VGA video input
- ▶ PIP Sub-screen & PBP Dual-screen viewing efficiency

Options

- HDMI 1.3 video input
- 3G / HD / SD-SDI Broadcast-grade input
- S-Video + Composite (BNC)
- Audio input & output
- DC power: 12V / 24V / 48V / 125V
- MCS Multi display OSD controller
- MIL-type or lockable connector
- Touchscreen: Capacitive 1-pt / Resistive 1-pt
- 21" Sunlight readable panel



RP-F117

1U 17" FHD Display Drawer

Benefits

- ▶ 1U 17" LCD display drawer
- ▶ 1920 x 1080 native resolution
- ▶ 16.7M colors (8-bit)
- ▶ DVI-D + VGA video input
- ▶ Short depth design of 480mm
- ▶ One man installation design
- ▶ Modern, molded front handle with two point lock

Options

- HDMI 1.3 video input
- 3G / HD / SD-SDI Broadcast-grade input
- Audio input & output
- DC power: 12V / 24V / 48V / 125V
- Touchscreen: Resistive 1-pt
- 17" Sunlight readable panel



RP-HF117

1U 17" FHD Sunlight Readable Display Drawer

Benefits

- ▶ 1U 17" LCD display drawer
- ▶ 1920 x 1080 native resolution
- ▶ 16.7M colors (8-bit)
- ▶ 1000 cd/m² brightness
- ▶ DVI-D + VGA video input
- ▶ Short depth design of 480mm
- ▶ One Man installation design
- ▶ Modern, molded front handle with two point lock

Options

- HDMI 1.3 / DP 1.0 video input
- 3G / HD / SD-SDI Broadcast-grade input
- Composite (BNC)
- Audio input & output
- DC power : 12V / 24V / 48V / 125V
- Touchscreen : Resistive 1-pt


X117
1U 16.2" WUXGA LCD Console Drawer
Benefits

- ▶ 1U 16.2" LCD console drawer
- ▶ 1920 x 1200 WUXGA native resolution
- ▶ 16.7M colors (8-bit)
- ▶ HDMI 1.4 + DVI-D + VGA video input / USB KB / MS
- ▶ 104-key keyboard with either touchpad or trackball
- ▶ Short depth design of 480mm
- ▶ One Man installation design
- ▶ New enhanced aesthetics with molded front handle

Options

- Front USB hub port for device access
- 3G / HD / SD-SDI Broadcast-grade input
- Audio input & output
- 2-post rack mounting brackets (ORB-2.1)
- DC power : 12V / 24V / 48V / 125V
- MAC or SUN Micro keyboard options


DX117
1U Dual Slide 16.2" WUXGA LCD Console Drawer
Benefits

- ▶ 1U 16.2" LCD console drawer
- ▶ Dual slide - LCD and keyboard slide independently
- ▶ 1920 x 1200 WUXGA native resolution
- ▶ 16.7M colors (8-bit)
- ▶ DVI-D + VGA video input / USB KB / MS
- ▶ 104-key keyboard with touchpad
- ▶ One Man installation design
- ▶ Modern, molded front handle with two point lock

Options

- HDMI 1.4 video input
- 3G / HD / SD-SDI Broadcast-grade input
- Audio input & output
- DC power : 12V / 24V / 48V / 125V
- MAC or SUN Micro keyboard options


X124
1U 24" WUXGA LCD Console Drawer
Benefits

- ▶ 1U 24" LCD console drawer
- ▶ 1920 x 1200 WUXGA native resolution
- ▶ 16.7M colors
- ▶ DVI-D + VGA video input / USB KB / MS
- ▶ 104-key keyboard with either touchpad or trackball
- ▶ One Man installation design
- ▶ Modern, molded front handle with two point lock

Options

- Front USB hub port for device access
- HDMI 1.3 video input
- 3G / HD / SD-SDI Broadcast-grade input
- Audio input & output
- DC power : 12V / 24V / 48V / 125V
- MAC or SUN Micro keyboard options

Model (left side open)	Model (right side open)
F121	F121R

KVM Kit Options

- **2K KVM**
8 ports
(Resolution related to LCD specification)

- **DVI-D KVM**
12 ports

- **Combo Cat6 KVM**
8 / 16 / 32 ports
IP & Remote options

- **Matrix Cat6 KVM**
16 / 32 ports
IP & Remote options

- **Combo DB-15 KVM**
8 / 16 ports
IP & Remote options

- **USB-Hub DB-15 KVM**
8 / 16 ports
IP & Remote options



RP-X617

6U 16.2" WUXGA Display Panel

Benefits

- ▶ 6U 16.2" LCD display panel
- ▶ 1920 x 1200 WUXGA native resolution
- ▶ 16.7M colors (8-bit)
- ▶ HDMI 1.4 + DVI-D + VGA video input
- ▶ PIP Sub-screen & PBP Dual-screen viewing efficiency
- ▶ Built-in dual stereo speakers

Options

- 3G / HD / SD-SDI Broadcast-grade input
- DC power : 12V / 24V / 48V / 125V
- MCS Multi display OSD controller
- MIL-type or lockable connector
- Touchscreen : Resistive 1-pt



RP-X924

9U 24" WUXGA Display Panel

Benefits

- ▶ 9U 24" LCD display panel
- ▶ 1920 x 1200 WUXGA native resolution
- ▶ 16.7M colors
- ▶ HDMI 1.3 + DVI-D + VGA video input
- ▶ PIP Sub-screen & PBP Dual-screen viewing efficiency

Options

- 3G / HD / SD-SDI Broadcast-grade input
- Audio input & output
- DC power : 12V / 24V / 48V / 125V
- MCS Multi display OSD controller
- MIL-type or lockable connector
- Touchscreen : Resistive 1-pt



RP-X117

1U 17" FHD Display Drawer

Benefits

- ▶ 1U 16.2" LCD display drawer
- ▶ 1920 x 1200 WUXGA native resolution
- ▶ 16.7M colors (8-bit)
- ▶ DVI-D + VGA video input
- ▶ Short depth design of 480mm
- ▶ One Man installation design
- ▶ Modern, molded front handle with two point lock

Options

- HDMI 1.4 video input
- 3G / HD / SD-SDI Broadcast-grade input
- DC power : 12V / 24V / 48V / 125V
- Touchscreen : Resistive 1-pt


K117
1U 17" 4K LCD Console Drawer
Benefits

- ▶ 1U 17" 4K LCD console drawer
- ▶ 3840 x 2160 native resolution
- ▶ 1920 x 1080 & 1920 x 1200 resolutions support
- ▶ 16.7M colors (8-bit)
- ▶ Display port 1.2 video input / USB KB / MS
- ▶ 104-key keyboard with either touchpad or trackball
- ▶ Built-in dual stereo speakers
- ▶ Short depth design of 480mm
- ▶ One man installation design
- ▶ New enhanced aesthetics with molded front handle

Options

- Front USB hub port for device access
- HDMI 2.0 video input
- 3G / HD / SD-SDI Broadcast-grade input
- DC power: 12V / 24V / 48V / 125V
- MAC or SUN Micro keyboard options
- Touchscreen: Resistive 1-pt


K1417
1U 17" Ultra Short Depth 4K LCD Console Drawer
Benefits

- ▶ 1U 17" 4K LCD console drawer
- ▶ 3840 x 2160@60Hz native resolution
- ▶ 1920 x 1080 & 1920 x 1200 resolution support
- ▶ 16.7M colors (8-bit)
- ▶ Display port 1.2 video input / USB KB/MS
- ▶ Ideal for open rack / short depth rack
- ▶ 104-key keyboard with either touchpad or trackball
- ▶ Built-in dual stereo speakers
- ▶ One man installation design
- ▶ Modern, molded front handle with two point lock

Options

- HDMI 2.0 video input
- 3G / HD / SD-SDI Broadcast-grade input
- DC power : 12V / 24V / 48V / 125V
- MAC or SUN Micro keyboard options
- Touchscreen : Resistive 1-pt


K123
1U 23" 4K Large LCD Console Drawer
Benefits

- ▶ 1U 23" 4K LCD console drawer
- ▶ 3840 x 2160 native resolution
- ▶ 1920 x 1080 & 1920 x 1200 resolutions support
- ▶ 1.07B colors (10-bit)
- ▶ Display port 1.2 video input / USB KB / MS
- ▶ 104-key keyboard with either touchpad or trackball
- ▶ Built-in dual stereo speakers
- ▶ One man installation design
- ▶ Modern, molded front handle with two point lock

Options

- Front USB hub port for device access
- HDMI 2.0 video input
- 3G / HD / SD-SDI Broadcast-grade input
- DC power: 12V / 24V / 48V / 125V
- MAC or SUN Micro keyboard options

Model (left side open)	Model (right side open)
K123	K123R

KVM Kit Options

- **4K 60Hz KVM**
8 ports

- **2K KVM**
8 ports


RP-K617
6U 17" 4K Display Panel
Benefits

- ▶ 6U 17" 4K LCD display panel
- ▶ 3840 x 2160 native resolution
- ▶ 1920 x 1080 & 1920 x 1200 resolution support
- ▶ 16.7M colors (8-bit)
- ▶ Display port 1.2 + HDMI 1.4 + HDMI 2.0 video input
- ▶ PIP Sub-screen & PBP Dual-screen viewing efficiency
- ▶ Built-in dual stereo speakers

Options

- 3G / HD / SD-SDI Broadcast-grade input
- DC power: 12V / 24V / 48V / 125V
- MCS Multi display OSD controller
- MIL-type or lockable connector
- Touchscreen: Projected Capacitive 10-pt
Resistive 1-pt


RP-K923
9U 23" 4K Display Panel
Benefits

- ▶ 9U 23" 4K LCD display panel
- ▶ 3840 x 2160 native resolution
- ▶ 1920 x 1080 & 1920 x 1200 resolution support
- ▶ 1.07B colors (10-bit)
- ▶ Display port 1.2 + HDMI 1.4 + HDMI 2.0 video input
- ▶ PIP Sub-screen & PBP Dual-screen viewing efficiency
- ▶ Built-in dual stereo speakers

Options

- 3G / HD / SD-SDI Broadcast-grade input
- DC power: 12V / 24V / 48V / 125V
- MCS Multi display OSD controller
- MIL-type or lockable connector
- Touchscreen: Projected Capacitive 10-pt
Infrared 6-pt
Resistive 1-pt


RP-K117
1U 17" 4K Display Drawer
Benefits

- ▶ 1U 17" 4K LCD display drawer
- ▶ 3840 x 2160 native resolution
- ▶ 1920 x 1080 & 1920 x 1200 resolution support
- ▶ 16.7M colors (8-bit)
- ▶ Display port 1.2 video input
- ▶ Built-in dual stereo speakers
- ▶ Short depth design of 480mm
- ▶ One man installation design
- ▶ Modern, molded front handle with two point lock

Options

- HDMI 2.0 video input
- 3G / HD / SD-SDI Broadcast-grade input
- DC power: 12V / 24V / 48V / 125V
- Touchscreen: Resistive 1-pt

MRK

2U Multi-display Console Drawer



Benefits

- ▶ 2U 22" short depth design
- ▶ Light weight only 46.2 lbs / 21 kgs
- ▶ Rugged construction for mobility & durability
- ▶ Built-in solid bearing slide rails
- ▶ Built-in dual stereo speaker (per display)
- ▶ Five LED backlit display selections (4K, WUXGA, FHD 60Hz, FHD 144Hz, 4:3)
- ▶ DVI-D + VGA video input for FHD & 4:3 (per display)
- ▶ Display port 1.2 video input for 4K (per display)
- ▶ 104-key keyboard with either touchpad or trackball (PS2 / USB)
- ▶ Fits 24" ~ 36" rack via adjustable mounting brackets

Options

- DC power: 12V / 24V / 48V / 125V
- 3G / HD / SD-SDI Broadcast-grade input
- Touchscreen for 17" 4K, 16.2" WUXGA, 17" FHD & 19" 4:3
- MAC or SUN Micro keyboard options available
- Front USB hub port for device access
- HDMI video input
- Add-on USB Selector

Models

LH mounted



RH mounted



17" **4K** UHD

MRK-K17-2L

MRK-K17-3

MRK-K17-2R

17" **1080p** **60 Hz**

MRK-F17-2L

MRK-F17-3

MRK-F17-2R

17" **1080p** **144 Hz**

MRK-MF17-2L

MRK-MF17-3

MRK-MF17-2R

16.2" **1920** **1200**

MRK-X17-2L

MRK-X17-3

MRK-X17-2R

19" **1280** **1024**

MRK-19-2L

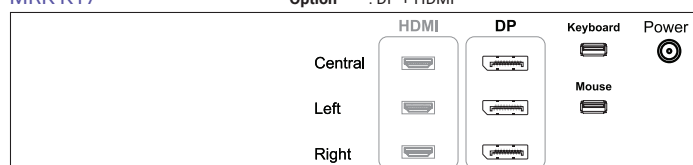
MRK-19-3

MRK-19-2R

Rear View

MRK-K17

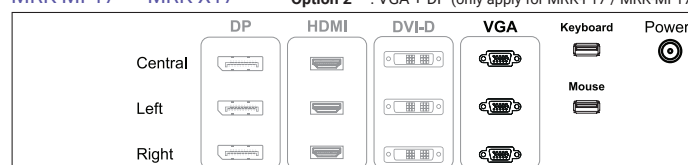
Standard : DP
Option : DP + HDMI



MRK-F17
MRK-MF17

MRK-19
MRK-X17

Standard : VGA + DVI-D
Option 1 : VGA + HDMI
Option 2 : VGA + DP (only apply for MRK-F17 / MRK-MF17)



MRP

2U Multi-display Drawer



Benefits

- ▶ 2U 22" short depth design
- ▶ Light weight only 42.7 lbs / 19.4 kgs
- ▶ Rugged construction for mobility & durability
- ▶ Built-in solid bearing slide rails
- ▶ Built-in dual stereo speaker (per display)
- ▶ Four LED backlit display selections (4K, FHD 60Hz, FHD 144Hz, 4:3)
- ▶ DVI-D + VGA video input for FHD & 4:3 (per display)
- ▶ Display port 1.2 video input for 4K (per display)
- ▶ Fits 24" ~ 36" rack via adjustable mounting brackets

Options

- DC power: 12V / 24V / 48V / 125V
- 3G / HD / SD-SDI Broadcast-grade input
- Touchscreen for 17" 4K, 17" FHD & 19" 4:3
- HDMI video input

Models

LH mounted



RH mounted



17" **4K** UHD

MRP-K17-2L

MRP-K17-3

MRP-K17-2R

17" **1080p** 60 Hz

MRP-F17-2L

MRP-F17-3

MRPF17-2R

17" **1080p** 144 Hz

MRP-MF17-2L

MRP-MF17-3

MRPMF17-2R

16.2" **1920** 1200

MRP-X17-2L

MRP-X17-3

MRP-X17-2R

19" **1280** 1024

MRP-19-2L

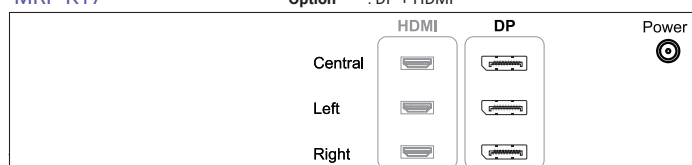
MRP-19-3

MRP-19-2R

Rear View

MRP-K17

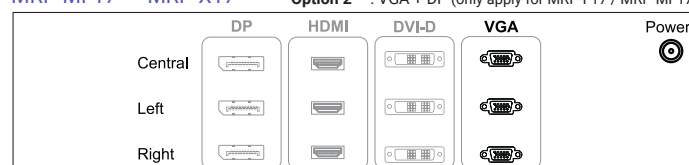
Standard : DP
Option : DP + HDMI



MRP-F17
MRP-MF17

MRP-19
MRP-X17

Standard : VGA + DVI-D
Option 1 : VGA + HDMI
Option 2 : VGA + DP (only apply for MRP-F17 / MRP-MF17)



Rack Console Drawer Series	Model	Video Input	LCD Panel			Chassis Design	KVM Rear Kit					
			Catagories	Size	Resolution		4K	2K	DVI-D	Cat 6 Combo	Martix	DB-15 Combo USB Hub
1U LCD Console Drawer	K117	DP 1.2 (attached 6ft cable)	4K	17"	3840 x 2160	1U, Short Depth design of 480mm	✓					
	F117	DVI-D + VGA	FHD	17"	1920 x 1080	1U, Short Depth design of 460mm		✓	✓	✓	✓	✓
	X117	HDMI 1.4 + DVI-D + VGA	WUXGA	16.2"	1920 x 1200	1U, Short Depth design of 480mm		✓	✓	✓	✓	✓
	L120	VGA	Regular	20"	1600 x 1200	1U		✓	✓	✓	✓	✓
	W119	DVI-D + VGA	Regular	19" Wide LCD	1440 x 900	1U, Short Depth design of 460mm		✓	✓	✓	✓	✓
	RKP117	VGA	Regular	17"	1280 x1024	1U, Short Depth design of 470mm		✓	✓	✓	✓	✓
	RKP119	VGA	Regular	19"	1280 x1024	1U, Short Depth design of 510mm		✓	✓	✓	✓	✓
	N117	VGA	Regular	17"	1280 x1024	1U, Short Depth design of 500mm		✓	✓	✓	✓	✓
	N119	VGA	Regular	19"	1280 x1024	1U, Short Depth design of 500mm		✓	✓	✓	✓	✓
	RKP7	VGA	Regular	17"	1280 x1024	1U		✓	✓	✓	✓	✓
	RKP9	VGA	Regular	19"	1280 x1024	1U		✓	✓	✓	✓	✓
Large LCD	K123	DP 1.2 (attached 6ft cable)	4K	23"	3840 x 2160	1U, Left open model or Right open model	✓					
	F121	DVI-D + VGA	FHD	21"	1920 x 1080	1U, Left open model or Right open model		✓	✓	✓	✓	✓
	X124	DVI-D + VGA	WUXGA	24"	1920 x 1200	1U, Left open model or Right open model		✓	✓	✓	✓	✓
Dual Slide	DK117	DP 1.2 (attached 6ft cable)	4K	17"	3840 x 2160	1U, Dual Slide	✓					
	DF117	DVI-D + VGA	FHD	17"	1920 x 1080	1U, Dual Slide		✓	✓	✓	✓	✓
	DX117	DVI-D + VGA	WUXGA	16.2"	1920 x 1200	1U, Dual Slide		✓	✓	✓	✓	✓
	D117	VGA	Regular	17"	1280 x1024	1U, Dual Slide		✓	✓	✓	✓	✓
	D119	VGA	Regular	19"	1280 x1024	1U, Dual Slide		✓	✓	✓	✓	✓
	RKP2417K	DP 1.2 (attached 6ft cable)	4K	17"	3840 x 2160	2U, Dual Slide, Short depth 480mm	✓					
	RKP2417F	DVI-D + VGA	FHD	17"	1920 x 1080	2U, Dual Slide, Short depth 480mm		✓	✓	✓	✓	✓
	RKP2417	VGA	Regular	17"	1280 x1024	2U, Dual Slide, Short depth 480mm		✓	✓	✓	✓	✓
Ultra Short Depth	RKP2419	VGA	Regular	19"	1280 x1024	2U, Dual Slide, Short depth 480mm		✓	✓	✓	✓	✓
	K1417	DP 1.2 (attached 6ft cable)	4K	17"	3840 x 2160	1U, Ultra Short Depth design of 400m	✓					
	F1417	DVI-D + VGA	FHD	17"	1920 x 1080	1U, Ultra Short Depth design of 400m		✓	✓	✓	✓	✓
High Brightness LCD	HF117	DVI-D + VGA	FHD	17"	1920 x 1080	1U, Short Depth design of 480mm		✓	✓	✓	✓	✓
	H117	VGA	Regular	17"	1280 x1024	1U, Short Depth design of 480mm		✓	✓	✓	✓	✓
	H119	VGA	Regular	19"	1280 x1024	1U, Short Depth design of 520mm		✓	✓	✓	✓	✓
SUN LCD Solution	S117	DVI-D + VGA	SUN	17"	1152 x 900	1U, Short Depth design of 460mm		✓	✓	✓	✓	✓
	S119	DVI-D + VGA	SUN	19"	1152 x 900	1U, Short Depth design of 500mm		✓	✓	✓	✓	✓
	NS117	DVI-D + VGA	SUN	17"	1152 x 900	1U, Short Depth design of 500mm		✓	✓	✓	✓	✓
	NS119	DVI-D + VGA	SUN	19"	1152 x 900	1U, Short Depth design of 500mm		✓	✓	✓	✓	✓
	MRK-K17	DP 1.2 / HDCP 1.3	4K	17"	3840 x 2160	2U, Triple / Dual (LH or RH mount) LCD						
Multi-Display	MRK-F17	DVI-D + VGA	FHD	17"	1920 x 1080	2U, Triple / Dual (LH or RH mount) LCD						
	MRK-MF17	DVI-D + VGA	FHD 144Hz	17"	1920 x 1080	2U, Triple / Dual (LH or RH mount) LCD						
	MRK-X17	DVI-D + VGA	WUXGA	16.2"	1920 x 1200	2U, Triple / Dual (LH or RH mount) LCD						
	MRK-19	DVI-D + VGA	Regular	19"	1280 x 1024	2U, Triple / Dual (LH or RH mount) LCD						

* For more detailed specification, please refer to the product sheets :
www.austin-hughes.com/resource_cat/product-resources/rack-console-drawer-resources

Rack Display Panel / Drawer Series		Model	Video Input	LCD Panel			Chassis Design	Options		
				Catagories	Size	Resolution		Touch Screen	3G / HD SD-SDI	DC Power
Display Panel	Regular	RP-K617	Display port 1.2 + HDMI 1.4 + HDMI 2.0	4K	17"	3840 x 2160	6U Rackmount	✓	✓	✓
		RP-F617	DVI-D + VGA	FHD	17"	1920 x 1080	6U Rackmount	✓	✓	✓
		RP-X617	HDMI 1.4 + DVI-D + VGA	WUXGA	16.2"	1920 x 1200	6U Rackmount	✓	✓	✓
		RP-717	DVI-D + VGA	Regular	17"	1280 x 1024	7U Rackmount	✓	✓	✓
		RP-819	DVI-D + VGA	Regular	19"	1280 x 1024	8U Rackmount	✓	✓	✓
		RP-920	DVI-D + VGA	Regular	20"	1600 x 1200	9U Rackmount	✓	✓	✓
		RP-W719	DVI-D + VGA	Regular	19" Wide LCD	1440 x 900	7U Rackmount	✓	✓	✓
	Large LCD	RP-K923	Display port 1.2 + HDMI 1.4 + HDMI 2.0	4K	23"	3840 x 2160	9U Rackmount ; VESA Mount Ready	✓	✓	✓
		RP-F821	DVI-D + VGA	FHD	21"	1920 x 1080	8U Rackmount ; VESA Mount Ready	✓	✓	✓
		RP-X924	HDMI 1.3 + DVI-D + VGA	WUXGA	24"	1920 x 1200	9U Rackmount ; VESA Mount Ready	✓	✓	✓
	High Brightness	RP-HF617	DVI-D + VGA	FHD	17"	1920 x 1080	6U Rackmount	✓	✓	✓
		RP-HF821	DVI-D + VGA	FHD	21"	1920 x 1080	8U Rackmount ; VESA Mount Ready	✓	✓	✓
		RP-H717	DVI-D + VGA	Regular	17"	1280 x 1024	7U Rackmount	✓	✓	✓
		RP-H819	DVI-D + VGA	Regular	19"	1280 x 1024	8U Rackmount	✓	✓	✓
		RP-HW719	DVI-D + VGA	Regular	19" Wide LCD	1440 x 900	7U Rackmount	✓	✓	✓
	Sun LCD Solution	SP-717	DVI-D + VGA	SUN	17"	1152 x 900	7U Rackmount			✓
		SP-819	DVI-D + VGA	SUN	19"	1152 x 900	8U Rackmount			✓
		SP-920	DVI-D + VGA	SUN	20"	1152 x 900	9U Rackmount			✓
	Split Quad	RP-F921QD-1080	QD (HDMI 1.3 x 4) + DVI-D + VGA	FHD	21"	1920 x 1080	9U Rackmount ; VESA Mount Ready			✓
		RP-919QD	QD (Composite BNC x 4) + VGA	Regular	19"	1280 x 1024	9U Rackmount			✓
		RP-W819QD	QD (Composite BNC x 4) + VGA	Regular	19" Wide LCD	1440 x 900	8U Rackmount			✓
Display Drawer	Regular	RP-K117	Display port 1.2 (attached 6ft DP cable)	4K	17"	3840 x 2160	1U, Short Depth design of 480mm	✓	✓	✓
		RP-F117	DVI-D + VGA	FHD	17"	1920 x 1080	1U, Short Depth design of 480mm	✓	✓	✓
		RP-X117	DVI-D + VGA	WUXGA	16.2"	1920 x 1200	1U, Short Depth design of 480mm	✓	✓	✓
		RP-117	DVI-D + VGA	Regular	17"	1280 x 1024	1U, Short Depth design of 500mm	✓		✓
		RP-119	DVI-D + VGA	Regular	19"	1280 x 1024	1U, Short Depth design of 500mm	✓		✓
		RP-W119	DVI-D + VGA	Regular	19" Wide LCD	1440 x 900	1U, Short Depth design of 460mm		✓	✓
		RP-120	DVI-D + VGA	Regular	20"	1600 x 1200	1U			✓
	Ultra Short Depth	RP-K1417	Display port 1.2 (attached 6ft DP cable)	4K	17"	3840 x 2160	1U, Ultra Short Depth design of 400m	✓	✓	✓
		RP-F1417	DVI-D + VGA	FHD	17"	1920 x 1080	1U, Ultra Short Depth design of 400m	✓	✓	✓
		RP-HF117	DVI-D + VGA	FHD	17"	1920 x 1080	1U, Short Depth design of 480mm	✓		✓
	High Brightness	RP-HW119	DVI-D + VGA	Regular	19"	1440 x 900	1U, Short Depth design of 460mm		✓	✓
		RP-H117	DVI-D + VGA	Regular	17"	1280 x 1024	1U, Short Depth design of 500mm	✓		✓
		RP-H119	DVI-D + VGA	Regular	19"	1280 x 1024	1U, Short Depth design of 500mm	✓		✓
		SP-117	DVI-D + VGA	SUN	17"	1152 x 900	1U, Short Depth design of 500mm			✓
	Sun LCD Solution	SP-119	DVI-D + VGA	SUN	19"	1152 x 900	1U, Short Depth design of 500mm			✓
		SP-120	DVI-D + VGA	SUN	20"	1152 x 900	1U			✓
	Split Quad	RP-119QD	QD (Composite BNC x 4) + VGA	FHD	19"	1280 x 1024	1U			✓
		RP-W119QD	QD (Composite BNC x 4) + VGA	Regular	19" Wide LCD	1440 x 900	1U			✓
	Multi-Display	MRP-K17	DP 1.2 / HDCP 1.3	4K	17"	3840 x 2160	2U, Triple / Dual (LH or RH mount) LCD	✓	✓	✓
		MRP-F17	DVI-D + VGA	FHD	17"	1920 x 1080	2U, Triple / Dual (LH or RH mount) LCD	✓	✓	✓
		MRP-MF17	DVI-D + VGA	FHD 144Hz	17"	1920 x 1080	2U, Triple / Dual (LH or RH mount) LCD	✓	✓	✓
		MRP-X17	HDMI 1.4 + DVI-D + VGA	WUXGA	16.2"	1920 x 1200	2U, Triple / Dual (LH or RH mount) LCD	✓	✓	✓
		MRP-19	DVI-D + VGA	Regular	19"	1280 x 1024	2U, Triple / Dual (LH or RH mount) LCD	✓	✓	✓

* For more detailed specification, please refer to the product sheets :
www.austin-hughes.com/resource_cat/product-resources/rack-display-resources/

Keyboard Drawer



RK-2e / RK-2b

1U Short Depth Keyboard Drawer

Benefits

- ▶ 1U keyboard drawer
- ▶ 104-key keyboard with either touchpad or trackball
- ▶ Short depth design of 400mm
- ▶ Modern, molded front handle with two point lock

Options

- MAC or SUN Micro keyboard options



RK-1e / RK-1b

1U Keyboard Drawer with KVM Options

Benefits

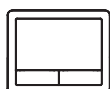
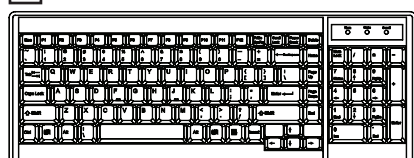
- ▶ 1U keyboard drawer
- ▶ 104-key keyboard with either touchpad or trackball
- ▶ Keyboard drawer depth 550mm
- ▶ One man installation design
- ▶ Modern, molded front handle with two point lock

Options

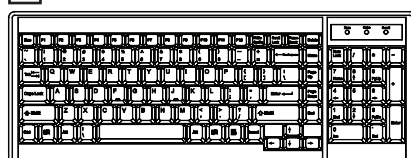
- MAC or SUN Micro keyboard options
- KVM rear kit: 2K
 - DVI-D
 - Combo Cat6
 - Matrix Cat6
 - Combo DB-15
 - USB Hub DB-15

Standard Keyboard









Ge G keyboard integrated with touchpad



Gb G keyboard integrated with trackball



Supported Layouts

America					
	United States				
EMEA					
	United Kingdom	Germany	France	Spain	Italy
Asia					
	Japan	Korea			

KVM Extender



CV-S101

Combo KVM Extender

Benefits

- ▶ Remote console up to 150M
- ▶ Dual user access at remote site
- ▶ Pure hardware solution makes network independent
- ▶ No software required



IP-S101

IP Combo KVM Extender

Benefits

- ▶ IP Remote access from any location via web browser
- ▶ Compatible with all branded KVM switches
- ▶ Maintaining servers across the world up to BIOS level

K55" ~ K28"

K55"



K43"



K32"



K28"



Highlights

Key Benefits

- ▶ 3840 x 2160@60Hz native UHD resolution
- ▶ 1920 x 1080 & 1920 x 1200 resolution support
- ▶ 1.07 billion colors (10-bit)
- ▶ PIP Sub-screen & PBP Dual-screen viewing efficiency
- ▶ Display port 1.2 + HDMI 1.4 + HDMI 2.0 video input
- ▶ Video decoding capability up to 1080p (option)
- ▶ Rugged structure ensures high mobility
- ▶ IP65 front protection (NAP series)
- ▶ Professional-use durability & around-the-clock operation

Applications

- Broadcasting / Advertising
- Traffic control / Command center
- Directory / Ticket kiosk
- Surveillance system
- Vehicle mount display
- Bathroom TV

Options

- DC power : 24V / 48V / 125V
- Touchscreen (for K55", K43" & K32") *
- Anti-reflective glass or Vandal proof glass
- IP65 front protection
- Custom chassis & mounting
- High brightness panel (for K55" & K43")
- HDMI decoder & extender
- HDMI quad display module 1080p
- Multi monitor OSD control module
- 3G / HD / SD-SDI input module
- 12G / 4K60 / SD-SDI input module
- Portrait mode module
- Auto dimming
- Manual dimming


* Refer to the following link for details of touchscreen models.
www.austin-hughes.com/CA-UV-4K-L.pdf

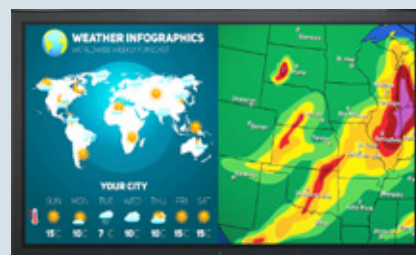
Standard Brightness / 700 cd/m² High Brightness

6mm aluminum front bezel



AP-K55 HAP-K55
 AP-K43 HAP-K43
 AP-K32
 AP-K28

6mm aluminum front bezel
 NEMA 4 / IP65 front protection 



NAP-K55 NHAP-K55
 NAP-K43 NHAP-K43
 NAP-K32
 NAP-K28

Aluminum front cover



DP-K55 HDP-K55
 DP-K43 HDP-K43
 DP-K32
 DP-K28

Universal open frame



OP-K55 HOP-K55
 OP-K43 HOP-K43
 OP-K32
 OP-K28

Chassis customization

- ▶ Dimension
- ▶ Color & Treatment
- ▶ Screen Printing
- ▶ Stainless Steel Bezel

K23" ~ K13"

K23"



K17"



K15"



K13"



Highlights

Key Benefits

- ▶ 3840 x 2160@60Hz native UHD resolution
- ▶ 1920 x 1080 & 1920 x 1200 resolution support
- ▶ K23": 1.07 billion colors (10-bit)
- ▶ K17", K15" & K13": 16.7 million colors (8-bit)
- ▶ PIP Sub-screen & PBP Dual-screen viewing efficiency
- ▶ Display port 1.2 + HDMI 1.4 + HDMI 2.0 video input
- ▶ Video decoding capability up to 1080p (option)
- ▶ Rugged structure ensures high mobility
- ▶ IP65 front protection (NAP series)
- ▶ Professional-use durability & around-the-clock operation

Applications

- Broadcasting / Advertising
- Traffic control / Command center
- Directory / Ticket kiosk
- Surveillance system
- Vehicle mount display
- Bathroom TV

Options

- DC power : 12V / 24V / 48V / 125V
- Touchscreen *
- Anti-reflective glass or Vandal proof glass
- IP65 front protection
- Custom chassis & mounting
- HDMI decoder & extender
- HDMI quad display 1080p (for K23")
- Multi monitor OSD control module
- 3G / HD / SD-SDI input module
- 12G / 4K60 / SD-SDI input module
- Auto dimming
- Manual dimming

* Refer to the following link for details of touchscreen models.
www.austin-hughes.com/CA-UV-4K-S.pdf

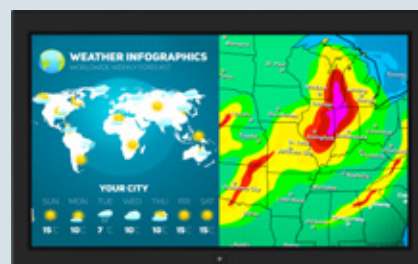
Standard Brightness

6mm aluminum front bezel



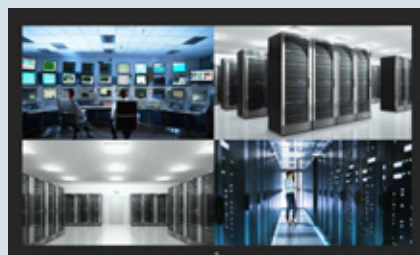
AP-K23
AP-K17
AP-K15
AP-K13

6mm aluminum front bezel
NEMA 4 / IP65 front protection



NAP-K23
NAP-K17
NAP-K15
NAP-K13

Aluminum front cover



DP-K23
DP-K17
DP-K15
DP-K13

Universal open frame



OP-K23
OP-K17
OP-K15
OP-K13

Chassis customization

- ▶ Dimension
- ▶ Color & Treatment
- ▶ Screen Printing
- ▶ Stainless Steel Bezel

F55" ~ F28"

F55"



F43"



F32"



F28"



Highlights

Key Benefits

- ▶ 1920 x 1080 native FHD resolution
- ▶ 1.07 billion colors (10-bit)
- ▶ DVI-D / VGA video input
- ▶ DP / HDMI video input (option)
- ▶ Video decoding capability up to 1080p (option)
- ▶ Rugged structure ensures high mobility
- ▶ IP65 front protection (NAP series)
- ▶ Professional-use durability & around-the-clock operation

Applications

- Broadcasting / Advertising
- Traffic control / Command center
- Directory / Ticket kiosk
- Surveillance system
- Vehicle mount display
- Bathroom TV

Options

- DC power : 24V / 48V / 125V
- Touchscreen (for F55", F43" & F32") *
- Anti-reflective glass or Vandal proof glass
- IP65 front protection
- Custom chassis & mounting
- Sunlight readable panel (for F55", F43" & F32")
- HDMI decoder & extender
- HDMI quad display 1080p
- Multi monitor OSD control module
- 3G / HD / SD-SDI input module
- Portrait mode module
- Auto dimming
- Manual dimming

* Refer to the following link for details of touchscreen models.
www.austin-hughes.com/CA-UV-FHD-L.pdf

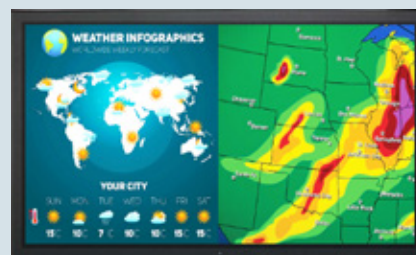
Standard Brightness / 1500 cd/m² Sunlight Readable Brightness

6mm aluminum front bezel



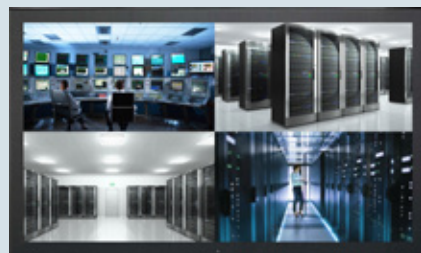
AP-F55 HAP-F55
 AP-F43 HAP-F43
 AP-F32 HAP-F32
 AP-F28

6mm aluminum front bezel
 NEMA 4 / IP65 front protection



NAP-F55 NHAP-F55
 NAP-F43 NHAP-F43
 NAP-F32 NHAP-F32
 NAP-F28

Aluminum front cover



DP-F55 HDP-F55
 DP-F43 HDP-F43
 DP-F32 HDP-F32
 DP-F28

Universal open frame



OP-F55 HOP-F55
 OP-F43 HOP-F43
 OP-F32 HOP-F32
 OP-F28

Chassis customization

- ▶ Dimension
- ▶ Color & Treatment
- ▶ Screen Printing
- ▶ Stainless Steel Bezel

F23" ~ F13"

F23"



F21"



F17"



F15"



F13"



Highlights

Key Benefits

- ▶ 1920 x 1080 native FHD resolution
 - ▶ F23": 1.07 billion colors (10-bit)
 - ▶ F21": 16.7 million colors
 - ▶ F17", F15" & F13": 16.7 million colors (8-bit)
 - ▶ DVI-D / VGA video input
 - ▶ DP / HDMI video input (option)
 - ▶ Video decoding capability up to 1080p (option)
 - ▶ Rugged structure ensures high mobility
 - ▶ IP65 front protection (NAP series)
- Professional-use durability & around-the-clock operation

Applications

- Broadcasting / Advertising
- Traffic control / Command center
- Directory / Ticket kiosk
- Surveillance system
- Vehicle mount display
- Bathroom TV

Options

- DC power : 12V / 24V / 48V / 125V
- Touchscreen *
- Anti-reflective glass or Vandal proof glass
- IP65 front protection
- Custom chassis & mounting
- Sunlight readable panel (for F21", F17" & F15")
- HDMI decoder & extender
- HDMI quad display 1080p (for F23" & F21")
- Multi monitor OSD control module
- 3G / HD / SD-SDI input module
- Portrait mode module (for F23")
- Auto dimming
- Manual dimming

* Refer to the following link for details of touchscreen models.
www.austin-hughes.com/CA-UV-FHD-S.pdf

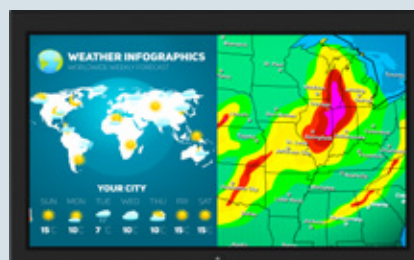
Standard Brightness / 1000 cd/m² Sunlight Readable Brightness

6mm aluminum front bezel



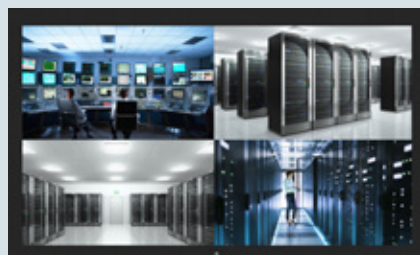
AP-F23
 AP-F21 **HAP-F21**
 AP-F17 **HAP-F17**
 AP-F15 **HAP-F15**
 AP-F13

6mm aluminum front bezel
 NEMA 4 / IP65 front protection



NAP-F23
 NAP-F21 **NHAP-F21**
 NAP-F17 **NHAP-F17**
 NAP-F15 **NHAP-F15**
 NAP-F13

Aluminum front cover



DP-F23
 DP-F21 **HDP-F21**
 DP-F17 **HDP-F17**
 DP-F15 **HDP-F15**
 DP-F13

Universal open frame



OP-F23
 OP-F21 **HOP-F21**
 OP-F17 **HOP-F17**
 OP-F15 **HOP-F15**
 OP-F13

Chassis customization

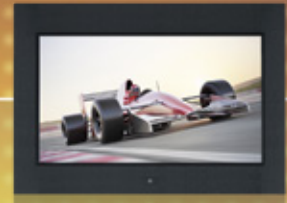
- ▶ Dimension
- ▶ Color & Treatment
- ▶ Screen Printing
- ▶ Stainless Steel Bezel

MF27" & MF17"

MF27"



MF17"



Highlights

Key Benefits

- ▶ 144 Hz high frequency refresh rate
- ▶ 1920 x 1080 native FHD resolution
- ▶ 16.7 million colors
- ▶ PIP Sub-screen & PBP Dual-screen viewing efficiency
- ▶ VGA + DVI-D + HDMI-1.4 video input for MF27"
- ▶ VGA + DVI-D video input for MF17"
- ▶ Video decoding capability up to 1080p (option)
- ▶ Rugged structure ensures high mobility
- ▶ IP65 front protection (NAP series)
- ▶ Professional-use durability & around-the-clock operation

Applications

- Military / Defense
- eSport
- Gaming
- Video Editing
- Broadcasting / Advertising
- Traffic control / Command center
- Surveillance system
- Vehicle mount display

Options

- DC power : 12V / 24V / 48V / 125V
- Touchscreen *
- Anti-reflective glass or Vandal proof glass
- IP65 front protection
- Custom chassis & mounting
- HDMI decoder & extender
- HDMI quad display 1080p (for MF27")
- Multi monitor OSD control module
- 3G / HD / SD-SDI input module
- Portrait mode module (for MF27")
- Auto dimming
- Manual dimming

* Refer to the following link for details of touchscreen models.
www.austin-hughes.com/CA-UV-MF.pdf

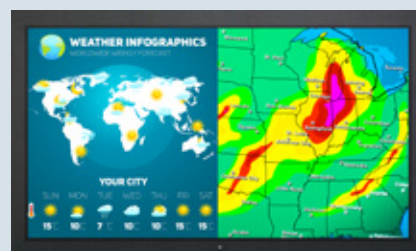
Standard Brightness

6mm aluminum front bezel



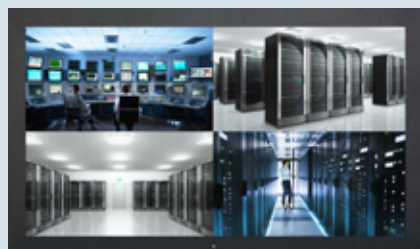
AP-MF27
AP-MF17

6mm aluminum front bezel
NEMA 4 / IP65 front protection



NAP-MF27
NAP-MF17

Aluminum front cover



DP-MF27
DP-MF17

Universal open frame



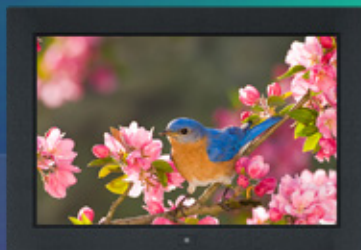
OP-MF27
OP-MF17

Chassis customization

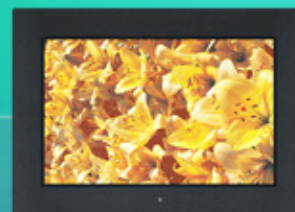
- ▶ Dimension
- ▶ Color & Treatment
- ▶ Screen Printing
- ▶ Stainless Steel Bezel

X24" & X17"

X24"



X17"



Highlights

Key Benefits

- ▶ 1920 x 1200 WUXGA native resolution
- ▶ 16.7 million colors (8-bit for X17")
- ▶ X24": HDMI 1.3 + DVI-D + S-Video + BNC + VGA
- ▶ X17": HDMI 1.4 + DVI-D + VGA
- ▶ PIP Sub-screen & PBP Dual-screen viewing efficiency
- ▶ Video decoding capability up to 1080p (option)
- ▶ Rugged structure ensures high mobility
- ▶ IP65 front protection (NAP series)
- ▶ Professional-use durability & around-the-clock operation

Applications

- Broadcasting / Advertising
- Traffic control / Command center
- Directory / Ticket kiosk
- Surveillance system
- Vehicle mount display
- Bathroom TV

Options

- DC power : 12V / 24V / 48V / 125V
- Touchscreen *
- Anti-reflective glass or Vandal proof glass
- IP65 front protection
- Custom chassis & mounting
- Multi monitor OSD control module
- 3G / HD / SD-SDI input module
- Auto dimming
- Manual dimming

* Refer to the following link for details of touchscreen models.
www.austin-hughes.com/CA-UV-WUXGA.pdf

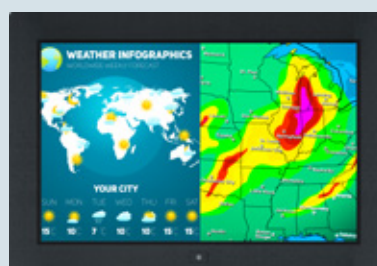
Standard Brightness

6mm aluminum front bezel



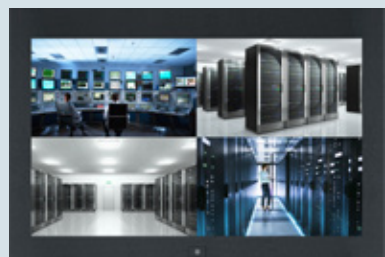
AP-X24
AP-X17

6mm aluminum front bezel
NEMA 4 / IP65 front protection



NAP-X24
NAP-X17

Aluminum front cover



DP-X24
DP-X17

Universal open frame



OP-X24
OP-X17

Chassis customization

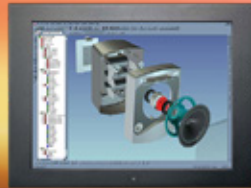
- ▶ Dimension
- ▶ Color & Treatment
- ▶ Screen Printing
- ▶ Stainless Steel Bezel

20" ~ 17"

W19"



20"



19"



17"



Highlights

Key Benefits

- ▶ 1440 x 900 / 1600 x 1200 / 1280 x 1024 native resolution
- ▶ 16.7 M colors
- ▶ DVI-D + VGA video input
- ▶ Video decoding capability up to 1080p (option)
- ▶ Rugged structure ensures high mobility
- ▶ IP65 front protection (NAP series)
- ▶ Professional-use durability & around-the-clock operation

Applications

- Broadcasting / Advertising
- Traffic control / Command center
- Directory / Ticket kiosk
- Surveillance system
- Vehicle mount display
- Bathroom TV

Options

- DC power : 12V / 24V / 48V / 125V
- Touchscreen *
- Anti-reflective glass or Vandal proof glass
- IP65 front protection
- Custom chassis & mounting
- Sunlight readable panel (W19", 19" & 17")
- HDMI decoder & extender (for W19")
- HDMI quad display 1080p (for W19")
- Multi monitor OSD control module
- 3G / HD / SD-SDI input module
- Auto dimming
- Manual dimming

* Refer to the following link for details of touchscreen models.
www.austin-hughes.com/CA-UV-Regular-L.pdf

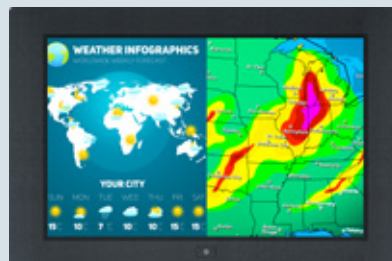
Standard Brightness / 1000 cd/m² Sunlight Readable Brightness

6mm aluminum front bezel



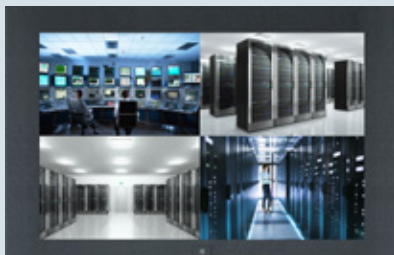
AP-W19 HAP-W19
 AP-20 HAP-19
 AP-19 HAP-17
 AP-17

6mm aluminum front bezel
 NEMA 4 / IP65 front protection



NAP-W19 NHAP-W19
 NAP-20 NHAP-19
 NAP-19 NHAP-17
 NAP-17

Aluminum front cover



DP-W19 HDP-W19
 DP-20 HDP-19
 DP-19 HDP-17
 DP-17

Universal open frame



OP-W19 HOP-W19
 OP-20 HOP-19
 OP-19 HOP-17
 OP-17

Chassis customization

- ▶ Dimension
- ▶ Color & Treatment
- ▶ Screen Printing
- ▶ Stainless Steel Bezel

15" ~ 10"

15"



12"



10"



Highlights

Key Benefits

- ▶ 1024 x 768 / 800 x 600 / 640 x 480 native resolution
- ▶ 15": 16.2 M colors
- ▶ 12" & 10": 262 K colors
- ▶ VGA video input
- ▶ Video decoding capability up to 1080p (option)
- ▶ Rugged structure ensures high mobility
- ▶ IP65 front protection (NAP series)
- ▶ Professional-use durability & around-the-clock operation

Applications

- Broadcasting / Advertising
- Traffic control / Command center
- Directory / Ticket kiosk
- Surveillance system
- Vehicle mount display
- Bathroom TV

Options

- DC power : 12V / 24V / 48V / 125V
- Touchscreen *
- Anti-reflective glass or Vandal proof glass
- IP65 front protection
- Custom chassis & mounting
- Multi monitor OSD control module
- Auto dimming
- Manual dimming

* Refer to the following link for details of touchscreen models.
www.austin-hughes.com/CA-UV-Regular-S.pdf

Standard Brightness

6mm aluminum front bezel



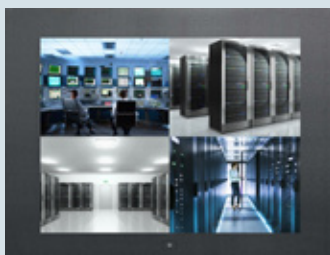
AP-15
AP-12
AP-10

6mm aluminum front bezel
NEMA 4 / IP65 front protection



NAP-15
NAP-12
NAP-10

Aluminum front cover



DP-15
DP-12
DP-10

Universal open frame



OP-15
OP-12
OP-10

Chassis customization

- ▶ Dimension
- ▶ Color & Treatment
- ▶ Screen Printing
- ▶ Stainless Steel Bezel

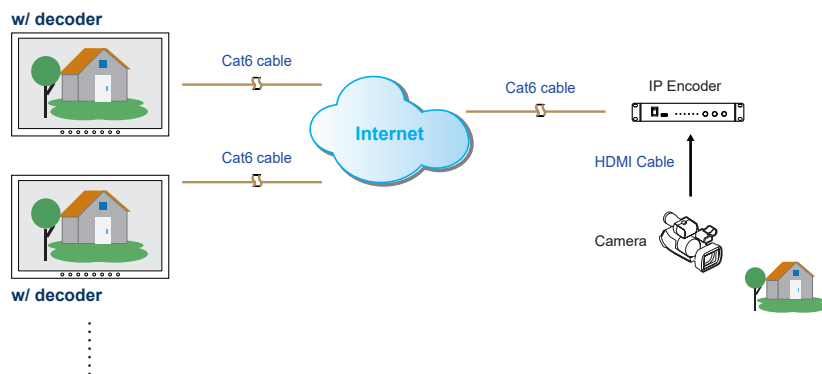
Embedded HDMI Decoder Module 1080p over IP

- Decodes RTSP, RTMP, UDP, HTTP, HLS protocols
- Supports video resolutions up to 1080p / 60Hz
- Unicast and multicast support
- Operates on standard 1000Mb Ethernet networks
- Built-in Web UI for configuration and control
- Excellent image quality with very low delay

Part no. :

Embedded HDMI Decoder Module : [UV-DE100F](#)

Standalone HDMI Encoder : [UV-EN100F](#)



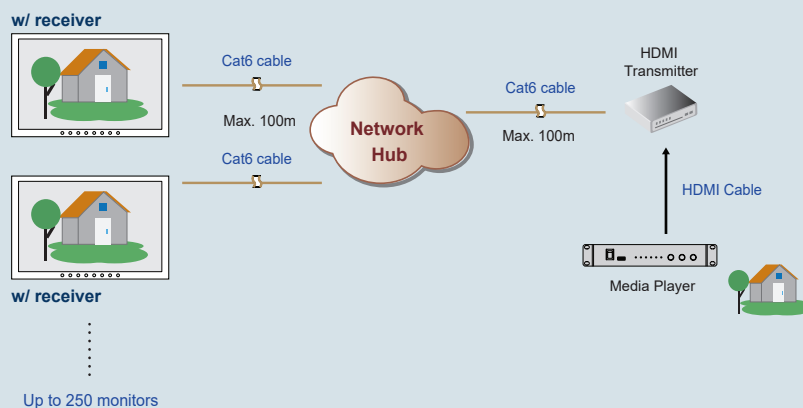
Embedded HDMI Receiver Module 1080p

- Extends the HDMI signal over a single Cat5/6 cable
- Supports video resolutions up to 1080p / 60Hz
- One to one just via Cat5/6 cable
- One to multi via network hub and Cat5/6 cable
- 100m maximum Cat5/6 cable distance
- Supports bi-directional IR communication
- High Speed HDMI 1.4 and HDCP 1.4 compliant
- No software or drivers required

Part no. :

Embedded HDMI Receiver Module : [UV-R100F](#)

Standalone HDMI Transmitter : [UV-T100F](#)



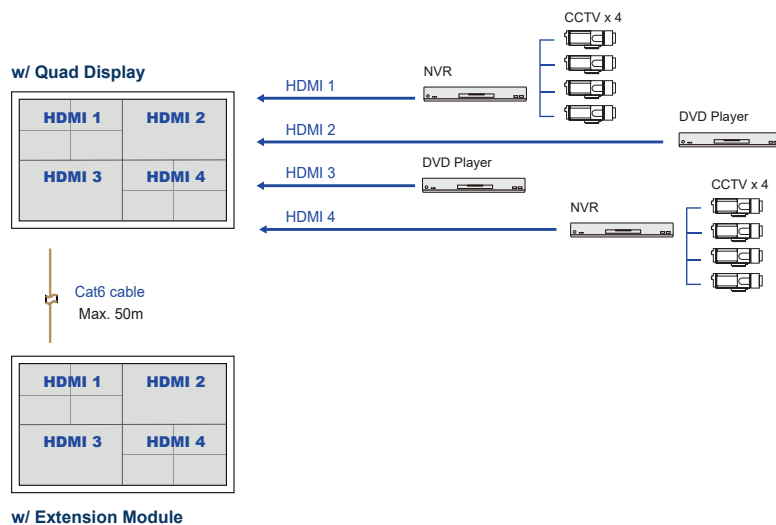
Embedded HDMI Quad Display Module 1080p

- Allows 4 x HDMI inputs to be monitored simultaneously
- Quad split, panel left and full screen monitoring modes
- High speed HDMI 1.4 and HDCP 1.4 compliant
- Supports video resolutions up to 1080p / 60Hz
- Supports Scaler Up and Down function
- Control via local front panel and IR remote

Part no. :

Embedded HDMI Quad Display Module : [QD-1080](#)

Embedded Quad Display Extension Module : [QD-E1080](#)

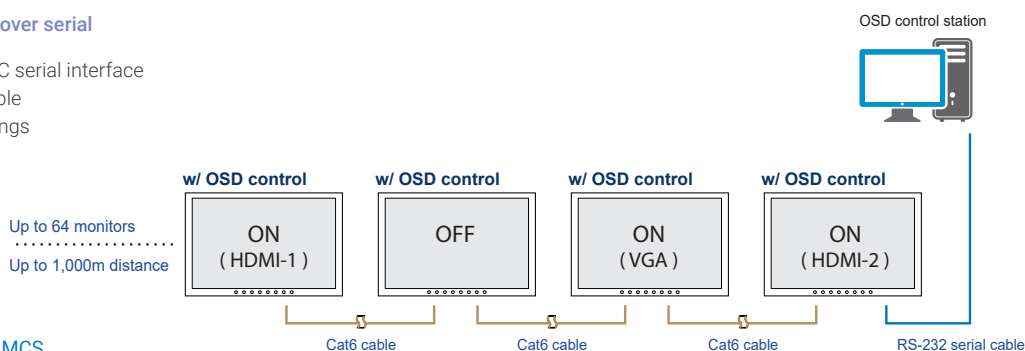


Embedded Multi Monitor OSD Control Module over serial

- Remote control the monitor OSD via RS-232C serial interface
- Daisy chain up to 64 monitors via Cat5/6 cable
- Individual ID for individual monitor OSD settings
- Power ON or OFF monitor
- Adjust brightness & audio
- Switch video sources

Part no. :

Embedded Multi Monitor OSD Control Module : **MCS**



Embedded 3G / HD / SD-SDI Input Module

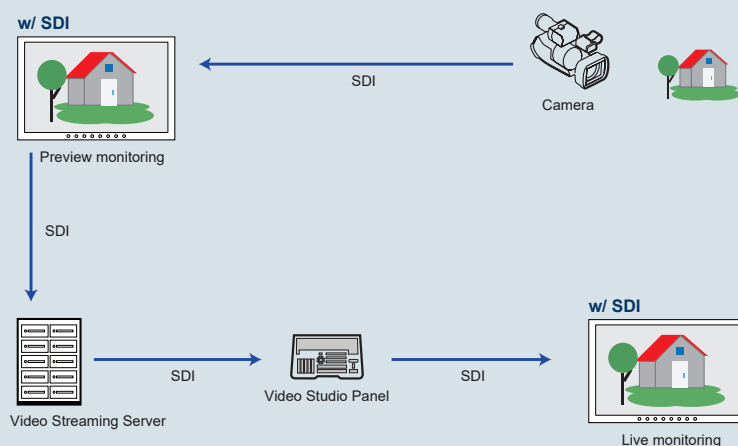
Embedded 12G / 4K60 / SD-SDI Input Module

- Intelligent SDI monitoring with broadcast quality scopes
- Supports multi-rate 3G / HD & 12G / 4K60 / SD-SDI format
- Provides input to output loop-through capability
- Auto format sensing & selection

Part no. :

Embedded 3G / HD / SD-SDI Input Module : **SDI**

Embedded 12G / 4K60 / SD-SDI Input Module : **12G-SDI**



Embedded Portrait Mode Module

- Provides users with a rotation feature (0, 90, 180 & 270 orientation) without frame delay via OSD
- Allows distortion-free display of content in various orientations
- Creates new application opportunities

Part no. :

Embedded Portrait Mode Module : **AD4.0-P**



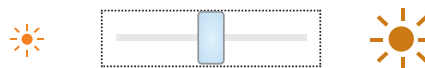
w/ Portrait mode module

Embedded Auto Brightness Dimming Module

- Brightness changes according to its ambient brightness
- Its brightness change causes 10% increase or decrease

Part no. :

Embedded Brightness Auto Dimming Module : **DA-01**



Embedded Manual Brightness Dimming Knob

- Easy-to-use IP54 dimming knob on the front panel
- One click causes 2% brightness increase or decrease
- Brightness adjustment from 0% to 100%

Part no. :

Brightness Dimming Knob : **DS-01**



Remote Reboot to Recover Your Device

- When a complete restart is required MiniBoot provides a simple and easy way to reboot a hardware device
- In addition to manual on/off, MiniBoot provides 3 kinds of auto outlet control :
 - IP-Ping automatically detects a failed system for timely reboot
 - Outlet on/off by sensor condition
 - Outlet on/off scheduling



Diversified Outlets & Inlets

- Variety of outlets & inlets available for different regional power requirements
- Outlet : US NEMA, IEC C13, UK BS1363, German Schuko CEE 7/3 or French CEE 7/5
- Inlet : C20 for different regional power cords (Custom inlet available on request.)



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.
- Support high-speed network IP via Gigabit IP LAN port



Save Manpower & Travel Costs

- Restart the problem device by remotely power on & off, MiniBoot allow user to recover the equipment via network IP.
- Reduce manpower and travel costs by negating the need for staff to actually be at the equipment location, improving uptime and productivity.



Power Monitoring via Network & Local Meter

- Allows remote monitoring via the free Graphic User Interface (GUI).
- Provides local current monitoring via MiniBoot blue LED ammeter.
- Allows user to establish the remaining capacity prior to adding a new device to the MiniBoot, plus displays the current being drawn and receives threshold alerts remotely.



Remote Management

- Simultaneous access via free management web GUI.
- SNMP V2 / V3 integration to DCIM.
- Remote management protocols: HTTP(S); SSH Command Line Interface; Telnet; SMTP; IPv6/IPv4.



Alerts / Alarms

- Receive alerts via SNMP, email (SMTP), and syslog when predefined thresholds are exceeded for both MiniBoot and environmental sensor events.
- Common SNMP MIBs (Management Information Base) for all MiniBoot models.



Sensors & WiFi

- Variety of optional sensors : Temperature & Humidity, Temperature, Smoke, Door.
- Option to connect via a WiFi kit (IPD-WIFI) complying with 802.11 g/n/ac.

Remote power reboot and monitoring functions are essential for hardware systems. MiniBoot offers a cost-efficient power solution for any environment with electronic devices or systems. Users can try to recover the crashed device by remote reboot, reducing the need to send engineers to site (less personnel and travel costs by negating the need for staff to be at the equipment location) therefore improving uptime and productivity.

Unlike a rack power strip which is mounted inside an IT server rack enclosure, MiniBoot can be applied in diversified applications. MiniBoot is designed for a variety of industries - Transportation (Air, Land and Sea), Broadcasting, Entertainment, Advertising, Manufacturing, Mining, Satellite, Defense, Education, Telecommunication, Finance & Banking, Commercial, etc.

Applications



- Commercial Offices
- Telecommunication Offices
- Satellite Stations
- Digital Signage
- Video Walls
- Service Centers



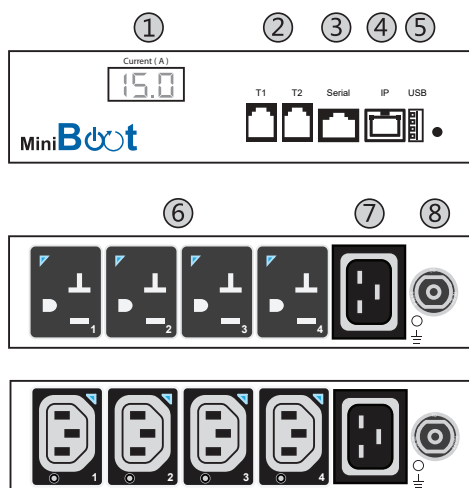
- Airport Check-in Kiosks
- Shopping Mall Kiosks
- ATM Machines
- Ticketing System
- Vending Machines
- Information Desks



- Factory Automation Systems
- Production Plants
- Assembly Line
- Quality & Control Line



- Universities
- Education Institutes
- Lecture Theatres
- Tutorial Classes
- Training Rooms



- ① RMS current meter x 1
- ② Sensor port x 2
- ③ Serial port x 1
- ④ Gigabit IP LAN port x 1
- ⑤ USB Wifi port x 1
- ⑥ Switched outlets (US NEMA, C13, UK, Schuko or French)
- ⑦ C20 Inlet x 1
- ⑧ Resettable fuse x 1

MiniBoot - Single Feed			Amp		
Outlet	Inlet	Model	110V	208V	230V
NEMA x 2 NEMA x 4 NEMA x 8	C20 x 1	MiniBoot-2US MiniBoot-4US MiniBoot-8US	15A		
C13 x 2 C13 x 4 C13 x 8	C20 x 1	MiniBoot-2C13 MiniBoot-4C13 MiniBoot-8C13		16A	10A / 13A / 16A
UK x 8	C20 x 1	MiniBoot-4UK			10A / 13A / 16A
Schuko x 4	C20 x 1	MiniBoot-4SCH			10A / 16A
French x 4	C20 x 1	MiniBoot-4FR			10A / 16A

* Custom configuration available on request
 ** Input cordset excluded



Hardware Specifications

Electrical	
Nominal input voltage	110V / 208V / 230V
Acceptable input voltage	±10% nominal
Input frequency	50 / 60Hz
Inlet	C20
Outlet	US NEMA, C13, UK BS1363, Schuko or French
Local meter	3-digit RMS current meter
Overload protection	Resettable fuse
Electrical endurance	1 x 10 ⁵ operations

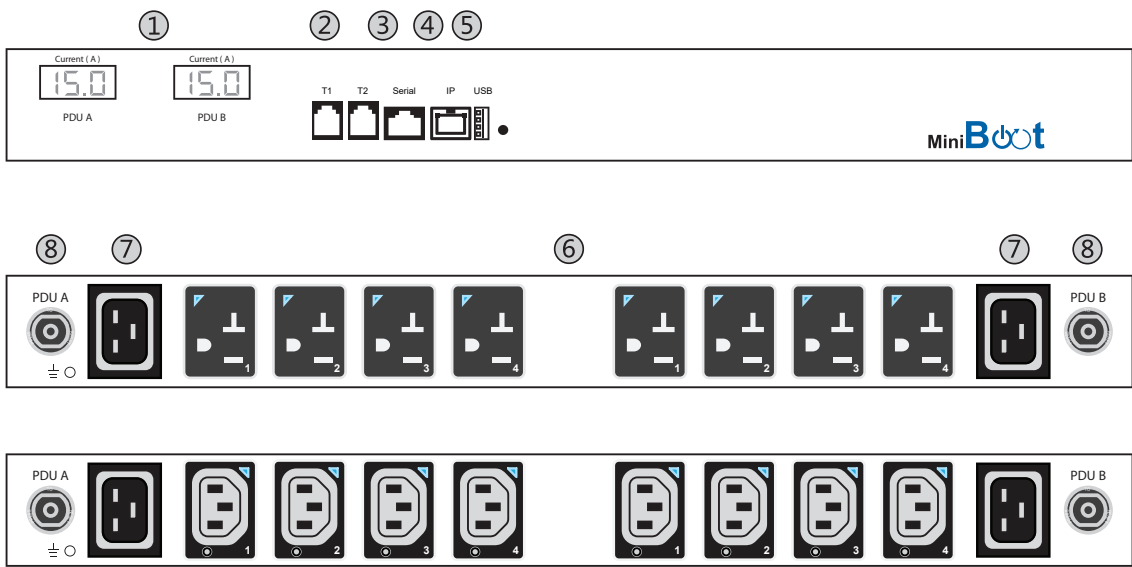
Chassis	
Color	White
Material	Steel

Compliance	
Operating temperature	-5 to 60°C degree (23 to 140°F)
Storage temperature	-25 to 65°C degree (13 to 149°F)
Operating humidity	0~95%, non-condensing
Storage humidity	0~95%, non-condensing

Physical (NEMA or C13)	2 x outlet / 4 x outlet	8 x outlet
Product (W x D x H)	180 x 140 x 44.45 mm	325 x 140 x 44.45 mm
Packing (W x D x H)	300 x 196 x 81 mm	525 x 230 x 80 mm
Net weight	0.9 kg / 2.0 lb	1.6 kg / 3.5 lb
Gross weight	1.2 kg / 2.7 lb	2.54 kg / 5.6 lb

Physical (NEMA or C13)	4 x outlet
Product (W x D x H)	220 x 150 x 55 mm
Packing (W x D x H)	300 x 196 x 81 mm
Net weight	1.23 kg / 2.7 lb
Gross weight	1.53 kg / 3.4 lb

Compliance	
EMC	FCC, CE/EMC
Safety	UL 62368-1:2014, CE/LVD
Environment	RoHS3, Reach & WEEE
ISO	9001 / 14001



- 1 RMS current meter x 2
- 2 Sensor port x 2
- 3 Serial port x 1
- 4 Gigabit IP LAN port x 1
- 5 USB Wifi port x 1
- 6 Switched outlets (US NEMA, C13)
- 7 C20 Inlet x 2
- 8 Resettable fuse x 2

MiniBoot - Single Feed			Amp		
Outlet	Inlet	Model	110V	208V	230V
NEMA x 8	C20 x 2	MiniBoot-D8US	15A		10A / 13A / 16A
C13 x 8	C20 x 2	MiniBoot-D8C13		16A	10A / 16A

* Custom configuration available on request
** Input cordset excluded



Hardware Specifications

Electrical	
Nominal input voltage	110V / 208V / 230V
Acceptable input voltage	±10% nominal
Input frequency	50 / 60Hz
Inlet	C20 x 2
Outlet	US NEMA, C13
Local meter	3-digit RMS current meter x 2
Overload protection	Resettable fuse x 2
Electrical endurance	1 x 10 ⁵ operations

Physical (NEMA or C13)	8 x outlet
Product (W x D x H)	437.5 x 140 x 44.45 mm
Packing (W x D x H)	525 x 230 x 80 mm
Net weight	1.8 kg / 4.0 lb
Gross weight	2.8 kg / 6.2 lb

Chassis	
Color	White
Material	Steel

Compliance	
Operating temperature	-5 to 60°C degree (23 to 140°F)
Storage temperature	-25 to 65°C degree (13 to 149°F)
Operating humidity	0~95%, non-condensing
Storage humidity	0~95%, non-condensing

Compliance	
EMC	FCC, CE/EMC
Safety	UL 62368-1:2014, CE/LVD
Environment	RoHS3, Reach & WEEE
ISO	9001 / 14001

Remote Reboot & Amp Monitoring Over IP

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 power management. MiniBoot offers two remote power management solutions for users' selection.



Built-in



via SNMP V2 / V3



Built-in MiniBoot GUI

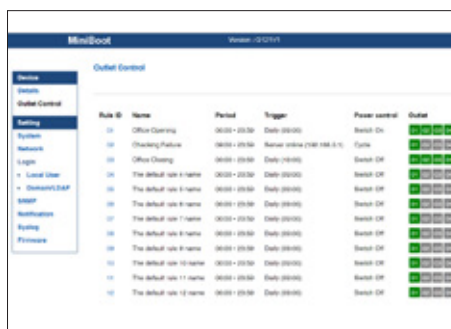
User-friendly GUI is included with MiniBoot. The Administrator can remotely manage the MiniBoot via the web browser.

It provides individual outlet switching On/Off, current monitoring and alarm alert functions. With enterprise level IP authentication, the administrator can manage the MiniBoot remotely with high security.

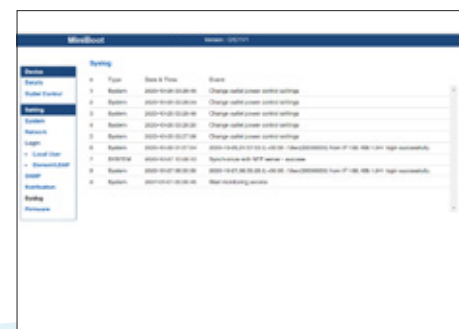
Circuit Monitoring & Outlet Switching



Outlet Control



System Audit Trail



3rd Party DCIM via SNMP V2 / V3

MiniBoot supports SNMP V2 / V3 integration for clients requiring remote management of the MiniBoot using their existing DCIM (Data Center Infrastructure Management) in order to centralize the management for monitoring power, cooling and environmental factors across facilities and IT systems.

MiniBoot Software

Electrical	
Functions	<p>Manual outlet on / off by GUI / SNMP</p> <p>Automatic outlet on / off by scheduling , IP Ping and sensor condition</p> <p>Aggregate current (Amp) monitoring</p> <p>Alarm alert</p>
Enterprise Level IP Authentication	<p>Active Directory (AD), Lightweight Directory Access Protocol (LDAPv3 / LDAPS)</p> <p>Remote Access Dial-In User Service (RADIUS) protocol, or local credential database</p>
Remote Management	Protocols: HTTP(S); SSH Command Line Interface; Telnet; SMTP; IPv6/IPv4
Alarms / Alerts	<p>Receive alerts via SNMP, email (SMTP), and syslog when predefined thresholds are exceeded for both MiniBoot and environmental sensor events</p> <p>Common SNMP MIBs (Management Information Base) for all MiniBoot models</p>
SNMP	SNMPv1/v2 & SNMPv3 for integration to DCIM

Hardware Specifications

Side Mount Kit

- Included with all MiniBoot models
- Enables easy installation into existing kiosks, walls, work panels and furniture



Rack Mount Kit

- Included with 8-port MiniBoot models
- 19" horizontal rack mount version



Sensors & Peripherals

WiFi Kit

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



Temperature & Humidity Sensor Temperature Sensor

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



Smoke Sensor

- Smoke Sensor with 1M or 3M cord
- When smoke alarm triggers the red LED light is visible on the sensor with continuous audio alert



Door Sensor

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



Lockable IEC



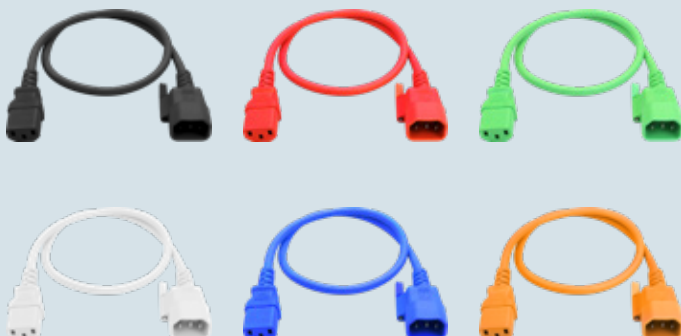
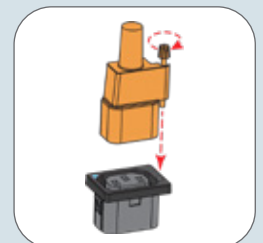
Lockable C13 Outlet

- Lockable C13 outlet MiniBoot models are available to secure plugs and prevent accidental disconnection
- Supports standard or switched outlets
- Compatible with lockable C13 power cords for outlet locking features



Lockable Color C14-C13 Cord

- Connect to lockable C13 outlets to secure plugs and prevent accidental disconnection
- Selection:
Black / Grey / Red / Blue / Orange / Green
C14 - C13: 0.5M / 1M / 2M



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 reboot power.

Austin Hughes has ISO14001 and ISO9001 approved design, manufacturing, assembly and test facilities. We support a worldwide customer base through our global locations in the Americas, EMEA, APAC and ASEAN and through an extensive authorized channel partner network.



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