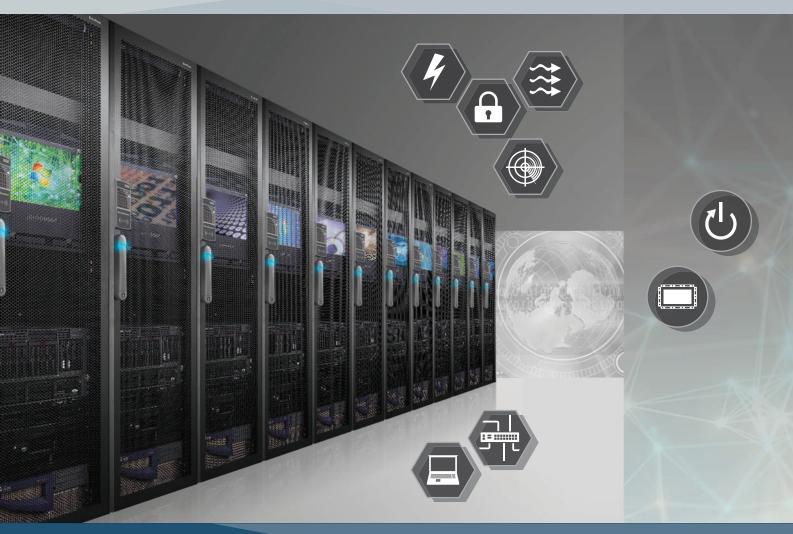
## **Austin Hughes - Leading Edge Solutions**

APAC 2023 Q3



#### **Rack Solutions**

- Power Security Airflow Sensor
- Screen KVM

#### **IT Solutions**

- Web Power Reboot
- Professional LCD





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.



# Infra Power®

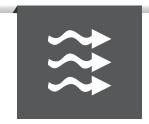
Rack Power Management

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



**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





## Infra Guard

Rack Sensor System

- >> Temperature + Humidity
- >> Temperature
- >> Smoke
- >> Shock

- >> Water Leakage
- >> Door Open/ Close
- >> Alarm Beacon
- >> LED Light Bar



**Rack Access Control** 

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





# $CyberView^{^{\text{\tiny TM}}}$

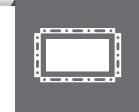
Rack KVM & Screen

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



Professional LCD

- >> 4K 55", 43", 32", 28", 23", 17", 15" & 13"
- >> FHD 55", 43", 32", 28", 23", 21", 19", 17", 15" & 13"
- >> WUXGA 24" & 16.2"
- >> Regular 20", W19", 19", 17", 15", 12" & 10"







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

# Infra Power® PDU

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



#### 1 Phase

#### 230V 16A / 20A / 32A

	Outlet		PDU Chassis	
UK	C13	C19	Vertical	Rackmount
24			<b>✓</b>	
20			<b>✓</b>	
16			<b>✓</b>	
12			<b>✓</b>	
10			<b>✓</b>	
8			<b>✓</b>	<b>~</b>
7			<b>✓</b>	<b>✓</b>
6			<b>✓</b>	<b>~</b>
8	16	4	<b>✓</b>	
8	8	4		<b>✓</b>
8	8	2		<b>~</b>
8	6	4		<b>✓</b>
4	20	4	<b>✓</b>	
4	20	4	<b>✓</b>	
4	16	4	<b>~</b>	
4	12	4	<b>✓</b>	
4	8	4	<b>✓</b>	

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

<b>230V</b> 16A / 20A / 32A	
<b>230 V</b> 10A / 20A / 32A	

208V 20A / 30A

Out	tlet	PDU Chassis		
C13	C19	Vertical	Rackmount	
36	6	<b>~</b>		
30	6	<b>✓</b>		
28	6	<b>~</b>		
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	<b>✓</b>	<b>✓</b>	
6	2		~	
4	4		<b>✓</b>	
36		~		
32		<b>✓</b>		
28		<b>✓</b>		
24		<b>✓</b>	<b>✓</b>	
20		<b>✓</b>	<b>✓</b>	
16		<b>✓</b>	<b>✓</b>	
12		<b>✓</b>	<b>✓</b>	
10		~	~	
8		~	~	
6			~	
4			~	
	12		~	
	10		~	
	8		~	
	6		~	
	4		~	















cUL & TUV available for selective configurations

#### 3 Phase

#### 400V 16A / 32A

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

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



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



Custom configurations available on request

#### **400V** 16A/32A/63A **208V** 20A/30A/50A/60A

Ou	tlet	PDU Chassis		
C13	C19	Vertical	Rackmount	
36	12	<b>~</b>		
36	6	<b>~</b>		
30	12	<b>✓</b>		
30	6	<b>✓</b>		
24	12	<b>✓</b>		
24	6	~		
21	3	<b>✓</b>		
18	6	~	~	
12	12	<b>✓</b>		
12	6	~	~	
6	3		~	
48		~		
42		<b>~</b>		
36		~		
30		~		
24		~	~	
18		~	~	
12			~	
	24	~		
	18	~		
	12	<b>~</b>	~	
	9		~	
	6		~	

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

### **110V** 15A / 20A / 30A

Outlet	PDU Chassis		
US NEMA	Vertical	Rackmount	
36	~		
32	~		
28	~		
24	~	~	
20	~	~	
16	~	~	
12	~	~	
10	~	~	
8	<b>✓</b>	<b>~</b>	

#### **Inlet & Cordset**

Inlet ( 1-PH 230V )	Amp	Cordset		
illiet ( 1-PH 230V )	Amp	mm²	length	
60309	32A	4	3 M	
Open end	20A	2.5	3 M	
60309				
C20	16A	1.5	3 M	
Schuko				
BS1363 UK	13A	1.5	3 M	
<b>C14</b>	10A	1.5	3 M	

Inlet ( 1-PH 208V )	A	Core	dset	
miet ( 1-PH 208V )	Amp	AWG	length	
€ L6-30P	30A	10	10 FT	
C L6-20P	20A	12	10 FT	

Inlet ( 1-PH 110V )	Amp	Cordset		
illiet (1-FII 110V)	Amp	AWG	length	
L5-30P (F1) 5-30P	30A	10	10 FT	
L5-20P 5-20P	20A	12	10 FT	
5-15P	15A	14	10 FT	

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

A	Cordset		
Allip	AWG	length	
60A	6	6.6 FT	
50A	6	6.6 FT	
30A	10	6.6 FT	
20A	12	6.6 FT	
	50A 30A	Amp AWG 60A 6 50A 6 30A 10	

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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.

# D 226. 2 22.5 219. 2 13.8 223. 2 8.2 2A-B 1A-B InfraPower Billing Grade Meter Accuracy Within +/- 1%

#### iMeter

#### Cascade port

Up to 32 PDU Levels

#### 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













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.

#### **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 center environment without building up additional connectivity, cable run, patch panel, or network related costs.

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

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

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

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



IPD-H03-S

Dual LAN IP Dongle - Horizontal

- For 111 iPDI1
- Up to 32 levels in daisy chain



#### IPD-03-S

**Dual LAN IP Dongle - Vertical** 

- For 0U / 2U iPDU
- Up to 32 levels in daisy chain



#### **Dual LAN Network Failure**

- Auto-negotiable 2 x Gigabit Ethernet port
- 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 connected iPDUs via IP



#### **USB WIFI Port**

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



APAC 2023 03

#### 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-based GUI, DCIM integration via SNMP V2 / V3 or REST API.
- Remote level & ID setting for cascaded iPDU's
- Protocols: HTTP(S); SSH Command Line Interface; Telnet; SMTP; IPv6/IPv4.



#### **Enterprise Level IP Authentication**

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



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

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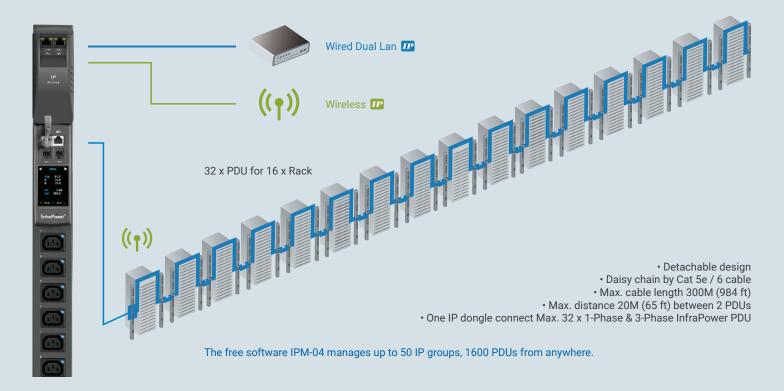
PDU

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 / IPD-H03-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.





#### 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.

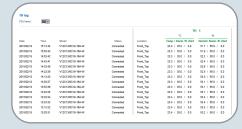
#### 3rd Party DCIM via SNMP V2/V3 or REST API

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

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



Temp. & Humid. Monitoring



Reporting

							Imp	١
	Date	Time	Model	Name	Location	Status	Max. / Load / Alarm / R. alert / L. alert	
	2015/02/10	62 38:22	V96C15/8C19-65A-W	W44-83A	Rack_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	02:20:21	V96C13/8C19-63A-W	W44-83A	Rask_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	02:16:20	V26C13/8C19-63A-W	W44-83A	Rask_004	Connected	16 / 00 / 13.0 / 0.0 / 0.0	
	2015/02/10	02:06:19	V96C13/8C19-83A-W	W44-63A	Resk_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	01.50.18	V96C1S/6C19-63A-W	W44-63A	Rank_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	D1:40:10	V98C13/9C19-69A-W	W44-03A	Rask_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	01:36:15	V36C13/8C19-63A-W	W44-63A	Rask_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	01:28:14	V96C15/8C19-63A-W	W44-83A	Resk_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	01.10.13	V96C13/8C19-63A-W	W44-63A	Rask_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	01:06:12	V26C13/9C19-63A-W	W44-82A	Rask_004	Connected	16 / 00 / 13.0 / 0.0 / 0.0	
	2015/02/10	00:56:11	V96C13/8C19-63A-W	W44-63A	Resk_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	00:40:10	V96C1S/6C19-63A-W	W44-63A	Rank_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	00:36:09	V98C13/9C19-69A-W	W44-03A	Rask_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	00:26:00	V36C13/8C19-63A-W	W44-63A	Rask_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	02:16:06	V96C1S/8C19-83A-W	W44-63A	Rack_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/10	00:00:05	V96C13/8C19-69A/W	W44-63A	Rask_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/09	22.58:04	V26C13/9C19-63A-W	W44-02A	Rask_004	Connected	16 / 00 / 13.0 / 0.0 / 0.0	
	2015/02/09	22.45:03	V36C13/8C19-83A-W	W44-63A	Rask_004	Connected	16 / 00 / 13.0 / 0.0 / 0.0	
- 1	2015/02/09	23 38:02	V96C1S/6C19-6SA-W	W44-63A	Rack_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	
	2015/02/09	23:26:01	V98C13/8C19-69A-W	W44-03A	Rask_004	Connected	16 / 0.0 / 13.0 / 0.0 / 0.0	á
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#### **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.



US NEMA + IEC

#### **Multiple Outlet Configurations**

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



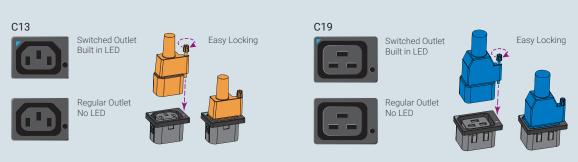








- Lockable IEC outlet PDU models are available to secure plugs and prevent accidental disconnection
- Supports standard or switched outlets
- Compatible with InfraPower lockable IEC power cords for outlet locking features

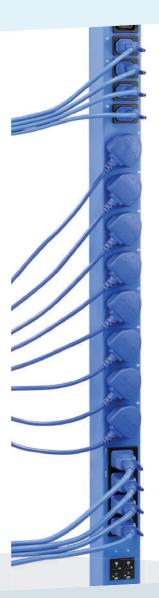






#### **Colored PDU Power Feed Differentiation**

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



#### **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): 3 ft / 6 ft



#### **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 ( 0.75mm<sup>2</sup> ) 0.5M / 1M / 2M













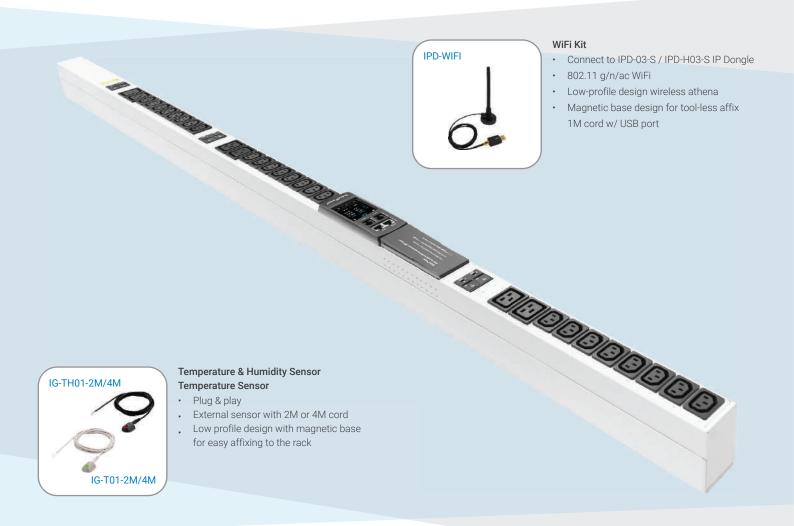


W series PDU meter includes a pair of connection ports for sensors & peripherals. It provides a simple and affordable solution for customers to monitor the environmental status of racks. Dual LAN PDU dongle supports optional WiFi kit with standards 802.11 g/n/ac. It meet the wireless network requirements and reduce capital expenditure cost as well as Ethernet installation & maintenance.



#### 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
- 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





#### **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



#### Door Sensor

- Mechanical door sensor with 2M or 4M
- 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





#### **Vertical OU - 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.



#### **Vertical Bracket Mounting Kit**

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



#### **Horizontal Rackmount Kit**

Design for 19" Rackmount.



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 Selction Buttons** 

\* 1-Phase MK PDU available on request

#### **Meter Reading & Setting**









#### 1 Phase MD Metered PDU





#### **MD Meter**

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

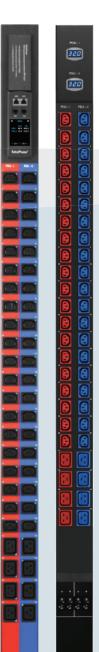
#### 1 Phase / 3 Phase Basic PDU



#### **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





#### 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.

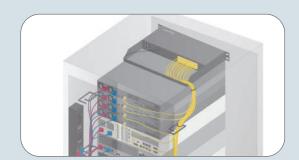


#### **Facilitate Cable Management**

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.

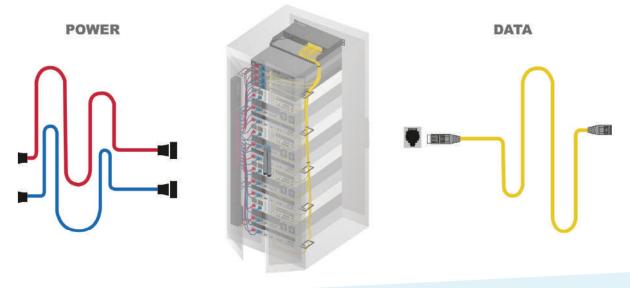
By InfraPower Dual Feed PDU, power & data cable separation is easily

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 n	os	PDU Chassis		
US NEMA		Vertical	Rackmount	
24	x 2	~		
20	x 2	~		
16	x 2	~		
12	x 2		~	
10	x 2		~	
8	x 2		~	

#### 230V 16A / 20A / 32A

#### 208V 20A / 30A

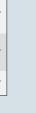
Outlet nos		PDU Chassis		
C13	C19		Vertical	Rackmount
20	4	x 2	~	
18	6	x 2	~	
16	4	x 2	~	
8	2	x 2		~
24		x 2	~	
20		x 2	~	
16		x 2	~	
12		x 2		~
10		x 2		~
8		x 2		<b>~</b>

## 3 Phase

400	<b>/</b> 16A	A / 32A	20	<b>08V</b> 20A/30A
Οι	ıtlet n	os	PDU C	hassis
C13	C19		Vetical	Rackmount
30	6	x 2	<b>~</b>	
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	<b>~</b>	

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

®	004	
Inlet ( 1-PH 208V )	Amp	Co AWG
C20		
60309	16A	1.5
Open end	20A	2.5
60309	32A	4



or		
		- 1





Inlet ( 1-PH 230V )	Amn	Cordset	
illiet ( I-PH 230V )	Amp	mm²	length
60309	32A	4	3 M
Open end	20A	2.5	3 M
<ul><li>60309</li><li>C20</li></ul>	16A	1.5	3 M

Inlet ( 1-PH 208V )	Amn	Cordset	
illiet ( 1-PH 206V )	Amp	AWG	length
C L6-30P	30A	10	10 FT
<b>L6-20P</b>	20A	12	10 FT











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

Inlet ( 3-PH 208V )	Amp	Cordset	
illiet ( 3-FH 200V )	Amp	AWG	length
60309	60A	6	6.6 FT
CS8365C	50A	6	6.6 FT
L15-30P	30A	10	6.6 FT
L15-20P	20A	12	6.6 FT

cUL & TUV available for selective configurations

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

0	Single or Dual Feed No Code Required for Single Feed PDU / D = Dual Feed PDU				
1	Chassis		V = Vertical 0U / H = Horizontal Rackmount 1U or 2U		
2	Power Phase		No Code Required for Single Phase / P = Three Phase		
3a	US NEMA / UK / Qty Schuko / FR		Refer to Configuration Tables ( P.5 for Single Feed PDU ; P.17 for Dual Feed PDU )	No Code Required for Nothing	
3b	Outlet	Туре	US = US NEMA; UK45/135/90/270 = UK; SCH = German Schuko CEE 7/3; FR = French CEE 7/5	No code Required for Nothing	
4a	IEC C13 Outlet	Qty	Refer to Configuration Tables ( P.5 for Single Feed PDU ; P.17 for Dual Feed PDU )	No Code Required for Nothing	
4b	(if any)	Туре	C13 = IEC C13	No code Required for Nothing	
5a	IEC C19 Outlet	Qty	Refer to Configuration Tables ( P.5 for Single Feed PDU ; P.17 for Dual Feed PDU )	No Code Required for Nothing	
5b	b (if any) Type		C19 = IEC C19	No code Required for Nothling	
6	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 /		Basic (No Code Required) / MD / MK / W / Wi / WS / WSi			
8 Safety Device CR = MCB / F = Resettable Fuse / ELCB = Earth-leakage Circuit Breaker / No Code Required for Nothing		ng			
y y			gle 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 = L	15-30P / L1520 = L15-20P	
10	Cordset Length 3 = 3M (Standard for Single Phase PDU) / 2 = 2M (Standard for Three Phase PDU) / Custom Length on Request *1M = 3		on Request * 1M = 3.28 FT		
11	Power Feed Position  B = Bottom Feed (Standard) / T = Top Feed				
12	10 0-1		Single Feed PDU: 1 = Black (Standard) / 2 = White / 3 = Red / 4 = Blue / 5 = Green / 6 = Orange	/ 7 = Yellow / 8 = Purple	
12	Color		Dual Feed PDU : 1 = Red Layout for PDU-I + Blue Layout for PDU-II (Standard)		
13	13 Extra Options SPT = Surge Protector / EMI = EMI Filter / RCM = Residual Current Monitor / No Code Required for Nothing		othing		

#### Example 1:

Part Code : VP18C13/6C19-32A-WSi/CR\_EN/2B-1

Model : WSi iPDU with Circuit Monitoring + Outlet Monitoring + Outlet Switching

 $\textbf{Configuration} \hspace{0.2cm} : \hspace{0.2cm} \textbf{Single Feed, Vertical, Three Phase, C13 x 18 + C19 x 6, 32A, MCB, 60309 Inlet, 2M Cordset, Bottom Feed, Black Chassis} \\$ 



#### Example 2:

Part Code : DV40C13/8C19-32A-W/CR\_0E/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	$32A \rightarrow 32A$	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	$30A \rightarrow 30A$	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	$20\text{A} \rightarrow 20\text{A}$	20A 5-20P x 2	20A 5-20R x 2
DEW-20A_L520	$20A \rightarrow 20A$	20A L5-20P x 2	20A L5-20R x 2
DEW-30A_530	$30A \rightarrow 30A$	30A 5-30P x 2	30A 5-30R x 2
DEW-30A_L530	$30A \rightarrow 30A$	30A L5-30P x 2	30A L5-30R x 2

<sup>\* 1.5</sup>m cordset standard for inlet & outlet. Specific cordset length available.

#### Single Feed Inline Meter

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

208V Model	Amp	Inlet ( Male )	Outlet ( Female )
EW-20A_L620	20A → 20A	L6-20P	L6-20C
EW-30A_L630	$30A \rightarrow 30A$	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	$20A \rightarrow 20A$	20A 5-20P	20A 5-20R
EW-20A_L520	$20A \rightarrow 20A$	20A L5-20P	20A L5-20R
EW-30A_530	$30A \rightarrow 30A$	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	$32A \rightarrow 32A$	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_L1520	$20A \rightarrow 20A$	20A L15-20P x 2	20A L15-20C x 2
DPW-20A_L2120	$20A \rightarrow 20A$	20A L21-20P x 2	20A L21-20C x 2
DPW-30A_L1530	$30A \rightarrow 30A$	30A L15-30P x 2	30A L15-30C x 2
DPW-30A_L2130	$30A \rightarrow 30A$	30A L21-30P x 2	30A L21-30C x 2
DPW-50A_CS8365C	$50\text{A} \rightarrow 50\text{A}$	50A CS8365 x 2	50A CS8364 x 2
DPW-60A_EN	$60A \rightarrow 60A$	60A EN x 2	60A EN x 2

<sup>\* 1.5</sup>m cordset standard for inlet & outlet. Specific cordset length available.

#### Single Feed Inline Meter

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

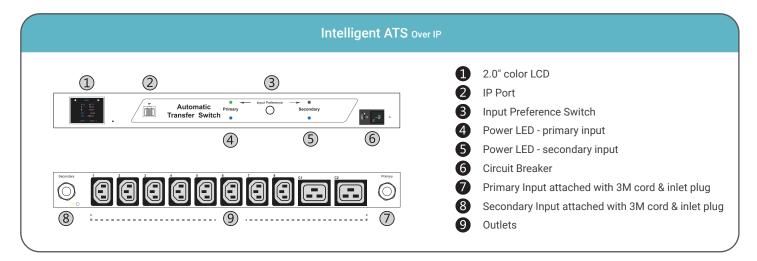
208V Model	Amp	Inlet ( Male )	Outlet ( Female )
PW-20A_L1520	20A → 20A	L15-20P	L15-20C
PW-20A_L2120	$20A \rightarrow 20A$	L21-20P	L21-20C
PW-30A_L1530	$30A \rightarrow 30A$	L15-30P	L15-30C
PW-30A_L2130	$30A \rightarrow 30A$	L21-30P	L21-30C
PW-50A_CS8365C	$50A \rightarrow 50A$	CS8365	CS8364
PW-60A_EN	60A → 60A	60A EN	60A EN

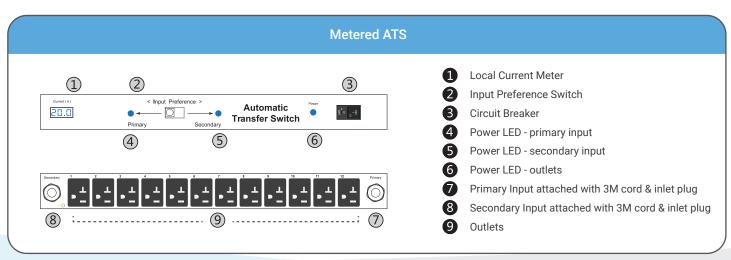
<sup>\*\*</sup> Bundled Inline Meter mounting kit supports rackmount or vertical mount.

<sup>\*\*</sup> Bundled Inline Meter mounting kit supports rackmount or vertical mount.

## Infra Power® ATS

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.





ATC Corios	Metered	Monitored	Swit	ched
ATS Series	MD	W	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	✓	✓	✓	✓
Outlet Type : US NEMA / C13 / C19 / UK / SCH / FR	✓	✓	✓	✓
IEC309 16A / 32A	✓	✓	✓	✓
L620R / L630R	✓	✓	✓	✓
Outlet # 1 - 24	✓	✓	✓	✓
Custom ATS on Request	✓	✓	✓	✓



#### 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**







WS / WSi iATS

### **2U ATS - Single Circuit**







WS / WSi iATS

MD ATS

#### **2U ATS - Dual Circuit**







WS / WSi iATS

M	D	Δ	т	5

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 / L6	20R / L630R / C13 / C19 / 60309 / UK / Schuko / French			
Local meter	3-digital LED current meter	Field replaceable color LCD			
Accuracy	± (3% of the reading + 5 last digits) RMS	Billing grade meter accuracy within ± 1%			
Overload protection	Нус	draulic-magnetic Miniature Circuit Breaker ( MCB )			
Transfer time	10 - 16ms typical	10ms typical			
Electrical endurance		1 x 10⁵ operations			
Temperature	Operating : -5 to 60°C degree	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 - Sing	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	ATS-H1EN16A	ATS-H1EN16A-W	ATS-H1EN16A-WS	ATS-H1EN16A-WSi			16A
L620R x 1	ATS-H1L620R	ATS-H1L620R-W	ATS-H1L620R-WS	ATS-H1L620R-WSi		20A	
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	ATS-H16US	ATS-H16US-W	ATS-H16US-WS	ATS-H16US-WSi			
NEMA x 20	ATS-H20US	ATS-H20US-W	ATS-H20US-WS	ATS-H20US-WSi	30A		
NEMA x 24	ATS-H24US	ATS-H24US-W	ATS-H24US-WS	ATS-H24US-WSi			
C13 x 16	ATS-H16C13	ATS-H16C13-W	ATS-H16C13-WS	ATS-H16C13-WSi			
C13 x 20	ATS-H20C13	ATS-H20C13-W	ATS-H20C13-WS	ATS-H20C13-WSi			
C13 x 24	ATS-H24C13	ATS-H24C13-W	ATS-H24C13-WS	ATS-H24C13-WSi			
C19 x 8	ATS-H8C19	ATS-H8C19-W	ATS-H8C19-WS	ATS-H8C19-WSi		30A	32A
C19 x 10	ATS-H10C19	ATS-H10C19-W	ATS-H10C19-WS	ATS-H10C19-WSi		30A	32A
C19 x 12	ATS-H12C19	ATS-H12C19-W	ATS-H12C19-WS	ATS-H12C19-WSi			
C13 x 16 + C19 x 2	ATS-H16C13 / 2C19	ATS-H16C13 / 2C19-W	ATS-H16C13 / 2C19-WS	ATS-H16C13 / 2C19-WSi			
C13 x 16 + C19 x 4	ATS-H16C13 / 4C19	ATS-H16C13 / 4C19-W	ATS-H16C13 / 4C19-WS	ATS-H16C13 / 4C19-WSi			
L630R x 1	ATS-H1L630R	ATS-H1L630R-W	ATS-H1L630R-WS	ATS-H1L630R-WSi		30A	
IEC309-16A x 2	ATS-H2EN16A	ATS-H2EN16A-W	ATS-H2EN16A-WS	ATS-H2EN16A-WSi			224
IEC309-32A x 1	ATS-H1EN32A	ATS-H1EN32A-W	ATS-H1EN32A-WS	ATS-H1EN32A-WSi			32A

230V ATS 208V ATS 110V ATS

Inlet	Amp	Cordset			
iiiiet	Allip	mm²	length		
<b>6</b> 0309	32A	4	3 M		
Open end	20A	2.5	3 M		
€ 60309 <b>□</b> C20	16A	1.5	3 M		
⚠ BS1363 UK	13A	1.5	3 M		
© C14	10A	1.5	3 M		

Inlet	Amn	Cordset		
illet	Amp	AWG	length	
<b>C</b> L6-30P	30A	10	10 FT	
C L6-20P	20A	12	10 FT	

Inlet	Amp	Cordset		
iiilet	Allip	AWG	length	
£5-30P 5-30P	30A	10	10 FT	
€ L5-20P	20A	12	10 FT	
<b>∱</b> 5-15P	15A	14	10 FT	

<sup>\*\*</sup> 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	WE co. 4
Intelligent Expansion	RF-33.9	×	RF-1.6	RF-1.9	WF-66.4
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	Front Door Cool Air In Hot Air Out	Top Exhaust hot air out  Equipment Cooling  Bottom Cool air in		nt	Front Door Cool Air In
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 via IP	✓		✓		✓
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

Model: WF-66.4 / F-66.4 Airflow: Intake air from bottom





#### Intelligent Model WF-66.4 / WF-66.4B



#### **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: 543 CFM
- ▶ Unit CFM : 2172 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



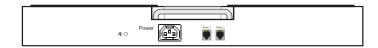
#### Basic Model F-66.4 / F-66.4B



#### Benefits

- Quad EC ( Electronically Communicated ) fans
- ► Fan CFM: 543 CFM
- ▶ Unit CFM: 2172 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 )



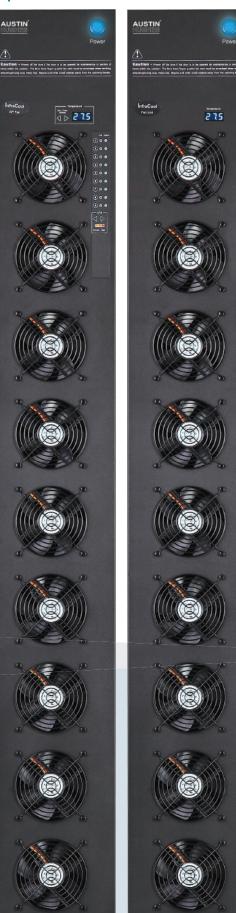
#### Temperature Sensor ( Pair )

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



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





#### **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 )





Rear Door Hot Air Out

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

<sup>\*</sup> 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)**



F-33.9

TEMP

#### **Temperature Sensor**

#### Bundled with Intelligent Fan

- Magnetic base
- Plug & Play
- 2M wire



#### Bundled with Basic Fan

- Plug & Play
- 2M wire

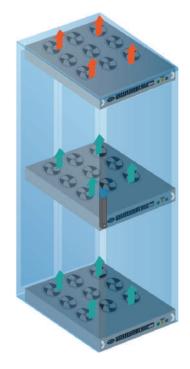


#### **Benefits**

- ▶ 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 )



Top Exhaust hot air out

Equipment

**Bottom** Cool air in

#### **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 )













RF-1.9 / RF-1.6

F-1.9 / F-1.6 / F-1.3

#### **Temperature Sensor**

#### Bundled with Intelligent Fan

MRF-1.9 / MRF-1.6

- 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 IG-TH01-4M

with 2M cord 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 IG-S01-3M

with 1M 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 IG-FB03-3M

with 1M cord 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**

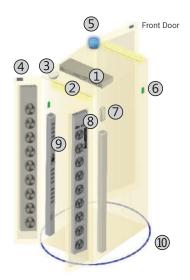


- Auto ON / OFF by door sensor detection
- Manual ON / OFF by software remote
- · Magnetic base for easy affixing to rack
- Dimension ( W x D x H ): 20 x 300 x 12 mm

#### 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
6	Flashing LED Beacon	1
6	Temp. & Humid. Sensor	2
7	Shock Sensor	1
8	Fan Unit	2
9	PDU	2
10	Water Sensor	1

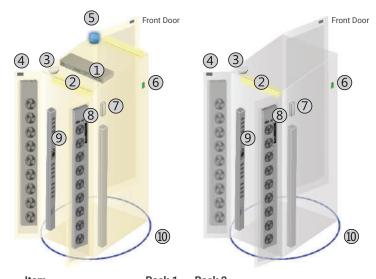
- EC 300M as the 1st level Master IP EC box
- The EC box can be cascaded up to 16 levels



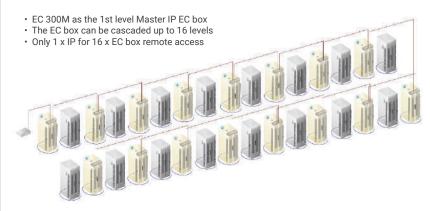
#### Free Software IGM-03

- · 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



#### Free Software IGM-03

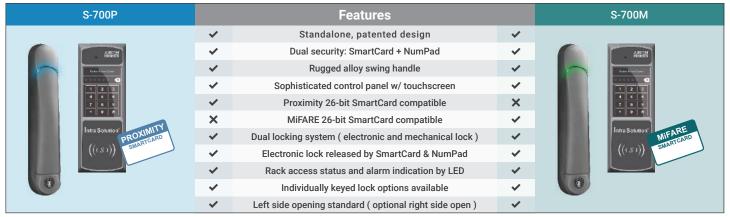
- · Supports 30 IP addresses
- 480 EC boxes & 960 IT server racks
- · Thousands of rack sensors & 1920 iPDUs & iFans

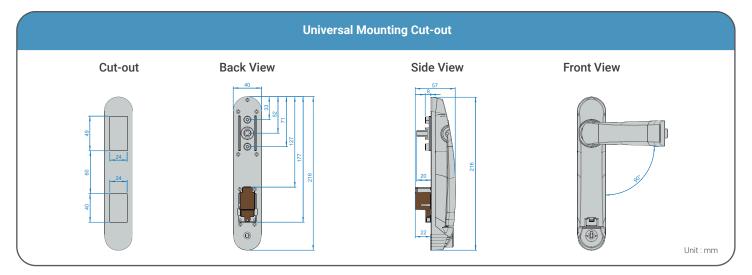


To satisfy high level data center security requirements, Austin Hughes has launched a standalone rack access solution with alloy swing handles & 2.8" touchscreen control panel. The InfraSolution S-700 series provides an innovative yet affordable solution for secure rack access in 21st century data centers.

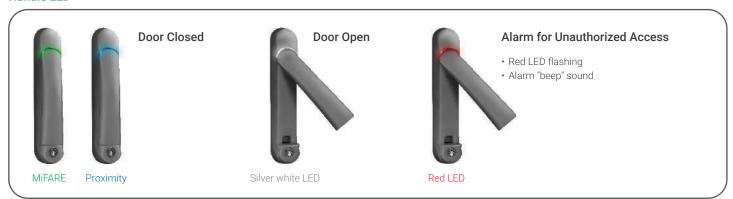








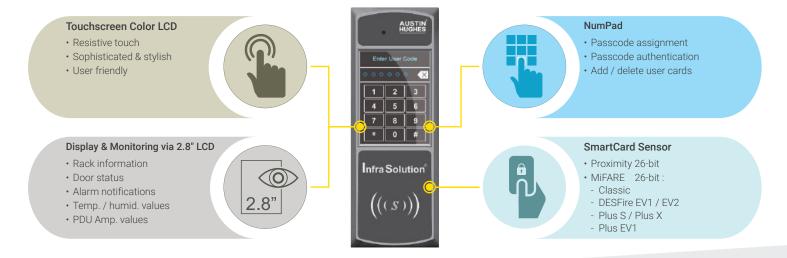
#### **Handle LED**



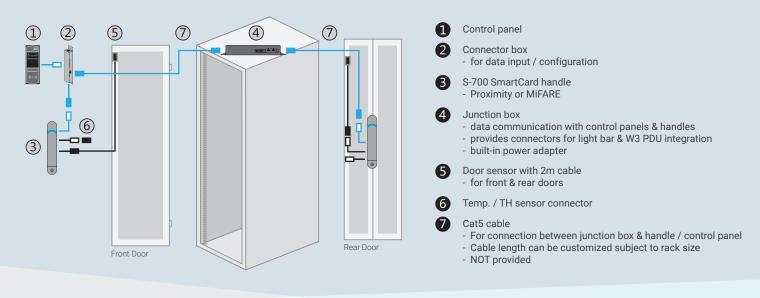
#### **Two-factor Authentication - Dual Security**



#### **Control Panel**



#### **Installation Diagram**



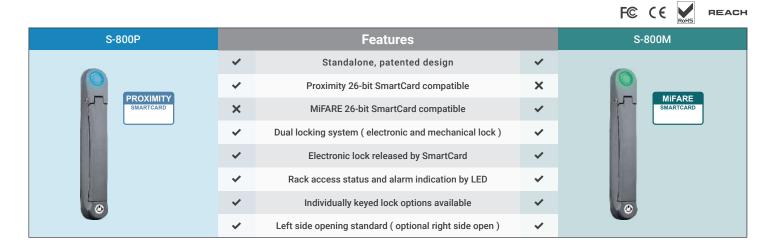
#### **Software**

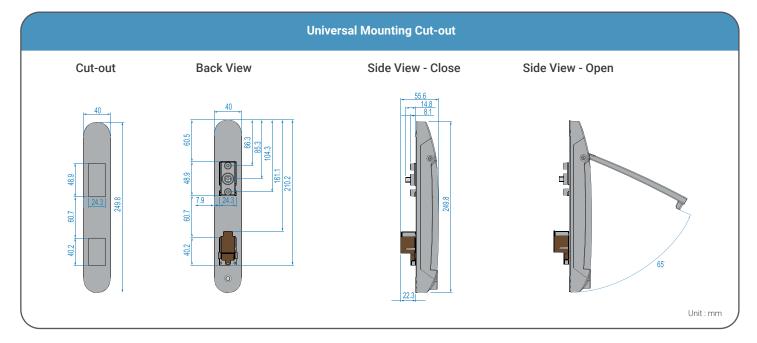
Via the Free utility (ISU-01), administrators can change admin / user passcodes and assign smartcards. A maximum of 50 user card credentials can be managed per control panel. Setup is easy via the optional data input cable (ISW-USB-1.8).



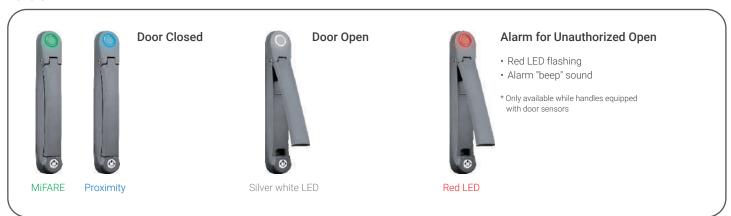
The patented S-800 SmartCard handle is designed for total rack access control and management.

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

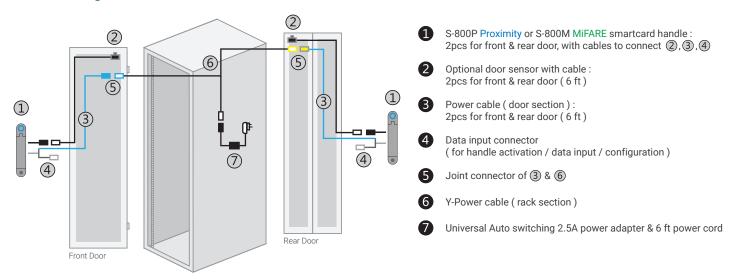




#### **Handle LED**

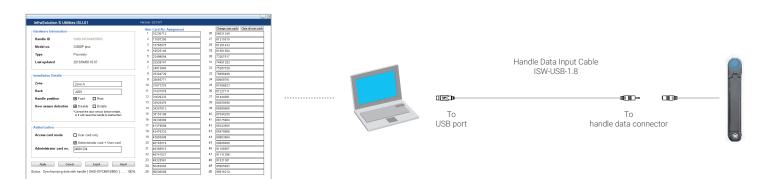


#### **Installation Diagram**



#### **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 Sensors for InfraSolution**

#### IR Door Sensor (Pair) Part no.: S-DIR



- Light weight
- Magnetic base for easy rack retrofit
- No custom cutting required on doors
- Mini size (33 x 19 x 7 mm)
- Reflective labels bundled
- With 2m cord
- Support InfraSolution S / X

#### Inductive Door Sensor (Pair) Part no.: S-DSI



- Light weight
- Adhesive for easy rack retrofit
- No custom cutting required on doors
- Mini size (32.5 x 12.2 x 9.2 mm)
- Mounting brackets bundled
- With 2m cord
- Support InfraSolution S / X

## Mechanical Door Sensor (Pair)

Part no.: S-DSW



- Precise
- Cost efficient integration to new rack
- Size (52 x 22.5 x 30.75 mm)
- Mounting brackets bundled
- With 2m cord
- Support InfraSolution S / X

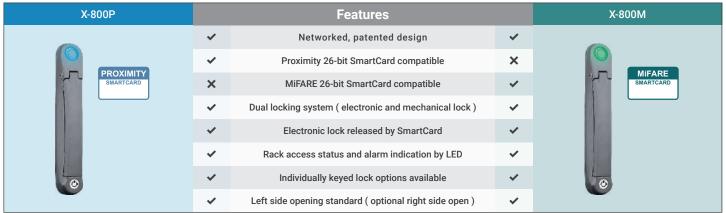


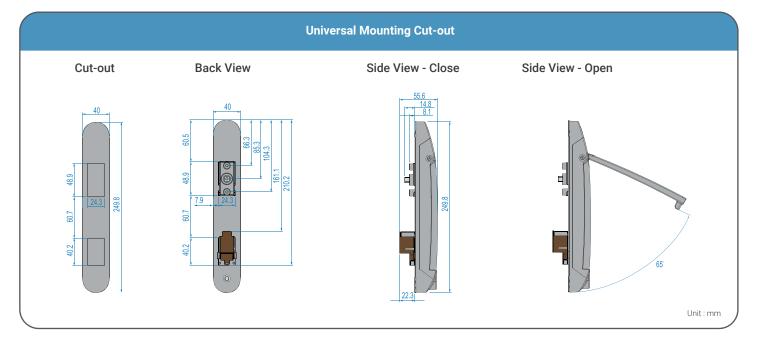
The patented X-800 SmartCard handle is designed for total rack access control and management.

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.

> F© (E V REACH





#### **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



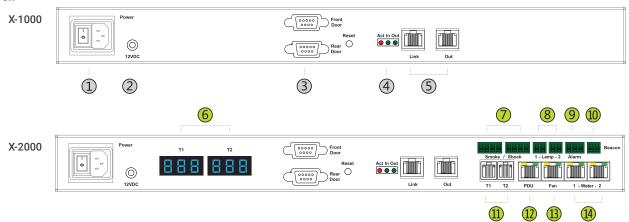


By Mechanical Key

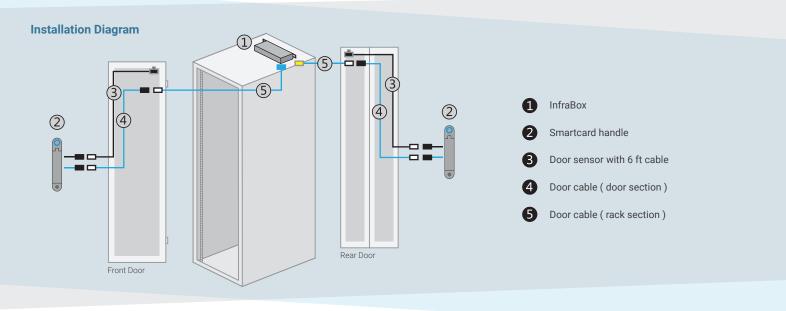


### X-800

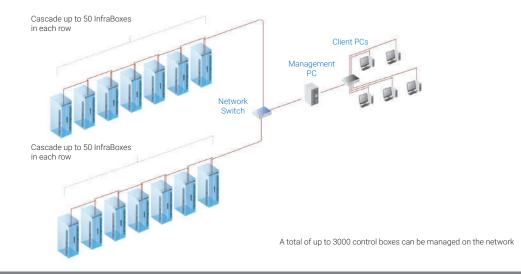
#### **Control Box**



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



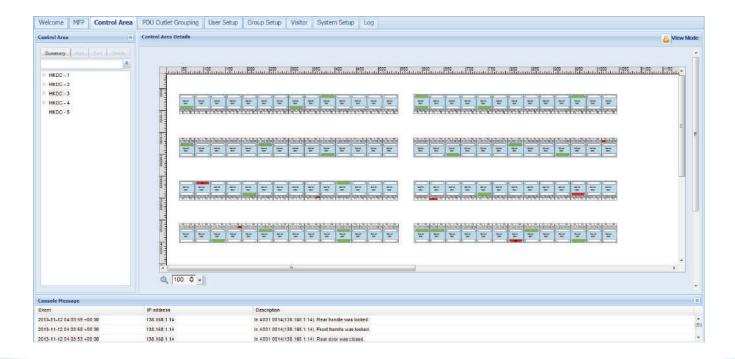
#### **InfraBox Connection Diagram**





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

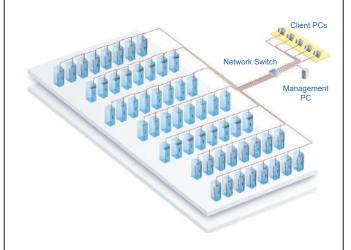
Each InfraBox connects a pair of Smartcard handles for secure rack access control and a variety of sensors to provide an integrated environmental monitoring solution. To enhance the functionality, up to 1920 PDUs and 960 Fan Units can be monitored through InfraSolution X Manager. To meet the requirements 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	<b>✓</b>
	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	<b>✓</b>
Sensor/Peripheral	Status Monitoring	<b>✓</b>
	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	<b>✓</b>
Fan Unit	CFM & Temp. Monitoring	<b>✓</b>
	Unit CFM ( Fan Speed ) Settings	<b>✓</b>
	Auto CFM Control Settings	~
	Individual Fan Kit ON/OFF	<b>✓</b>
	Fan Unit ON/OFF	<b>✓</b>
Chart/Event/Reporting	System & Device Event Reporting	<b>✓</b>
	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.

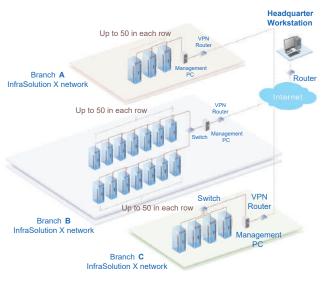


- · Connect the 1st InfraBox in each daisy chain to the network switch
- · Connect the management PC and client PCs via the network switch
- · Up to 3000 Infraboxes/Racks

#### **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.

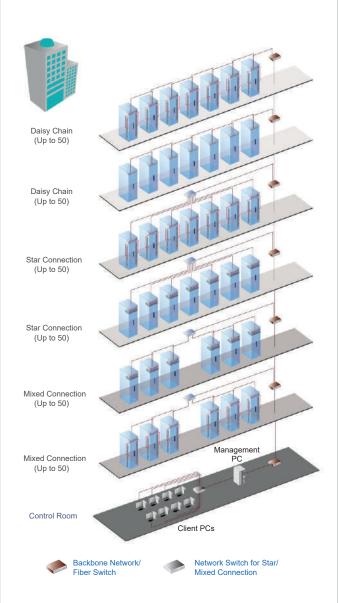
An InfraSolution X software license is required for each remote site/ management PC



### **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 1080 / 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 1080 / 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 1080 / 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 ports in 1U
- IP 1080 / 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	<b>4K</b> 60 <sub>Hz</sub>	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	8
Max. Resolution - 16 : 9 16 : 10 4 : 3	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				
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				~	~	~	~
1080 Access Option				~	~	~	~
DC Power Option: 12V / 24V / 48V / 125V / 250V	~	~	~	~	~	~	~
Multi Lingual OSD Menu				~	~	~	~
1U Standalone KVM	~	~	~	~	~	~	~
KVM integration to LCD Console Drawer	<b>~</b>	<b>~</b>	<b>~</b>	~	~	~	~



4K 60Hz KVM

CK-6P

CK-6H



DP KVM cable 6 ft



HDMI KVM cable 6 ft

CH-6D



DVI-D KVM cable 6 ft

2K KVM



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

**DG-100P** 

DG-100H

**DG-100SD** 

DG-100S



USB-C dongle

DP-USB dongle



HDMI-USB dongle



DVI-USB dongle



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 USB keyboard with either touchpad or trackball
- ► Short depth design of 460mm and 500mm respectively
- One man installation design
- New enhanced aesthetics with molded front handle

#### **Options**

- HDMI 1.4 + DVI-D + Audio + Speakers (AV4.4)
- HDMI 1.4 + Speakers ( HDMI )
- S-Video + Composite + Speakers (BNC)
- 3G / HD / SD-SDI input + Speakers (SDI)
- Front USB hub port for device access ( USB )
- 2-post rack mounting brackets (ORB-2.1)
- DC power: 12V / 24V / 48V / 125V / 250V
- SUN Micro keyboard option
- 17" Touchscreen:
  - Projected Capacitive 10-pt / Resistive 1-pt
- 19" Touchscreen: Resistive 1-pt



# 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 USB keyboard with either touchpad or trackball
- Short depth design of 500mm
- One man installation design
- Modern, molded front handle with two point lock

#### Options

- HDMI 1.4 + DVI-D + Audio + Speakers (AV4.4)
- HDMI 1.4 + Speakers ( HDMI )
- S-Video + Composite + Speakers (BNC)
- 3G / HD / SD-SDI input + Speakers (SDI)
- DC power: 12V / 24V / 48V / 125V / 250V
- SUN Micro keyboard option



# 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 USB keyboard with touchpad
- ► One man installation design
- Modern, molded front handle with two point lock

#### Options

- HDMI 1.4 + DVI-D + Audio + Speakers (AV4.4)
- HDMI 1.4 + Speakers ( HDMI )
- S-Video + Composite + Speakers (BNC)
- 3G / HD / SD-SDI input + Speakers (SDI)
- DC power: 12V / 24V / 48V / 125V / 250V
- SUN Micro keyboard option

# **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 ports IP & Remote options



# RP-717 / 819

# 7U / 8U Display Panel

#### **Benefits**

- ▶ 7U 17" / 8U 19" LCD display panel
- 1280 x 1024 native resolution / 16.7M colors
- ► HDMI 1.4 + VGA video input ( speakers excluded )
- 2-year standard warranty (upgradable up to 5 years)

#### **Options**

- Dual stereo speakers for HDMI ( HS4.4 )
- DVI-D + Audio + Speakers ( DV4.4 )
- Composite + Audio IN + Speakers (BNC)
- 3G / HD / SD-SDI input + Speakers (SDI)
- Multi display OSD controller ( MCS )
- MIL-type or lockable connector
- IP65 front protection ( IP65 )
- DC power: 12V / 24V / 48V / 125V / 250V Touchscreen: Projected Capacitive 10-pt\*/

Capacitive 1-pt\* / Resistive 1-pt

\* Extra 1U chassis height will be increased after integration.



# RP-W819QD

# 8U 19" Widescreen Quad Display Panel

#### Renefite

- ▶ 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 / 250V



# RP-117 / 119

# 1U 17" / 19" Display Drawer

#### Benefits

- ▶ 1U 17" / 19" LCD display drawer
- ▶ 1280 x 1024 native resolution
- 16.7M colors
- HDMI 1.4 + VGA video input ( speakers excluded )
- Short depth design of 500mm
- One man installation design
- ► Modern, molded front handle with two point lock

#### Options

- Dual stereo speakers for HDMI ( HS4.4 )
- DVI-D + Audio + Speakers (DV4.4)
- S-Video + Composite + Speakers (BNC)
- 3G / HD / SD-SDI input + Speakers (SDI)
- DC power: 12V / 24V / 48V / 125V / 250V
- 17" Touchscreen: Projected Capacitive 10-pt /
  Resistive 1-pt
- 19" Touchscreen: Resistive 1-pt



# RP-120

# 1U 20" Display Drawer

#### Benefits

- ▶ 1U 20" LCD display drawer
- ▶ 1600 x 1200 native resolution
- ▶ 16.7M colors
- ► HDMI 1.4 + VGA video input ( speakers excluded )
- One man installation design
- Modern, molded front handle with two point lock

# Options

- Dual stereo speakers for HDMI ( HS4.4 )
- DVI-D + Audio + Speakers (AV3.0)
- S-Video + Composite + Speakers (BNC)
- 3G / HD / SD-SDI input + Speakers (SDI)
- DC power: 12V / 24V / 48V / 125V / 250V
- Touchscreen : Resistive 1-pt







# F117

# 1U 17" FHD LCD Console Drawer

#### Benefits

- ▶ 1U 17" LCD console drawer
- ▶ 1920 x 1080 native resolution
- ▶ 16.7M colors (8-bit)
- ► HDMI 1.4 + VGA video input ( speakers excluded )
- ▶ 104-key USB keyboard with either touchpad or trackball
- Short depth design of 460mm
- One man installation design
- New enhanced aesthetics with molded front handle

#### Options

- Dual stereo speakers for HDMI (HS4.4)
- DP 1.0 + Speakers ( DP )
- DVI-D + Audio + Speakers ( DV4.4 )
- Composite + Audio IN + Speakers ( BNC )
- 3G / HD / SD-SDI input + Speakers (SDI)
- Front USB hub port for device access ( USB )
- 2-post rack mounting brackets ( ORB-2.1 )
- DC power: 12V / 24V / 48V / 125V / 250V
- SUN Micro keyboard option
- Touchscreen:

Projected Capacitive 10-pt / Resistive 1-pt



# 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)
- HDMI 1.4 + VGA video input ( speakers excluded )
- Ideal for open rack / short depth rack
- ▶ 104-key USB 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

- Dual stereo speakers for HDMI (HS4.4)
- DP 1.0 + Speakers ( **DP** )
- DVI-D + Speakers ( DVI )
- Composite + Audio IN + Speakers (BNC)
- 3G / HD / SD-SDI Broadcast-grade input + Speakers (SDI)
- Front USB hub port for device access ( USB )
- DC power: 12V / 24V / 48V / 125V / 250V
- SUN Micro keyboard option
- Touchscreen:

Projected Capacitive 10-pt / 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
- HDMI 1.4 + VGA video input ( speakers excluded )
- ▶ 104-key USB keyboard with either touchpad or trackball
- One man installation design
- Modern, molded front handle with two point lock

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

#### Options

- Dual stereo speakers for HDMI ( HS4.4 )
- DP 1.0 + Speakers ( **DP** )
- DVI-D + Audio + Speakers ( DV4.4 )
- Composite + Audio IN + Speakers (BNC)
- 3G / HD / SD-SDI input + Speakers ( SDI )
- Front USB hub port for device access ( USB )
- DC power: 12V / 24V / 48V / 125V / 250V
- SUN Micro keyboard option

# **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 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)
- ► HDMI 1.4 + VGA video input ( speakers excluded )

#### **Options**

- Dual stereo speakers for HDMI (HS4.4)
- DVI-D + Audio + Speakers ( DV4.4 )
- DP 1.0 + HDMI-2.0 + Audio + Speakers (DP)
- Composite + Audio IN + Speakers ( BNC )
- 3G / HD / SD-SDI input + Speakers (SDI)
- Multi display OSD controller ( MCS )
- · MIL-type or lockable connector
- DC power: 12V / 24V / 48V / 125V / 250V
- Touchscreen:

Projected Capacitive 10-pt / Resistive 1-pt

\* No DVI-D after integration of DP 1.0 video input



# **RP-F821**

# 8U 21" FHD Display Panel

#### **Benefits**

- ▶ 8U 21" LCD display panel
- ▶ 1920 x 1080 native resolution
- ▶ 16.7M colors
- HDMI 1.4 + VGA video input (speakers excluded)
- PIP Sub-screen & PBP Dual-screen viewing efficiency

- Dual stereo speakers for HDMI (HS4.4)
- DVI-D + Audio + Speakers ( DV4.4 )
- DP 1.0 + HDMI-2.0 + Audio + Speakers (DP)
- Composite + Audio IN + Speakers (BNC)
- 3G / HD / SD-SDI input + Speakers (SDI)
- Multi display OSD controller ( MCS ) · MIL-type or lockable connector
- DC power: 12V / 24V / 48V / 125V / 250V
- Touchscreen: Resistive 1-pt





# 1U 17" FHD Display Drawer

#### **Benefits**

- ▶ 1U 17" LCD display drawer
- ▶ 1920 x 1080 native resolution
- ▶ 16.7M colors (8-bit)
- HDMI 1.4 + VGA video input ( speakers excluded )
- Short depth design of 480mm
- One man installation design
- Modern, molded front handle with two point lock

#### Options

- Dual stereo speakers for HDMI (HS4.4)
- DVI-D + Audio + Speakers ( DV4.4 )
- DP 1.0 + Speakers ( **DP** )
- Composite + Audio IN + Speakers (BNC)
- 3G / HD / SD-SDI input + Speakers (SDI)
- DC power: 12V / 24V / 48V / 125V / 250V
- Touchscreen :

Projected Capacitive 10-pt / Resistive 1-pt



# **RP-HF117**

# 1U 17" FHD Sunlight Readable Display Drawer

- ▶ 1U 17" LCD display drawer
- ▶ 1920 x 1080 native resolution
- ▶ 16.7M colors (8-bit)
- ► 1000 cd/m² brightness
- ► HDMI 1.4 + VGA video input ( speakers excluded )
- Short depth design of 480mm
- One Man installation design
- Modern, molded front handle with two point lock

- Dual stereo speakers for HDMI (HS4.4)
- DVI-D + Audio input & output + Speakes ( DV4.4 )
- DP 1.0 + Speakers (DP)
- Composite + Audio IN + Speakers (BNC)
- 3G / HD / SD-SDI Broadcast-grade input + Speakers (SDI)
- DC power: 12V / 24V / 48V / 125V
- Touchscreen:

Projected Capacitive 10-pt / 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 USB keyboard with either touchpad or trackball
- Dual stereo speakers
- Short depth design of 480mm
- One Man installation design
- New enhanced aesthetics with molded front handle

#### **Options**

- Audio input & output ( AU )
- 3G / HD / SD-SDI Broadcast-grade input (SDI)
- Front USB hub port for device access ( USB )
- 2-post rack mounting brackets (ORB-2.1)
- DC power: 12V / 24V / 48V / 125V / 250V
- SUN Micro keyboard option
- Touchscreen:

Projected Capacitive 10-pt / Resistive 1-pt



# 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)
- ► HDMI 1.4 + VGA video input (speakers excluded)
- ▶ 104-key USB keyboard with touchpad
- One Man installation design
- Modern, molded front handle with two point lock

#### Ontions

- Dual stereo speakers for HDMI ( HS4.4 )
- DVI-D + Audio input & output + Speakers ( DV4.4 )
- 3G / HD / SD-SDI Broadcast-grade input + Speakers (SDI)
- DC power: 12V / 24V / 48V / 125V / 250V
- SUN Micro keyboard option



# X124

# 1U 24" WUXGA Large LCD Console Drawer

#### Benefits

- ▶ 1U 24" LCD console drawer
- ▶ 1920 x 1200 WUXGA native resolution
- 16.7M colors
- ► HDMI 1.4 + VGA video input ( speakers excluded )
- ▶ 104-key USB keyboard with either touchpad or trackball
- ► One Man installation design
- Modern, molded front handle with two point lock

Model ( left side open )	Model ( right side open )
X124	X124R

#### Options

- Dual stereo speakers for HDMI ( HS4.4 )
- DVI-D ( **DVI** )
- \* No HDMI after integration of DVI option
- 3G / HD / SD-SDI Broadcast-grade input + Speakers (SDI)
- Front USB hub port for device access ( USB )
- DC power: 12V / 24V / 48V / 125V
- SUN Micro keyboard option
- Touchscreen:

Projected Capacitive 10-pt / Resistive 1-pt

# **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 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

- DP 1.0 + HDMI 2.0 + Audio input & output ( **DP** )
- Composite + Audio IN (BNC)
- 3G / HD / SD-SDI Broadcast-grade input (SDI)
- MCS Multi display OSD controller ( MCS )
- MIL-type or lockable connector
- DC power: 12V / 24V / 48V / 125V / 250V
- · Touchscreen:

Projected Capacitive 10-pt / Resistive 1-pt





# 9U 24" WUXGA Display Panel

#### **Benefits**

- ▶ 9U 24" LCD display panel
- ▶ 1920 x 1200 WUXGA native resolution
- ▶ 16.7M colors
- VGA + DVI-D + HDMI + Speaker
- ► Built-in dual stereo speakers
- ▶ PIP Sub-screen & PBP Dual-screen viewing efficiency

- DP 1.0 + HDMI 2.0 + Audio input & output (DP)
- Composite + Audio IN (BNC)
- 3G / HD / SD-SDI Broadcast-grade input ( SDI )
- MCS Multi display OSD controller ( MCS )
- MIL-type or lockable connector
- DC power: 12V / 24V / 48V / 125V / 250V
- Touchscreen: Resistive 1-pt



# **RP-X117**

# 1U 16.2" WUXGA Display Drawer

#### Benefits

- ▶ 1U 16.2" LCD display drawer
- ▶ 1920 x 1200 WUXGA native resolution
- ▶ 16.7M colors (8-bit)
- ► HDMI 1.4 + VGA video input ( speakers excluded )
- Short depth design of 480mm
- One Man installation design
- Modern, molded front handle with two point lock

# **Options**

- Dual stereo speakers for HDMI (HS4.4)
- 3G / HD / SD-SDI Broadcast-grade input + Speakers (SDI)
- DC power: 12V / 24V / 48V / 125V / 250V
- 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 USB 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

- HDMI 2.0 video input ( HDMI )
- 3G / HD / SD-SDI Broadcast-grade input (SDI)
- Front USB hub port for device access ( USB )
- 2-post rack mounting brackets (ORB-2.1)
- DC power: 12V / 24V / 48V / 125V / 250V
- SUN Micro keyboard option
- · Touchscreen:

Projected Capacitive 10-pt / 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 USB keyboard with either touchpad or trackball
- Ultra Short depth design of 400mm
- ► Built-in dual stereo speakers
- One man installation design
- Modern, molded front handle with two point lock

- HDMI 2.0 with 2 x USB KB/MS cable ( HDMI )
- 3G / HD / SD-SDI Broadcast-grade input (SDI)
- DC power: 12V / 24V / 48V / 125V / 250V
- SUN Micro keyboard option
- Touchscreen:

Projected Capacitive 10-pt / Resistive 1-pt



K123

# 1U 23" 4K Large LCD Console Drawer

- ▶ 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 USB keyboard with either touchpad or trackball
- Built-in dual stereo speakers
- One man installation design
- Modern, molded front handle with two point lock

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

- HDMI 2.0 video input ( HDMI )
- 3G / HD / SD-SDI Broadcast-grade input ( SDI )
- Front USB hub port for device access ( USB )
- DC power: 12V / 24V / 48V / 125V / 250V
- SUN Micro keyboard option

# **KVM Kit Options**

4K 60Hz 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**

- 112G / 4K60 / SD-SDI input ( 12G-SDI )
- \* No HDMI 2.0 after integration of 12G-SDI
- 3G / HD / SD-SDI Broadcast-grade input (SDI)
- Multi display OSD controller ( MCS )
- · MIL-type or lockable connector
- DC power: 12V / 24V / 48V / 125V / 250V
- · Touchscreen:

Projected Capacitive 10-pt / Resistive 1-pt





# 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**

- 12G / 4K60 / SD-SDI input (12G-SDI)
  - \* No HDMI 2.0 after integration of 12G-SDI
- 3G / HD / SD-SDI Broadcast-grade input (SDI)
- Multi display OSD controller ( MCS )
- MIL-type or lockable connector
- DC power: 12V / 24V / 48V / 125V / 250V
- · Touchscreen:

Projected Capacitive 10-pt / Resistive 1-pt





# 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 ( HDMI )
- 3G / HD / SD-SDI Broadcast-grade input (SDI)
- DC power: 12V / 24V / 48V / 125V / 250V
- Touchscreen:

Projected Capacitive 10-pt / Resistive 1-pt



# **2U Multi-display Console Drawer**



#### **Benefits**

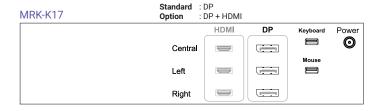
- 2U 22" short depth design
- Light weight
- Rugged construction for mobility & durability
- Built-in solid bearing slide rails
- ► Built-in dual stereo speaker (per display)
- ► Four LED backlit display selections (4K, WUXGA, FHD, 4:3)
- DVI-D + VGA video input for WUXGA, FHD & 4:3 (per display)
- Display port 1.2 video input for 4K (per display)
   \* Attached 6ft DP cable
- 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 / 250V
- 3G / HD / SD-SDI Broadcast-grade input
- Sunlight readable LCD for 17" FHD & 19" 4:3
- Touchscreen
- SUN Micro keyboard options available
- Front USB hub port for device access
- · HDMI video input
- · Add-on USB Selector



### **Rear View**



MRK-F17	MRK-		Option 1	: VGA + DVI-I : VGA + HDM : VGA + DP (c	I	r MRK-F17)	
		DP	HDMI	DVI-D	VGA	Keyboard	Power
	Central				<b>()</b>		0
	Left			·	<b>()</b>	Mouse	
	Right	[rowww]			<b>()</b>		



# 2U Multi-display Drawer



#### **Benefits**

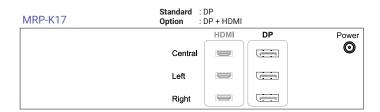
- ▶ 2U 22" short depth design
- Light weight
- Rugged construction for mobility & durability
- Built-in solid bearing slide rails
- ▶ Built-in dual stereo speaker (per display)
- ► Four LED backlit display selections (4K, WUXGA, FHD, 4:3)
- DVI-D + VGA video input for WUXGA, FHD & 4:3 (per display)
- Display port 1.2 video input for 4K (per display)
- \* Attached 6ft DP cable
- ► Fits 24" ~ 36" rack via adjustable mounting brackets

#### **Options**

- DC power: 12V / 24V / 48V / 125V / 250V
- 3G / HD / SD-SDI Broadcast-grade input
- Sunlight readable LCD for 17" FHD & 19" 4:3
- Touchscreen
- · HDMI video input



### **Rear View**



MRP-F1/	MRP-19 MRP-X17			: VGA + HDN : VGA + DP (	In apply for MRP-F17)	
		DP	HDMI	DVI-D	VGA	Po
	Central				<b>(388</b> )	

Left

Right

Standard : VGA + DVI-D

· **##** 

0

# Full Model List - Rack Console Drawer & Rack Display



Rack Console Drawer Series  1U LCD Console Drawer  Large LCD	K117 F117 F119 X117 L120 W119 RKP117 RKP119	Video Input  DP 1.2 ( attached 6ft cable ) HDMI 1.4 + VGA HDMI 1.4 + VGA HDMI 1.4 + DVI-D + VGA VGA	Categories 4K FHD FHD	Size 17" 17"	Resolution	Chassis Design	4K	2K		M Rear Cat		DD		
1U LCD Console Drawer	K117 F117 F119 X117 L120 W119 RKP117 RKP119	DP 1.2 (attached 6ft cable) HDMI 1.4 + VGA HDMI 1.4 + VGA HDMI 1.4 + DVI-D + VGA VGA	4K FHD FHD	17"		Olidosis Design	ΔK	2K	D) // E	Ca			DB-15	
	F117 F119 X117 L120 W119 RKP117 RKP119	HDMI 1.4 + VGA HDMI 1.4 + VGA HDMI 1.4 + DVI-D + VGA VGA	FHD FHD					ZI	DVI-D	Combo		Combo		
	F119 X117 L120 W119 RKP117 RKP119	HDMI 1.4 + VGA HDMI 1.4 + DVI-D + VGA VGA	FHD	17"	3840 x 2160	1U, Short Depth design of 460mm	~							
	X117 L120 W119 RKP117 RKP119	HDMI 1.4 + DVI-D + VGA VGA			1920 x 1080	1U, Short Depth design of 460mm		~	~	~	~	~	~	
	L120 W119 RKP117 RKP119	VGA		19"	1920 x 1080	1U, Short Depth design of 460mm		~	~	~	~	~	~	
	W119 RKP117 RKP119		WUXGA	16.2"	1920 x 1200	1U, Short Depth design of 480mm		~	~	~	~	~	~	
	RKP117 RKP119		Regular	20"	1600 x 1200	10		~	~	~	~	~		
	RKP119	HDMI 1.4 + VGA	Regular	19" Wide LCD	1440 x 900	1U, Short Depth design of 460mm		~	~	~	v	~	~	
Large LCD		VGA	Regular	17"	1280 x1024	1U, Short Depth design of 460mm		~	~	~	~	~	~	
.arge LCD		VGA	Regular	19"	1280 x1024	1U, Short Depth design of 500mm		~	~	~	v	~	~	
Large LCD	N117	VGA	Regular	17"	1280 x1024	1U, Short Depth design of 500mm		~	~	~	~	~		
Large LCD	N119	VGA	Regular	19""	1280 x1024	1U, Short Depth design of 500mm		~	~	~	~	~		
Large LCD	RKP7/9	VGA	Regular	17" / 19"	1280 x1024	10		~	~	~	~	~		
Large LCD	K123	DP 1.2 ( attached 6ft cable )	4K	23"	3840 x 2160	1U, Left open model or Right open model	~							
	F121	HDMI 1.4 + VGA	FHD	21"	1920 x 1080	1U, Left open model or Right open model		~	~	~	~	~	~	
	X124	HDMI 1.4 + VGA	WUXGA	24"	1920 x 1200	1U, Left open model or Right open model		~	_	~		~	_	
	DK117	DP 1.2 ( attached 6ft cable )	4K	17"	3840 x 2160	1U, Dual Slide	~							
	DF117	HDMI 1.4 + VGA	FHD	17"	1920 x 1080	1U. Dual Slide		~	,	~	J	_		
	DX117	HDMI 1.4 + VGA	WUXGA	16.2"	1920 x 1200	1U. Dual Slide		~	_	~		~		
	D117	VGA	Regular	17"	1280 x1024	1U. Dual Slide			_	_	_	_		
Dual Slide	D119	VGA	Regular	19"	1280 x1024	1U. Dual Slide			,	,				
	RKP2417K	DP 1.2 ( attached 6ft cable )	4K	17"	3840 x 2160	17 11 11 11	_							
	RKP2417F	HDMI 1.4 + VGA	FHD	17"	1920 x 1080	2U, Dual Slide, Short depth 480mm		_	_	_	_	_		
	RKP2417	VGA	Regular	17"	1280 x1024	2U, Dual Slide, Short depth 480mm			,	,	,			
	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 400mm	v							
Ultra Short Depth	F1417	HDMI 1.4 + VGA	FHD	17"	1920 x 1080	1U, Ultra Short Depth design of 400mm	·	J			· ·		,	
	DK1417	HDMI 2.0 + DP 1.2	4K	17"	3840 x 2160	1U, Dual Slide, Ultra Short Depth, 480mm		•	Ť		_		Ť	
Dual Slide Ultra Short Depth	DF1417	HDMI 1.4 + DP 1.2 + VGA	FHD	17"	1920 x 1080	1U, Dual Slide, Ultra Short Depth, 480mm								
	HF117	HDMI 1.4 + VGA	FHD	17"	1920 x 1080	1U, Short Depth design of 480mm					· ·		J	
High Brightness LCD	HF119	HDMI 1.4 + VGA	FHD	19"	1920 x 1080	1U, Short Depth design of 460mm		,	, i	,	J	-	J	
riigii brigiitiless LOD	H117 / H119	VGA	Regular	17" / 19"	1280 x1024	1U, Short Depth design of 480 / 520mm		,	, i	, i	,			
	S117 / S119	DVI-D + VGA	SUN	17 / 19	1152 x 900	1U, Short Depth design of 460 / 500mm		4	,	,	,	4	J	
SUN LCD Solution	NS117 / NS119	DVI-D + VGA	SUN	17 / 19	1152 x 900	1U, Short Depth design of 500mm		4	,	4	, , , , , , , , , , , , , , , , , , ,	,	Ť	
	MRK-K17	DP 1.2 / HDCP 1.3	4K	17 / 19	3840 x 2160	2U, Triple / Dual ( LH or RH mount ) LCD		v	·	·	•	·		
	MRK-K17	DVI-D + VGA	FHD	17"	1920 x 1080									
Multi-Display	WIRK-F17				1920 x 1080	2U, Triple / Dual ( LH or RH mount ) LCD 2U, Triple / Dual ( LH or RH mount ) LCD								
	MRK-X17	DVI-D + VGA	WUXGA	16.2"										

<sup>\*</sup> For more detailed specification, please refer to the product sheets: www.austin-hughes.com/resource\_cat/product-resources/rack-console-drawer-resources

					LCD Panel				Option	S
Rack Display Panel	/ Drawer Series	Model	Video Input	Categories	Size	Resolution	Chassis Design	Touch Screen	3G / HD SD-SDI	
		RP-K617	Display port 1.2 + HDMI 1.4 + HDMI 2.0	4K	17"	3840 x 2160	6U Rackmount		~	_
		RP-F617 / F719	HDMI 1.4 + VGA	FHD	17" / 19"	1920 x 1080	6U / 7U Rackmount	~	~	~
		RP-X617	HDMI 1.4 + VGA	WUXGA	16.2"	1920 x 1200	6U Rackmount	~	~	~
	Regular	RP-717	HDMI 1.4 + VGA	Regular	17"	1280 x 1024	7U Rackmount	~	~	-
		RP-819	HDMI 1.4 + VGA	Regular	19"	1280 x 1024	8U Rackmount	~	~	
		RP-920	HDMI 1.4 + VGA	Regular	20"	1600 x 1200	9U Rackmount	~	~	
	RP-W719	HDMI 1.4 + VGA	Regular	19" Wide LCD	1440 x 900	7U Rackmount	~	~		
		RP-K923	Display port 1.2 + HDMI 1.4 + HDMI 2.0	4K	23"	3840 x 2160	9U Rackmount; VESA Mount Ready	~	~	
	Large LCD	RP-F821	HDMI 1.4 + 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	~	~	
isplay Panel		RP-HF617	HDMI 1.4 + VGA	FHD	17"	1920 x 1080	6U Rackmount	~	~	
		RP-HF719	HDMI 1.4 + VGA	FHD	19"	1920 x 1080	7U Rackmount	~	~	
	High Brightness	RP-HF821	HDMI 1.4 + VGA	FHD	21"	1920 x 1080	8U Rackmount; VESA Mount Ready	~	~	
		RP-H717 / H819	HDMI 1.4 + VGA	Regular	17" / 19"	1280 x 1024	7U / 8U Rackmount	~	~	
Sun LCD Solution Split Quad		RP-HW719	HDMI 1.4 + VGA	Regular	19" Wide LCD	1440 x 900	7U Rackmount	~	~	
	SP-717	HDMI 1.4 + VGA	SUN	17"	1152 x 900	7U Rackmount				
	Sun LCD Solution	SP-819	HDMI 1.4 + VGA	SUN	19"	1152 x 900	8U Rackmount			
	SP-920	HDMI 1.4 + VGA	SUN	20"	1152 x 900	9U Rackmount				
		RP-F921QD-1080	QD ( HDMI 1.3 x 4 ) + DVI-D + VGA	FHD	21"	1920 x 1080	9U Rackmount; VESA Mount Ready			
	Split Quad	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			
		RP-K117	Display port 1.2 ( attached 6ft DP cable )	4K	17"	3840 x 2160	1U, Short Depth design of 480mm	~	~	
		RP-F117	HDMI 1.4 + VGA	FHD	17"	1920 x 1080	1U, Short Depth design of 480mm	~	~	
		RP-X117	HDMI 1.4 + VGA	WUXGA	16.2"	1920 x 1200	1U, Short Depth design of 480mm	~	~	
	Regular	RP-117	HDMI 1.4 + VGA	Regular	17"	1280 x 1024	1U, Short Depth design of 500mm	~		
		RP-119	HDMI 1.4 + VGA	Regular	19"	1280 x 1024	1U, Short Depth design of 500mm	~		
		RP-W119	HDMI 1.4 + VGA	Regular	19" Wide LCD	1440 x 900	1U, Short Depth design of 460mm		~	
		RP-120	HDMI 1.4 + VGA	Regular	20"	1600 x 1200	10			
	Illana Ohana Danah	RP-K1417	Display port 1.2 (attached 6ft DP cable)	4K	17"	3840 x 2160	1U, Ultra Short Depth design of 400mm	~	~	
	Ultra Short Depth	RP-F1417	HDMI 1.4 + VGA	FHD	17"	1920 x 1080	1U, Ultra Short Depth design of 400mm	~	~	
		RP-HF117	HDMI 1.4 + VGA	FHD	17"	1920 x 1080	1U, Short Depth design of 480mm	~	~	
I D	High Databases	RP-HW119	HDMI 1.4 + VGA	Regular	19"	1440 x 900	1U, Short Depth design of 460mm		~	
isplay Drawer	High Brightness	RP-H117	HDMI 1.4 + VGA	Regular	17"	1280 x 1024	1U, Short Depth design of 500mm	~		
		RP-H119	HDMI 1.4 + VGA	Regular	19"	1280 x 1024	1U, Short Depth design of 500mm	~		
		SP-117	HDMI 1.4 + VGA	SUN	17"	1152 x 900	1U, Short Depth design of 500mm			
	Sun LCD Solution	SP-119	HDMI 1.4 + VGA	SUN	19"	1152 x 900	1U, Short Depth design of 500mm			
		SP-120	HDMI 1.4 + VGA	SUN	20"	1152 x 900	10			
	Outlin Outlin	RP-119QD	QD ( Composite BNC x 4 ) + VGA	FHD	19"	1280 x 1024	10			
	Split Quad	RP-W119QD	QD ( Composite BNC x 4 ) + VGA	Regular	19" Wide LCD	1440 x 900	10			
		MRP-K17	DP 1.2 / HDCP 1.3	4K	17"	3840 x 2160	2U, Triple / Dual ( LH or RH mount ) LCD	~	~	
	A A In the In	MRP-F17	DVI-D + VGA	FHD	17"	1920 x 1080	2U, Triple / Dual ( LH or RH mount ) LCD	~	~	
	Multi-Display	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	_	v	

<sup>\*</sup> 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**

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 600mm
- One man installation design
- Modern, molded front handle with two point lock

### **Options**

- SUN Micro keyboard options
- · KVM rear kit: 2K

DVI-D

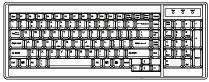
Combo Cat6

Matrix Cat6 Combo DB-15

USB Hub DB-15

# Standard Keyboard













#### Supported Layouts



Asia





# **KVM Extender**





# IP-H101 / IP-S101

# 1 port IP HDMI / VGA KVM Gateway

#### Benefits

- ► HDMI connection to KVM/ computer ( IP-H101 )
- VGA connection to KVM/ computer ( IP-S101 )
- ► High performance FHD 1080 IP remote access
- Quad-core processor IP KVM
- HTML-based & Java-free
- ► Enterprise level IP authentication
- ► Control over IP & BIOS-level accessProtection
- Plug & play, tool-less & easy setup



# CV-K101 / CV-F101

# 4K / 1080p HDMI KVM Extender

#### Benefits

- ► CV-K101 support resolution up to 4K@60Hz
- ► CV-F101 support resolution up to 1080p@60Hz
- Support point to point connection
- Uncompressed and no latency
- Transmitter support one HDMI loop-out
- Support KVM function
- ► Transmission diatance up to 70m via CAT6 cable
- Protection from surge/ lightning/ ESD



# CV-S101

# Combo KVM Extenter

# Benefits

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



#### **Key Benefits**

- ▶ 3840 x 2160@60Hz native UHD resolution
- ▶ 1920 x 1080 & 1920 x 1200 resolution support
- ▶ 1.07B 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

- 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/m<sup>2</sup> High Brightness



# 8mm/6mm aluminum front bezel



AP-K55 HAP-K55 AP-K43 HAP-K43

AP-K32

AP-K28

NEMA 4 / IP65 front protection 8mm/6mm aluminum front bezel





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

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



#### **Key Benefits**

- ▶ 3840 x 2160@60Hz native UHD resolution
- ▶ 1920 x 1080 & 1920 x 1200 resolution support
- K23": 1.07B colors (10-bit)
- K17", K15" & K13": 16.7M 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

- 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

# **Standard Brightness**

# 6mm aluminum front bezel



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

#### Aluminum front cover



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

#### NEMA 4 / IP65 front protection 6mm aluminum front bezel



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

# Universal open frame



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

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

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



#### **Key Benefits**

- ▶ 1920 x 1080 native FHD resolution
- ► F55", F32", F28", F23" : 1.07B colors (10-bit)
- ► F43": 16.7M colors (8-bit)
- ► F55" ~ F28" : HDMI 1.4, DVI-D & VGA ; Optional DP & HDMI 2.0
- ► F23": HDMI 1.4 & VGA; Optional DP, HDMI 2.0 & DVI-D
- 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

- DC power: 24V / 48V / 125V
- Touchscreen (F55", F48", F32", F23") \*
- 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/m<sup>2</sup> Sunlight Readable Brightness





AP-F55 HAP-F55

AP-F43 HAP-F43

AP-F32 HAP-F32 AP-F28

AP-F23

NEMA 4 / IP65 front protection 8mm/6mm aluminum front bezel



NAP-F55 NHAP-F55

NAP-F43 NHAP-F43 NAP-F32 NHAP-F32

NAP-F28

NAP-F23

# Aluminum front cover



DP-F55 HDP-F55 DP-F43 HDP-F43

DP-F32 HDP-F32

DP-F28 DP-F23 Universal open frame



OP-F55 HOP-F55 OP-F43 HOP-F43

OP-F32 HOP-F32

OP-F28

OP-F23

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





#### **Key Benefits**

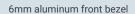
- ▶ 1920 x 1080 native FHD resolution
- ► F21", F19": 16.7 million colors
- ► F17", F15" & F13": 16.7 million colors (8-bit)
- ► HDMI 1.4 & VGA video input
- ► DP / HDMI 2.0 / DVI-D video input (option)
- Video decoding capability up to 1080p (option)
- Rugged structure ensures high mobility
- IP65 front 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

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

# Standard Brightness / 1000 cd/m<sup>2</sup> Sunlight Readable Brightness





AP-F21 HAP-F21 AP-F19 HAP-F19

HAP-F17

AP-F15 HAP-F15

AP-F13

NEMA 4 / IP65 front protection 6mm aluminum front bezel



NAP-F21 NHAP-F21 NAP-F19 NHAP-F19

NAP-F17 NHAP-F17

NAP-F15 NHAP-F15

NAP-F13

# Aluminum front cover



DP-F21 HDP-F21

DP-F19 HDP-F19 HDP-F17

DP-F15 HDP-F15

DP-F13

# Universal open frame



HOP-F21

HOP-F19

HOP-F17

OP-F15 HOP-F15

OP-F13

OP-F19

## Chassis customization

Dimension

APAC 2023 03

Color & Treatment

Screen Printing

Stainless Steel Bezel

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



#### **Key Benefits**

- 1440 x 900 / 1600 x 1200 / 1280 x 1024 native resolution
- ▶ 16.7M colors
- ► HDMI 1.4 & VGA video input; Optional DP & DVI-D
- Video decoding capability up to 1080p (option)
- Rugged structure ensures high mobility
- ▶ IP65 front protection ( NAP series )
- Professional-use durability & around-the-clock operation

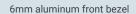
#### **Applications**

- 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

# Standard Brightness / 1000 cd/m² Sunlight Readable Brightness





AP-W19 HAP-W19

AP-20

AP-19 HAP-19

AP-17 HAP-17

#### NEMA 4 / IP65 front protection 6mm aluminum front bezel



NAP-W19 NHAP-W19

NAP-20

NAP-19 NHAP-19

NAP-17 NHAP-17

#### Aluminum front cover



DP-W19 HDP-W19

DP-20

DP-19 HDP-19

DP-17 HDP-17

# Universal open frame



OP-W19 HOP-W19

OP-20

OP-19 HOP-19 OP-17 HOP-17

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

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



#### **Key Benefits**

- ▶ 1024 x 768 / 800 x 600 / 640 x 480 native resolution
- ▶ 15": 16.2M colors
- ▶ 12" & 10": 262K 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

# **Standard Brightness**

# 6mm aluminum front bezel



AP-15 AP-12

AP-10

# Aluminum front cover



DP-15 DP-12 DP-10

# NEMA 4 / IP65 front protection 6mm aluminum front bezel



NAP-15 NAP-12 NAP-10

# Universal open frame



OP-15 OP-12

OP-10

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

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





#### **Key Benefits**

- ▶ 1920 x 1200 WUXGA native resolution
- ▶ 16.7M colors (8-bit for X17 16.2" LED)
- 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

- 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

# **Standard Brightness**

# 6mm aluminum front bezel



AP-X24 AP-X17

#### Aluminum front cover



DP-X24 DP-X17

#### NEMA 4 / IP65 front protection 6mm aluminum front bezel



NAP-X24 NAP-X17

# Universal open frame



OP-X24 OP-X17

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

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











# 4K

- K55"
- K43"
- K32"
- K28"
- K23"
- K17"
- K15"
- K13"

# FHD

- F55" F21"
- F43" F19"
- F32" F17"
- F28" F15"
- 0 1 20 0 1 10
- F23" F13"

# WXUGA ( 1920 x 1200 )

- X24"
- X17"

# Regular

- W19" (1440 x 900 )
- 20" ( 1600 x 1200 )
- 19" ( 1280 x 1024 )
- 17" ( 1280 x 1024 )
- 15" ( 1024 x 768 )
- 12" ( 800 x 600 )
- 10" ( 800 x 600 )

# **High Brightness**

# 4K

- K55"
- K43"

# Sunlight Readable Brightness



• F55"

- F43" F19"
- F32" F17"
  - F15"

• F21"

# Regular

- W19" (1440 x 900 )
- 19" ( 1280 x 1024 )
- 17" ( 1280 x 1024 )

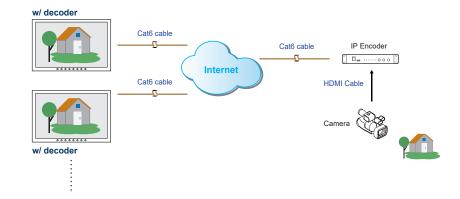
# **UltraView**

# 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

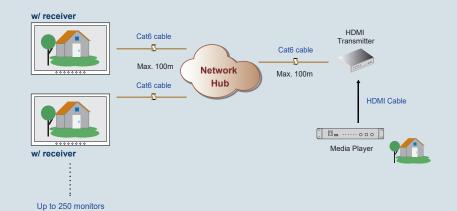


# Embedded HDMI Receiver Module 1080p

- 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

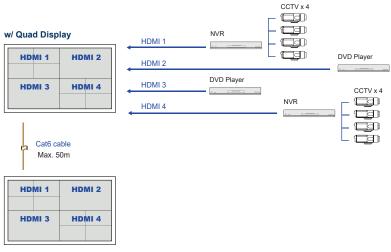


# Embedded HDMI Quad Display Module 1080p

- 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

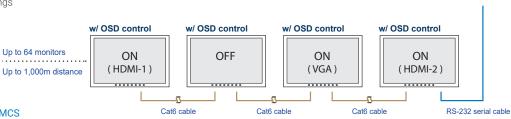


w/ Extension Module

OSD control station

#### 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.:

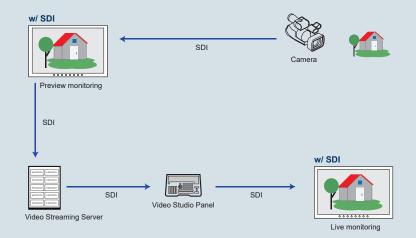
Embedded Multi Monitor OSD Control Module: MCS

# 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%

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.

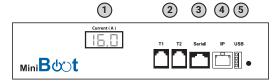


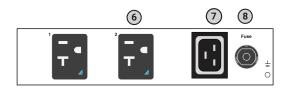
Remote power reboot and monitoring functions are essential for hardware systems. MiniBoot offers a cost-efficient power solution for any environment with electronic devices or systems. Users can try to recover the crashed device by remote reboot, reducing the need to send engineers to site (less personnel 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.











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

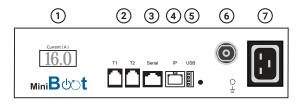


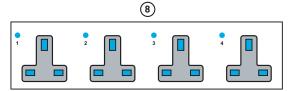


MiniBoot - NEMA / IEC			Amp			
nlet	Model	110V	208V	230V	WxDxH	
	MiniBoot-2US					
C20 x 1	MiniBoot-4US	15A				
	MiniBoot-8US				200 x 145 x 44.5 mm	
	MiniBoot-2C13				7.9 x 5.7 x 1.8 inch	
C20 x 1	MiniBoot-4C13		16A	10A/13A/16A		
	MiniBoot-8C13					
22	20 x 1	MiniBoot-2US 20 x 1 MiniBoot-4US MiniBoot-8US MiniBoot-2C13 20 x 1 MiniBoot-4C13	MiniBoot-2US 20 x 1 MiniBoot-4US 15A MiniBoot-8US MiniBoot-2C13 20 x 1 MiniBoot-4C13	MiniBoot-2US 20 x 1 MiniBoot-4US 15A MiniBoot-8US MiniBoot-2C13 20 x 1 MiniBoot-4C13 16A	MiniBoot-2US 20 x 1 MiniBoot-4US 15A MiniBoot-8US MiniBoot-2C13 20 x 1 MiniBoot-4C13 16A 10A / 13A / 16A	

ւ(ՈՐ)  $\epsilon$ FC CB RoHS3 REACH

- Custom configuration available on request
- Input cordset excluded
   Dimensions are subject to change without prior notice









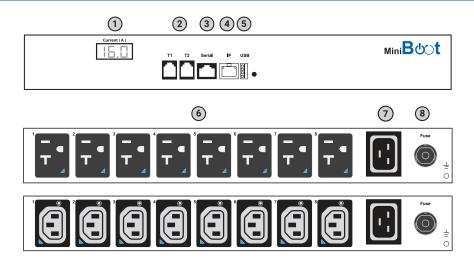
- RMS current meter x 1
- Sensor port x 2
- Serial port x 1
- Gigabit IP LAN port x 1
- USB Wifi port x 1
- Resettable fuse x 1
- C20 Inlet x1
- Switched outlets (UK, Schuko or French)

MiniBoot - I	MiniBoot - UK / SCH / FR			Amp				
Outlet	Inlet	Model	110V	208V	230V	WxDxH		
UK x 4	C20 x 1	MiniBoot-4UK			10A/13A/16A			
Schuko x 4	C20 x 1	MiniBoot-4SCH			10A / 16A	220 x 150 x 55 mm 8.7 x 5.9 x 2.2 inch		
French x 4	C20 x 1	MiniBoot-4FR			10A / 16A	0.7 A 0.5 A 2.2 HIGH		

CB CK C€ RoHS3 REACH

- Custom configuration available on request
- \*\* Input cordset excluded
- \*\*\* Dimensions are subject to change without prior notice





- 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 )
- 7 C20 Inlet x 1
- 8 Resettable fuse x 1

MiniBoot - I	MiniBoot - NEMA / IEC			Amp	Product Dimension	
Outlet	Inlet	Model	110V	208V	230V	WxDxH
NEMA x 8	C20	MiniBoot-8US	15A			345 x 145 x 44.5 mm
C13 x 8	C20	MiniBoot-8C13		16A	10A/13A/16A	13.6 x 5.7 x 1.8 inch









RoHS3

REACH

# **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
Accuracy	± (3% of the reading + 5 last digits) RMS
Overload protection	Resettable fuse
Electrical endurance	1 x 10 <sup>5</sup> operations

Chassis	
Color	White
Material	Steel

Environmental				
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			

Dhysical	NEMA or C13			
Physical	2 x outlet	4 x outlet	8 x outlet	
Product (WxDxH)	200 x 145 x 44.5 mm		345 x 145 x 44.5 mm	
Packing (WxDxH)	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	UK, SCH or FR
i ilysicui	4 x outlet
Product (WxDxH)	220 x 150 x 55 mm
Packing (WxDxH)	300 x 196 x 81 mm
Net weight	1.23 kg / 2.7 lb
Gross weight	1.53 kg / 3.4 lb

Compliance	110V / 208V	230V
EMC	FCC Part 15 Subpart B	CE/EMC
	ICES-003 Issue 7	
Safety	UL 62368-1 : 2014	CE / LVD , UKCA & CB
	CSA C22.2 No. 62368-1 : 2014	EN 62368-1 : 2014 / A11 : 2017
		BS EN 62368-1 : 2014 / A11 : 2017
		IEC 62368-1 : 2014
Environment	RoHS3, Reach & WEEE	
ISO	9001 / 14001	





### **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.

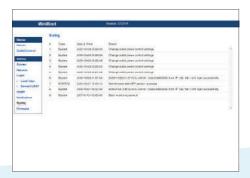
### **Circuit Monitoring & Outlet Switching**



#### **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

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



# **Free Mounting Kit**

#### Side Mount Kit

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



#### Rack Mount Kit

- · Included with IEC / US 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

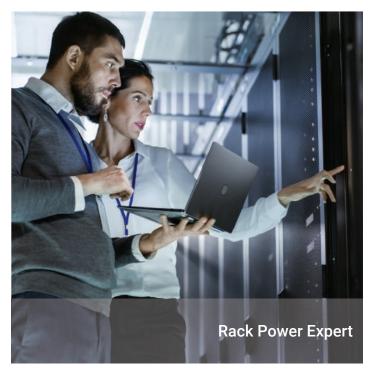






Founded in 1995, **Austin Hughes** is a design and manufacturing group that offers a broad range of solutions based around 19 inch rack mount technology: the UltraRack IT server rack series, InfraRack intelligent rack solutions, InfraPower intelligent remote management power solutions, InfraCool intelligent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

**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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