

**Rack Sensor System** 





# >>> Rack Environmental Management

# Infra Guard

For mission critical data centers, the ability to remotely manage the IT rack environment is vital. Environmental issues to your racks, including high temperature & humidity, smoke, water leakage, physical threats, unauthorized door access, power and cooling inefficiencies can have a significant impact on the performance of the operations.

**Infra Guard** provides an environmental monitoring solution to secure high levels of data center operational stability and flexibility. It also gives a free integrated platform for today's data centers. User can remotely manage the environment and conditions in racks via IP. This can help reducing manpower and travel costs by negating the need for staff to actually be at the rack location.

#### **Key Benefits**

#### >>> Variety of Sensors / Peripherals

Getting instant notification of various environmental fluctuations, InfraGuard offers a variety of environmental sensors.



#### >>> Integrated PDUs / Fan Units

In order to enhance the functionality, the InfraGuard remote management supports the integration to intelligent Switched / Monitored PDUs and Fan Units. Up to 1920 x kWh PDU and same quantity of Fan Units can be remotely managed by the management software.

#### >>> Scalable Flexibility

Multi ports for some critical sensors / peripherals / devices on control box are available. Users can apply "One Box One Rack" in order to achieve the optimum environmental management, or "One Box Two Racks" for cost efficient setup.



#### >>> High Density of Environmental Management

The free management software IGM-03 supports up to 30 x IP.

Up to 16 x InfraGuard control box can be connected by daisy chain and remotely access by one single IP.

Under "One Box Two Racks" scenario, environmental remote management up to 960 racks can be achieved.



## >>> Control Box

# Infra Guard

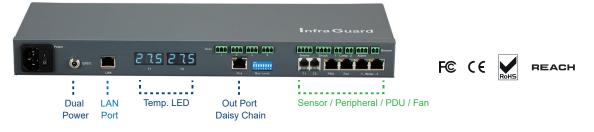
Control box consolidates the integrated sensors and devices.

Up to 16 x Control box can be connected by daisy chain for IP remote access.

Infra Guard offers two control box models with same integrated sensor and device I/O.



EC Box 300M - Master IP control box (1st Level)



#### EC Box 300 - Expansion Serial control box (2nd - 16th Level)





REACH

	EC-300M ( Master IP Box )	EC-300 ( Expansion Serial Box )
Daisy Chain SNMP	1st Level ✔	2nd - 16th Level via Master IP Box
LAN Port	V	×
Daisy Chain Port - LINK	×	V
Daisy Chain Port - OUT	<ul> <li>✓</li> </ul>	V
Dual Power Input Option	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>
Temperature LED	<ul> <li>✓</li> </ul>	✓
Temp-Humid Sensor	2	2
Smoke / Shock Sensor	2	2
Water Sensor	2	2
Door Sensor	4	4
LED Light Bar	2	2
LED Flashing Beacon	1	1
Alarm Board	1	1
Integrated PDU	4 ( daisy chain )	4 ( daisy chain )
Integrated Fan Unit	4 ( daisy chain )	4 ( daisy chain )
Product Dimension (WxDxH)	400 x 135 x 39.7 mm / 15.7 :	x 5.3 x 1.6 inch
Packing Dimension (WxDxH)	557 x 367 x 98 mm / 21.9 x	x 14.4 x 3.9 inch
Net Weight	1.06 kgs / 2.3 lbs	
Gross Weight	2.2 kgs / 4.8 lbs	
Power Consumption	e e e e e e e e e e e e e e e e e e e	AC, 50 / 60Hz, Max. 48 Watt
Operating Temperature	0 to 55°C Degree	
Storage Temperature	-5 to 60°C Degree	
Relative Humidity	5~90%, non-condensing	
Mounting	1U Rackmount	
Safety Regulatory	FCC & CE certified	
Environmental	RoHS3 & Reach compliant	

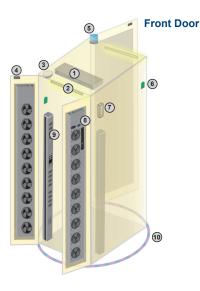
## >>> Connection - One Box One Rack

# Infra Guard

In One Box - One Rack connection, complete range of integrated sensors and devices can be applied to the rack. Multiple sensors / integrated devices can be applied to one single rack in order to achieve the optimum environmental monitoring conditions.

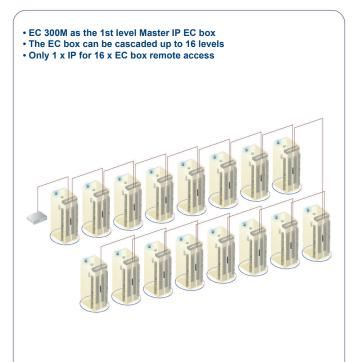


#### **Suggested Sensors / Devices Allocation**



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

#### **Rack Level Connection**



Daisy chain by Cat5/6 cable
 Max. distance between 2 EC box is 20M
 Max. distance in a daisy chain group up to 300M

IGM-03 supports 30 x IP address ; 480 x EC box ; 1920 x Integrated kWh PDU ; 1920 x Integrated Cooling Fan Unit ; Thousands of Environmental Sensors





5 x concurrent user for remote management

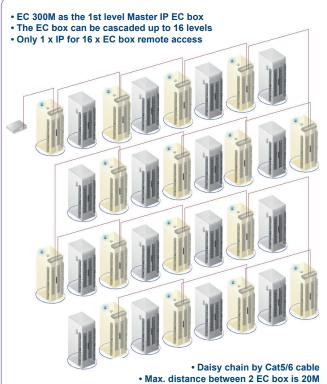
## >>> Connection - One Box Two Racks

# nfra Guard

EC Box provides multi-ports for some critical sensors / devices. It means that enables user to share the control box and some duplicated sensors / devices to two racks. A cost efficient environmental management can be achieved.



#### **Rack Level Connection**

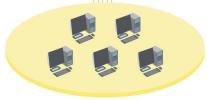


Max. distance between 2 EC box is 20M
 Max. distance in a daisy chain group up to 300M



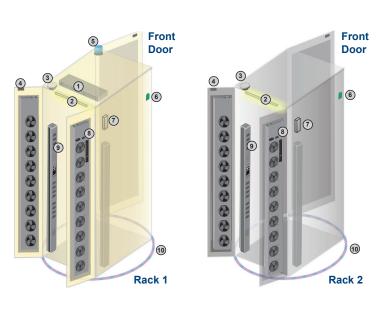
IGM-03 supports 30 x IP address ; 480 x EC box ; 1920 x Integrated kWh PDU ; 1920 x Integrated Cooling Fan Unit ; Thousands of Environmental Sensors

Remote access by web-based GUI from anywhere around the world



5 x concurrent user for remote management

## Suggested Sensors / Devices Allocation



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

\* either smoke sensor or shock sensor

## >>> Sensor / Peripheral

# Infra Guard

To maintain optimum operational conditions in data centers, getting instant notification of various environmental fluctuations is vital.

**Infra Guard** offers a wide range of sensors for complete environmental monitoring, including temperature, humidity, smoke, shock and water leakage.

Peripherals such as LED light bars and flashing LED beacons, are designed for use with the sensors for a comprehensive local environmental monitoring solution.



# Temp. + Humid. Sensor

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

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



Safely operated smoke detection
 Part no.:
 IG-S01-1M with 1M cord
 IG-S01-3M with 3M 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



 Alert the physical vibration on the rack Part no. : IG-V01-1M with 1M cord IG-V01-3M with 3M cord

## Inductive Door Sensor



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

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

Mechanical Door Sensor



- Low cost
- Precise
- · Cost efficient integration to new rack

<ul> <li>Custom cuttir</li> </ul>	ng required on door
Part no. :	
IG-DSW-2M	with 2M cord

IG-D5W-2W	with 21vi cord
IG-DSW-4M	with 4M cord







- 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



Highly visible for alerting user to alarm status

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





- 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

## >>> PDU

# Infra Guard

Switched

WSi

.

~

.

~

~

5

~

~

~

~

~

~

~

~

~

.

~

...

~

5

~

5

~

~

~

~

With today's increasing demand for power management solution, a complete suite of rack PDU models is required specifically to help data center IT managers meet their rapidly escalating power requirements.

nfra Power<sup>®</sup> intelligent PDU can be integrated to provide a power management solution from PDU Level to Outlet Level kWh monitoring. Switched models are also available for remote outlet switching on / off. Our PDUs are also offered in many sizes and configurations depending on voltage, current, outlet number and type of connections.

Details

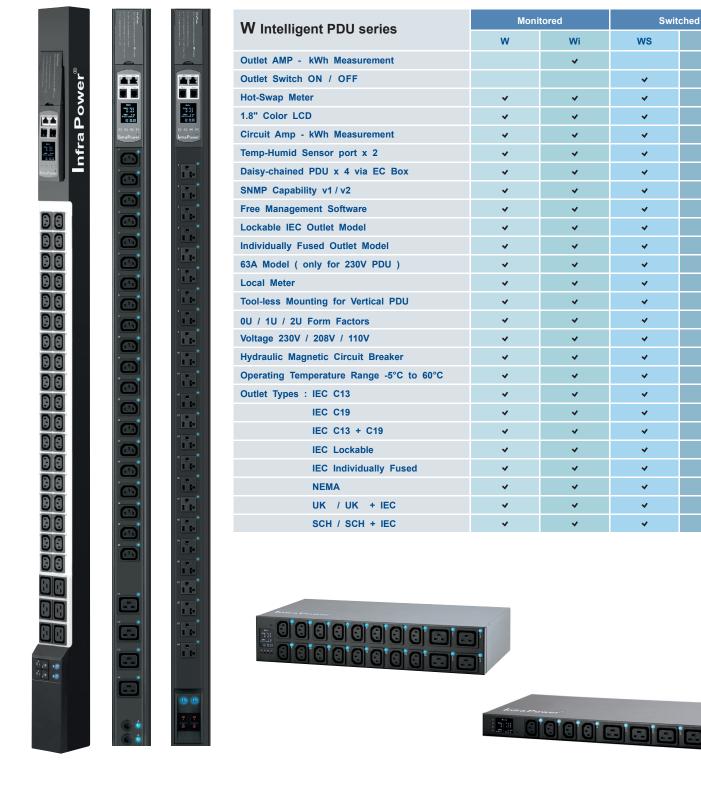


cUL certified for specific configurations

RoHS

REACH

ւա) F© (€



Details

If intelligent PDU is not required, you may select Basic or Metered series. http://www.austin-hughes.com/infrapower/single-phase/pdu/metered-pdu

## >>> Fan Unit

# Infra Guard

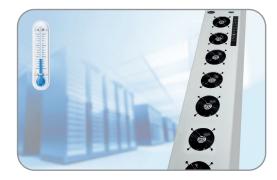
The biggest challenge in today's data center is thermal management. Cooling the equipment in an enclosed rack has always been important.

Infra Cool<sup>®</sup> intelligent cooling fan units can be integrated to have both local & remote management capabilities. Front panel LED and buttons allow the local monitoring and individual fan kit switch on / off. Moreover, fan speed can be adjusted automatically according to the temperature detected by the sensor. It provides adequate airflow and minimizes the operation cost for data center energy consumption.



¢





USTIN' Power Power	Intelligent Fan Unit	Door Mount Fan Panel	1U Rackmou	int Fan Tray
	Part No.	RF-33.9	RF-1.6	RF-1.9
	Fan Number	9	6	9
	Total CFM	972	648	972
	Airflow	Front Door Cool Air In Rear Door Hot Air Out	The second secon	Top Exhaust hot air out Equipment Cooling Bottom Cool air in
	Daisy-chained Fan x 2 via EC Box	✓	~	,
	Temp. Port	<b>~</b>	~	
	Temp. Sensor	*	~	
XX.	Automatic Fan Speed Control	*	~	
1	Control Panel :	<	~	
	• Individual Fan On / Off	<	~	
	Alarm Temp. Setting	✓	~	,
	Unit CFM ( fan speed ) Setting	✓	~	,
	Temperature LED	✓	~	,
	• Fan Status LED	*	~	,
XX.	CFM Status LED	✓	~	,

#### **Rackmount Fan Trays**



#### Auto Fan Speed Control



#### Temp. Sensor Port x 1



# >>> Management Software

# Infra Guard

Infra Guard Manager IGM-03 is a FREE environmental sensor management software to monitor up to 30 Master IP Groups remotely (max. 16 EC box levels in each Master IP Group), total 480 EC boxes. Each EC box can connect a variety of sensors to provide an environmental monitoring solution to secure high levels of data center operational stability and flexibility.

To enhance the functionality, up to 1920 x kWh PDU / Remote Fan Unit can be monitored through **IGM-03** GUI as well. 5 concurrent user access are bundled for achieving the demand of multi-user / multi-tasking in nowadays' time-sharing data center operation. Details



	ult_box_name 168.1.81									
30x evel Location 01 Rack_001 02 Rack_002 03 Rack_003	Setting @ @	51 V V	\$2 V V	\$3 \$	Sensor S4 S5	\$6	\$7 \$ \$ \$	S8 V V V	PDU         Fan Unit         Door           P1         P2         P3         P4         F1         F2         F3         F4         D1         D2         D3           Q         V         Image: Constraint of the state of	D4
04 Rack_004 05 Rack_005 06 Rack_005 07 Rack_007 08 Rack_009 10 Rack_010 11 Rack_011 12 Rack_011 13 Rack_013 14 Rack_014		•>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>×>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	222222202222	333333333333 3333333333333		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
15 Rack_015 16 Rack_016 2 Auto data refresh :	© ©	S1 : T/TH S2 : T/TH S3 : Smol	12	2	S5 : Water 1 S6 : Water 2 S7 : Lamo 1		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Connected	

Features		IGM-03
Capacity	Master IP Group (just 1 for 16 EC box levels) EC Box Number Concurrent User	30 480 5
Device Overview	Status of Sensor, PDU, Fan Unit & Door Device Setting / Audio and Visual Output Setting	v v
Sensor Peripheral	Status Monitoring Location of Sensor / Peripheral Temp-Humid Alarm Setting / Rising Alert Threshold Setting	2 2 2
PDU	Energy Consumption kWh / Amp Monitoring Outlet Level Measurement PDU Outlet Schedule Outlet Switch ON / OFF Amp Alarm Threshold Setting Amp Rising / Low Alert Threshold Setting Temp-Humid / Circuit Breaker Monitoring	> > > > > > > > > > > > > > > > > > >
Fan Unit	CFM & Temp. Monitoring Unit CFM (fan speed) Setting Auto CFM Control Setting Individual Fan Kit ON / OFF Fan Unit ON / OFF	> > > > > > > > > > > > > > > > > > >
Event Log / Report	System & Device Event Device Log / Reporting	v v

# >>> Management Software

# Infra Guard

age: 1 2 Box	T I		Temp, Hu	mid.		Smoke / Shock			Water	I.		Lan
Level Location	Setting	Location		%	Location	Status	-	Location	Status	8	Location	Stal
01 Rack_001	0	S1 Front bottom	24.9	55	S3 Rear inside top	Connected	\$5	Bottom surrounded	Connected	\$7	Fronttop	08
		S2 Reartop	23.1	50	S4 Upper inside	Connected	56			58	Rear top	08
02 Rack_002	0	S1 Front bottom	24.0	57	\$3 Rear inside top	Connected	\$5	Bottom surrounded	Connected	\$7	Fronttop	08
		\$2 Reartop	25.0	55	S4 Upper inside	Connected	<b>S6</b>	4		\$8	Rear top	08
03 Rack_003	0	S1 Front bottom	24.1	57	\$3 Rear inside top	Connected	\$5	Bottom surrounded	Connected	\$7	Fronttop	0
		S2 Rear top	23.5	59	S4 Upper inside	Connected	<b>S6</b>	4		58	Rear top	0
04 Rack_004	0	\$1 Front bottom	26.3	50	\$3 Rear inside top	Connected	\$5	Bottom surrounded	Connected	\$7	Fronttop	08
		S2 Reartop	23.1	53	S4 Upper inside	Connected	<b>S6</b>	U C		58	Rear top	OF
05 Rack_005	0	S1 Front bottom	23.8	57	S3 Rear inside top	Connected	\$5	Bottom surrounded	Connected	\$7	Fronttop	OF
		S2 Reartop	25.2	53	S4 Upper Inside	Connected	56	2		58	Rear top	0
06 Rack_005	0	S1 Front bottom	23.8	58	S3 Rear inside top	Connected	\$5	Bottom surrounded	Connected	57	Fronttop	08
		S2 Reartop	23.1	51	S4 Upper inside	Connected	56	9	¥	58	Rear top	0
07 Rack_007	0	S1 Front bottom	23.1	50	S3 Rear inside top	Connected	\$5	Bottom surrounded	Connected	\$7	Fronttop	08
		S2 Rear top	22.9	31	S4 Upper inside	Connected	<b>S6</b>	2		\$8	Rear top	08
08 Rack_008	0	S1 Front bottom	23.9	57	\$3 Rear inside top	Connected	\$5	Bottom surrounded	Connected	\$7	Fronttop	0
		S2 Reartop	23.2	81	S4 Upper inside	Connected	<b>S6</b>	u		\$8	Reartop	OF

## Sensors

- >> Sensor Status
- >> Sensor Setting
- >> Door Status
- >> Door Setting

PDU :	01 V24C13-32A-W	Si	PDU kWh :	0.				(*C / %)	TH 02				0	
Status :	Connected		PDU load amp				Temp::	22.5 Humid : 62.9	Temp.:		Humid :			
Name :	PDU_default_name PDU_default_loc		Power factor Apparent pov											
	1.50_delation_loc		Apparent por	ici (irin) - v.										
Circuit	A Max	amp : 16.0	Alarr	n amp :	13.0		Circuit	B Ma	x.amp: 16.0		Alarm a	mp :	13.0	
	Loa	d amp : 0.0	Risir	ig alert amp :	0.0			Loz	ad amp : 0.0		Rising	alert amp :	0.0	
			Low	alert amp :	0.0						Low ale	irt amp :	0.0	
Peakam	p: 0.0 2013/	03/15 00:00:00			Reset	_	Peak am	p: 0.0 2013	/03/15 00:00:00			_	Reset	
kWh:	0.00 2013/	03/15 00:00:00			Reset		KWh :	0.00 2013	/03/15 00:00:00			C	Reset	
lutlet	Name	۵	mp	kWh	Status S	tch 0	utlet	Name	A	no		kWh	Status	Switch
		-	R. alert / L. alert	-	-				Load / Alarm /		/ L. alert			
1	outlet_name01	0.0 / 10.0 /	0.0 / 0.0	0.00	ON	1	3	outiet_name13	0.0 / 10.0 /	0.0	/ 0.0	0.00	OFF	ON
2	outlet_name02	0.0 / 10.0 /	0.0 / 0.0	0.00	OFF	N 1	•	outlet_name14	0.0 / 10.0 /	0.0	/ 0.0	0.00	OFF	ON
3	outlet_name03	0.0 / 10.0 /	0.0 / 0.0	0.00	OFF	N 1	5	outlet_name15	0.0 / 10.0 /	0.0	/ 0.0	0.00	OFF	ON
4	outlet_name04	0.0 / 10.0 /	0.0 / 0.0	0.00	OFF	N 1	5	outlet_name16	0.0 / 10.0 /	0.0	/ 0.0	0.00	OFF	ON
5	outlet_name05	0.0 / 10.0 /	0.0 / 0.0	0.00	OFF	N 1	7	outlet_name17	0.0 / 10.0 /	0.0	/ 0.0	0.00	OFF	ON
6	outlet_name06	0.0 / 10.0 /	0.0 / 0.0	0.00	OFF	N 1	3	outlet_name18	0.0 / 10.0 /	0.0	/ 0.0	0.00	OFF	ON
7	outlet_name07	0.0 / 10.0 /	0.0 / 0.0	0.00	OFF	N 1		outlet_name19	0.0 / 10.0 /	0.0	/ 0.0	0.00	OFF	ON
18 👘	outlet_name08	0.0 / 10.0 /	0.0 / 0.0	0.00	OFF	N 2		outlet_name20	0.0 / 10.0 /	0.0	/ 0.0	0.00	OFF	ON
9 🕫	outlet_name09	0.0 / 10.0 /	0.0 / 0.0	0.00	OFF	N 2	1	outlet_name21	0.0 / 10.0 /	0.0	/ 0.0	0.00	OFF	ON
0	outlet_name10	0.0 / 10.0 /	0.0 / 0.0	0.00	OFF	N 2	2	outlet_name22	0.0 / 10.0 /	0.0	/ 0.0	0.00	OFF	ON
11	outlet_name11	0.0 / 10.0 /	0.0 / 0.0	0.00	OFF	N 2	3	outlet_name23	0.0 / 10.0 /	0.0	/ 0.0	0.00	OFF	ON
	outlet_name12	0.0 / 10.0 /	0.0 / 0.0	0.00	OFF	N 2	•	outlet_name24	0.0 / 10.0 /	0.0	/ 0.0	0.00	OFF	ON
2								utlet icon for setting						



- >> Status
- >> PDU / Temp + Humid Setting
- >> Outlet Schedule
- >> PDU Log
- >> Outlet kWh Log
- >> Outlet Switch ON / OFF

Fan Unit	Setting					
Box level :	02					
Status :	Connected					
Name :	Rack_002					
Location :	Rack_002					
Fan unit :	01 V RF-1.3 1U Fan Tray				1	~
Status :	Connected	Unit switch :	ON	OFF	Temp. Sensor ( °C )	٢
Name :	FanName03				Temp.: -	
Location :	FanLocation03	Unit CFM :	Normal	High Max.		
Fan	Status Switch					
01	OFF ON					
02	OFF ON					
03	OFF ON		5			
03	UFF ON					
		+				
			Front			
Auto da	ta refresh : Untick du	rino data input				
Appl	ly Save new data					
Canc	el Cancel new data input					
_						
Exit	Return to FAN STATUS					
* Press F11 t	o enlarge or diminish the screen					

an		

>> Status

- >> Fan Unit Setting
- >> Temp. Setting

# >>> Item List

# Infra Guard

Control Box	
EC-300M	Master IP control box - LAN port x 1 for remote over IP - Built-in SNMP - Daisy chain : 1st level
EC-300	Expansion Serial control box - Daisy chain : 2nd - 16th level
ECP-4A	Dual power input option, 4A@12V

Management Software			
IGM-03	InfraGuard management software - Max. 30 master IP groups (just 1 for 16 EC box levels) - Max. 480 EC boxes - Max. 5 concurrent users - Package including CD key		
	* Free of charge		

Sensor / Peripheral					
IG-TH01-2M	Temp. + Humid. sensor	w/ 2m cord			
IG-TH01-4M	Temp. + Humid. sensor	w/ 4m cord			
IG-T01-2M	Temp. sensor	w/ 2m cord			
IG-T01-4M	Temp. sensor	w/ 4m cord			
IG-S01-1M	Smoke sensor	w/ 1m cord			
IG-S01-3M	Smoke sensor	w/ 3m cord			
IG-V01-1M	Shock sensor	w/ 1m cord			
IG-V01-3M	Shock sensor	w/ 3m cord			
IG-W01-3M	Water sensor	w/ 3m Cat6 cable			
IG-DSI-2M	Inductive door sensor, pair	w/ 2m cord			
IG-DSI-4M	Inductive door sensor, pair	w/ 4m cord			
IG-DSW-2M	Mechanical door sensor, pair	w/ 2m cord			
IG-DSW-4M	Mechanical door sensor, pair	w/ 4m cord			
CLB-IX-002	LED light bar	w/ 2m cord			
CLB-IX-003	LED light bar	w/ 3m cord			
IG-FB03-1M	LED beacon	w/ 1m cord			
IG-FB03-3M	LED beacon	w/ 3m cord			

PDU		
InfraPower Intelligen	t PDU :	
WSi kWh switched F	PDU, outlet measurement	
WS kWh switched F	PDU	
W kWh monitored	PDU	
* All PDUs above come with	n Temp. + Humid. sensor port x 2	
Outlet :	Voltage :	
Outlet :	Voltage :	
<b>Outlet :</b> US Nema	Voltage : 100-120VAC	
<b>Outlet</b> : US Nema IEC C13 / C19	<b>Voltage :</b> 100-120VAC 200-250VAC / 208VAC	

Fan l	Jnit

InfraCool Intelligent Expansion Serial Fan :					
RF-33.9	33U Inte	lligent door mount fan panel w/ 9 fans			
RF-1.6	1U Inte	lligent rackmount remote fan tray w/ 6 fans			
RF-1.9	1U Inte	lligent rackmount remote fan tray w/ 9 fans			
* All Expansion Serial fan above come with Temp. sensor x 1					

For details, please refer to http://www.austin-hughes.com/infraguard



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. These solutions include UltraRack IT server rack, InfraRack smart rack, InfraPower rack PDU & ATS, InfraCool rack cooling systems, InfraGuard rack sensors and peripherals, InfraSolution rack access control and CyberView rack LCD KVM switches. We also offer industrial & commercial IT products, such as UltraView professional displays and Mini IP solutions.

Austin Hughes has ISO14001 and ISO9001 approved design, manufacturing, assembly, and test facilities. We support a worldwide customer base through our global locations.

TAA

As a leading global IT manufacturer, Austin Hughes provides TAA-compliant data center solutions, manufactures and assembles products in strategic TAA-certified locations.





# AUSTIN<sup>®</sup> HUGHES

Visit our Website >



### Americas

Austin Hughes Solutions Inc. 21375 Cabot Blvd Hayward, CA 94545 United States

inquiry-americas@austin-hughes.com

#### EMEA

Austin Hughes Europe Ltd. Unit 1, Chancery Gate Business Centre Manor House Avenue Southampton, SO15 0AE United Kingdom

inquiry-emea@austin-hughes.com

## APAC

Austin Hughes Electronics Ltd. Unit 3608-12, Cable TV Tower 9 Hoi Shing Road, Tsuen Wan Hong Kong

inquiry-apac@austin-hughes.com

## ASEAN

Austin Hughes Pte. Ltd. 164 Gul Circle #01-07 JTC Space@Gul Singapore 629621

inquiry-asean@austin-hughes.com

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

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

All brand names, logo and registered trademarks are properties of their respective owners. Copyright 2024 Austin Hughes Electronics Ltd. All rights reserved. Distributed by:

Distributor by country on application