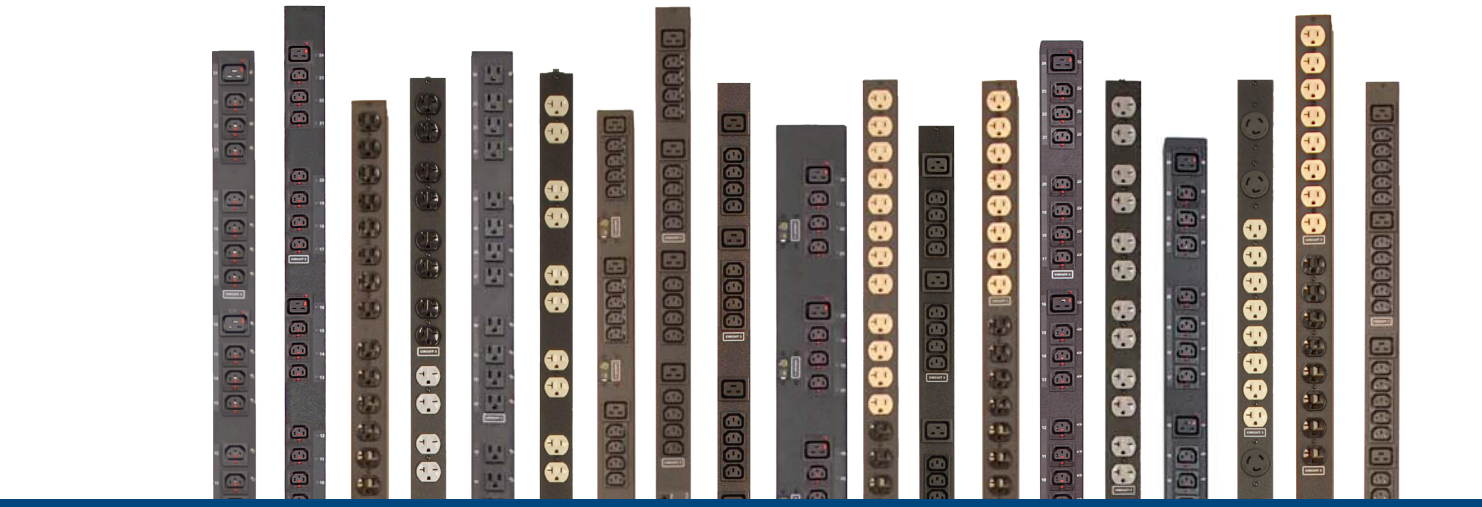
emcor®
ENCLOSURES



Power Distribution Units

www.crenlo.com/emcor | 507-287-3535

emcor®

ENCLOSURES

Power Distribution Units

Crenlo offers one of the largest selection of enclosure power distribution units (PDUs) available on the market. This complete suite of power products is designed specifically to help IT professionals meet rapidly escalating power requirements.

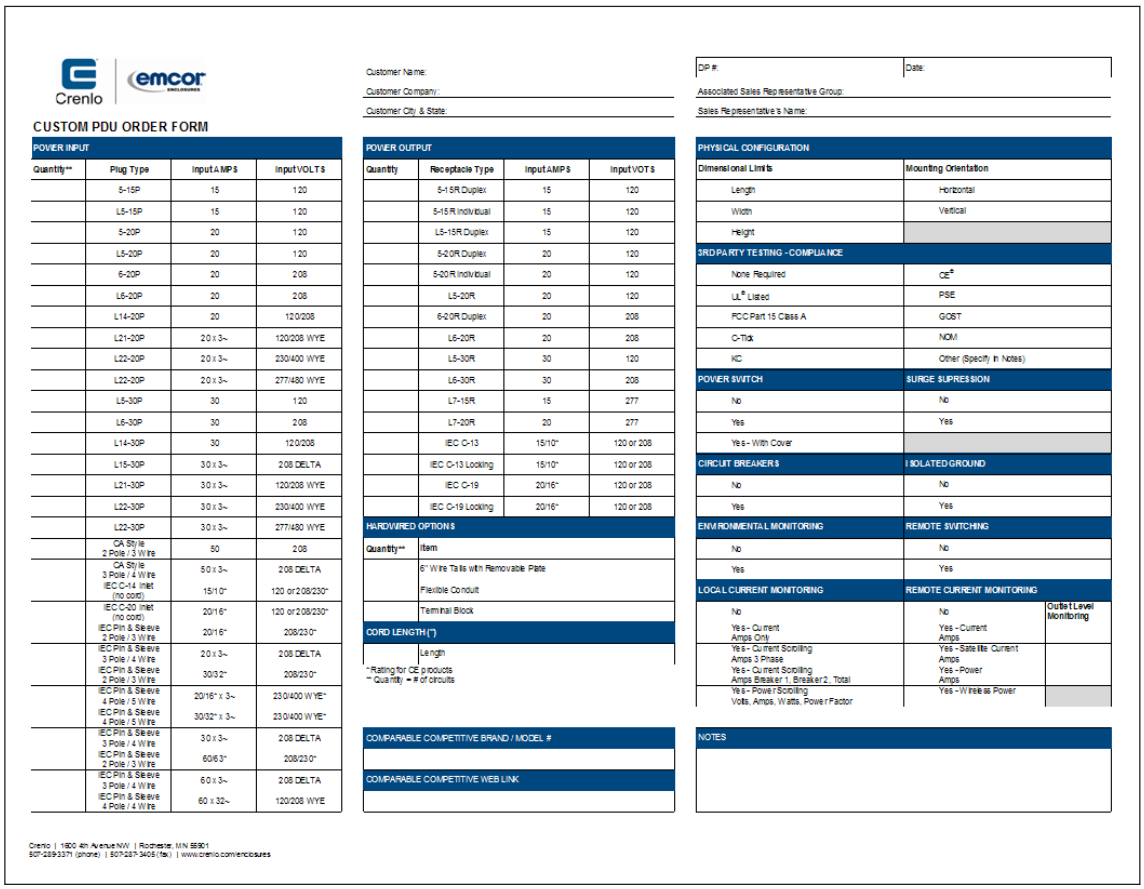
Crenlo's PDUs are distinguished by their quality, dependability and versatility in robust electrical applications. All products are designed with an emphasis on safety and reliability. The line includes an extensive range of vertical, Zero U products, which do not occupy server space in racks, as well as 1U horizontal formats. Environmental Monitoring options are also available. All units ship with mounting brackets and hardware.

High Density Power Solutions

Everyday higher levels of performance are expected without sacrificing reliability. Crenlo offers high power density solutions to meet your needs. We offer both rack mount and vertical mount three-phase PDUs ranging from 50A to 60A input capacities. These sophisticated units allow an entire rack of equipment to be powered from a single power cord input.

Custom Power Strips Delivered In Days

Crenlo can accommodate custom power strip requests with remarkable turnaround times. Simply provide your specifications (use our custom order form) and we will provide the design, specs, and quote in just days. Final product often ships in under two weeks.



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CUSTOM PDU ORDER FORM

Customer Name:
Customer Company:
Customer City & State:

DP #: | Date:
Associated Sales Representative Group:
Sales Representative's Name:

POWER INPUT			
Quantity**	Plug Type	Input AMPS	Input VOLTS
	5-15P	15	120
	L5-15P	15	120
	5-20P	20	120
	L5-20P	20	120
	6-20P	20	208
	L6-20P	20	208
	L14-20P	20	120/208
	L21-20P	20 x 3~	120/208 WYE
	L22-20P	20 x 3~	230/400 WYE
	L22-20P	20 x 3~	277/480 WYE
	L5-30P	30	120
	L6-30P	30	208
	L14-30P	30	120/208
	L15-30P	30 x 3~	208 DELTA
	L21-30P	30 x 3~	120/208 WYE
	L22-30P	30 x 3~	230/400 WYE
	L22-30P	30 x 3~	277/480 WYE
	CA Style 2 Pole / 3 Wire	50	208
	CA Style 3 Pole / 4 Wire	50 x 3~	208 DELTA
	IEC C-14 Inlet (no cord)	15/10*	120 or 208/230*
	IEC C-20 Inlet (no cord)	20/16*	120 or 208/230*
	IEC Pin & Sleeve 2 Pole / 3 Wire	20/16*	208/230*
	IEC Pin & Sleeve 3 Pole / 4 Wire	20 x 3~	208 DELTA
	IEC Pin & Sleeve 2 Pole / 3 Wire	30/32*	208/230*
	IEC Pin & Sleeve 4 Pole / 5 Wire	20/16* x 3~	230/400 WYE*
	IEC Pin & Sleeve 4 Pole / 5 Wire	30/32* x 3~	230/400 WYE*
	IEC Pin & Sleeve 3 Pole / 4 Wire	30 x 3~	208 DELTA
	IEC Pin & Sleeve 2 Pole / 3 Wire	60/63*	208/230*
	IEC Pin & Sleeve 3 Pole / 4 Wire	60 x 3~	208 DELTA
	IEC Pin & Sleeve 4 Pole / 4 Wire	60 x 3~	120/208 WYE

POWER OUTPUT			
Quantity	Receptacle Type	Input AMPS	Input VOLTS
	5-15R Duplex	15	120
	5-15R Individual	15	120
	L5-15R Duplex	15	120
	5-20R Duplex	20	120
	5-20R Individual	20	120
	L5-20R	20	120
	6-20R Duplex	20	208
	L6-20R	20	208
	L5-30R	30	120
	L6-30R	30	208
	L7-15R	15	277
	L7-20R	20	277
	IEC C-13	15/10*	120 or 208
	IEC C-13 Locking	15/10*	120 or 208
	IEC C-19	20/16*	120 or 208
	IEC C-19 Locking	20/16*	120 or 208

HARDWIRED OPTIONS	
Quantity**	Item
	6" Wire Tails with Removable Plate
	Flexible Conduit
	Terminal Block

CORD LENGTH (")	
	Length

*Rating for CE products
** Quantity = # of circuits

PHYSICAL CONFIGURATION	
Dimensional Limits	Mounting Orientation
Length	Horizontal
Width	Vertical
Height	

3RD PARTY TESTING - COMPLIANCE	
None Required	CE*
UL® Listed	PSE
FCC Part 15 Class A	GOST
C-Tick	NOM
KC	Other (Specify in Notes)

POWER SWITCH	SURGE SUPRESSION
No	No
Yes	Yes
Yes - With Cover	

CIRCUIT BREAKERS	ISOLATED GROUND
No	No
Yes	Yes

ENVIRONMENTAL MONITORING	REMOTE SWITCHING
No	No
Yes	Yes

LOCAL CURRENT MONITORING	REMOTE CURRENT MONITORING	
No	No	Outlet Level Monitoring
Yes - Current Amps Only	Yes - Current Amps	
Yes - Current Scrolling Amps 3 Phase Yes - Current Scrolling Amps Breaker 1, Breaker 2, Total	Yes - Satellite Current Amps Yes - Power Amps	
Yes - Power Scrolling Volts, Amps, Watts, Power Factor	Yes - Wireless Power	

COMPARABLE COMPETITIVE BRAND / MODEL #
COMPARABLE COMPETITIVE WEB LINK

NOTES

Crenlo | 1600 4th Avenue NW | Rochester, MN 55901
507-289-3371 (phone) | 507-287-3405 (fax) | www.crenlo.com/enclosures

How Much Power Is Needed?

Add the power ratings in Watts (W) from the label(s) of the equipment you want to put in the cabinet.

Example: 30 servers each using 300 Watts = 30 x 300 = 9,000 Watts, or 9kW.

Sometimes, the labels indicate Amps (A) instead of Watts (W).
In this case, multiply Voltage (V) and Current (A) values to get an approximate value for power.

Power Rating and Requirements for a Single AC Feed

The chart below shows the relationship between single and three phase power feeds and the associated kW load that they will support when de-rated by 80% per UL®/NEC requirements.

Amps [Nameplate]	Amps [Branch Circuit Rating]	Volts [Nameplate]	Volts [Actual Delivered]	Phase	80% Watts (kW)	Watts
12	15	125	120	1	1,440 (1.4)	1,800
16	20	125	120	1	1,920 (1.9)	2,400
24	30	125	120	1	2,880 (2.8)	3,600
16	20	250	208	1	3,328 (3.3)	4,160
24	30	250	208	1	4,992 (4.9)	6,240
35	50	250	208	1	7,280 (7.3)	10,400
48	60	250	208	1	9,984 (10.0)	12,480
16	20	230	230	1	3,680 (3.7)	4,600
24	30	230	230	1	5,520 (5.5)	9,600
48	60	230	230	1	11,040 (11.0)	13,800
16	20	208	208	3	5,757 (5.7)	7,197
24	30	208	208	3	8,636 (8.6)	10,795
35	50	208	208	3	12,594 (12.6)	17,992
48	60	208	208	3	17,272 (17.2)	21,590
80	100	208	208	3	28,787 (28.8)	35,984
100	125	208	208	3	35,984 (36.0)	44,980
120	150	208	208	3	43,181 (43.2)	53,976
16	20	230	230	3	11,040 (11.0)	13,800
24	30	230	230	3	16,560 (16.6)	20,700

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Environmental Monitoring Accessories 38
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80% De-rating Factor

Since most customers base their PDU input current specifications on the branch circuit ratings that the PDU is intended to be connected to we have set up our catalog to reflect this. However, when you receive a PDU from us, the label may carry a nameplate current rating that is 80% of the branch circuit rating in order to comply with UL®/NEC requirements.

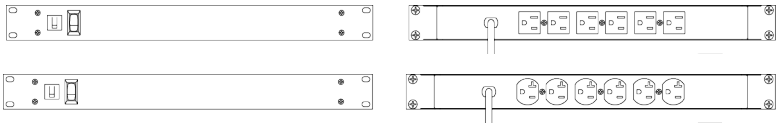
Overview

Type	Part Number	Amps	Volts	kW	Total Receptacle Qty	Configuration	Page #
Basic	PDU-615R-PC	15	120	1.4	6	19” Hor	6
Basic	WM-180615-DW	15	120	1.4	6	18” Vert	6
Basic	WM-481015-DW	15	120	1.4	10	48” Vert	6
Basic	PDU-620R-PC	20	120	1.4	6	19” Hor	6
Basic	WM-180615-PC	15	120	1.4	6	18” Vert	7
Basic	WM-481015-PC	15	120	1.4	10	48” Vert	7
Basic	WM-180620-PC	20	120	1.4	6	18” Vert	7
Basic	WM-481020-PC	20	120	1.4	10	48” Vert	7
Basic	WM-482430-PC	30	120	1.4	24	48” Vert	7
Metered - Power	PDUG-JBCN200-102D20DST5	20 x 2	120 x 2	1.9 x 2	20	66” Vert	9
Metered - Power	PDUG-JBCN200-102D20DTL5	20 x 2	120 x 2	1.9 x 2	20	66” Vert	9
Metered - Power	PDUG-VRELCN080-103I44TL6	30	208	4.9	8	17” Vert / Hor	9
Metered - Power	PDUG-XPBC240-103D20TL6	30	208	4.9	24	66” Vert	9
Metered - Power	PDUG-XPBC300-103IN6TL6	30	208	4.9	30	66” Vert	9
Metered - Current	PDUG-VHVBAN248-102D20TL21	20 X 3~	120 / 208 WYE	5.7	24	66” Vert	10
Metered - Current	PDUG-VHVBAN308-102IN6TL21	20 X 3~	120 / 208 WYE	5.7	30	66” Vert	10
Metered - Current	PDUG-VHVBAN309-102M11TL21	20 X 3~	120 / 208 WYE	5.7	30	66” Vert	10
Metered - Current	PDUG-XPBA248-103D20TL21	30 X 3~	120 / 208 WYE	8.6	24	66” Vert	11
Metered - Current	PDUG-XPBA308-103IN6TL21	30 X 3~	120 / 208 WYE	8.6	30	66” Vert	11
Metered - Current	PDUG-XPBA308-103IN6TL15	30 X 3~	208 DELTA	8.6	30	66” Vert	11
Metered - Current	PDUG-ZPBA300-106IN6PS6	60	208	9.9	30	66” Vert	11
Power Monitoring	PDUG-RCXRN102-102D20ST5-D	20	120	1.9	10	19” Hor	14
Power Monitoring	PDUG-RCXRN102-102D20TL5-D	20	120	1.9	10	19” Hor	14
Power Monitoring	PDUG-RCXRN122-102C13C20-D	20	120 or 208	1.9 or 3.3	12	19” Hor	14
Power Monitoring	PDUG-RCXBN242-102D20ST5-D	20	120	1.9	24	66” Vert	15
Power Monitoring	PDUG-RCXBN242-102D20TL5-D	20	120	1.9	24	66” Vert	15
Power Monitoring	PDUG-RCXBN302-102IN6ST6-D	20	208	3.3	30	66” Vert	15
Power Monitoring	PDUG-RCXBN302-102IN6TL6-D	20	208	3.3	30	66” Vert	15
Power Monitoring	PDUG-RCXBN243-102D20TL21-D	20 X 3~	120 / 208 WYE	5.7	24	66” Vert	16
Power Monitoring	PDUG-RCXBN308-102IN6TL21-D	20 X 3~	120 / 208 WYE	5.7	30	66” Vert	16
Power Monitoring	PDUG-RCXB240-103D20TL5-D	30	120	2.8	24	66” Vert	16
Power Monitoring	PDUG-RCXB240-103D20TL6-D	30	208	4.9	24	66” Vert	16
Power Monitoring	PDUG-RCXB300-103IN6TL6-D	30	208	4.9	30	66” Vert	16
Power Monitoring	PDUG-RCXB243-103D20TL21-D	30 X 3~	120 / 208 WYE	8.6	24	66” Vert	17
Power Monitoring	PDUG-RCXB308-103IN6TL21-D	30 X 3~	120 / 208 WYE	8.6	30	66” Vert	17
Power Monitoring	PDUG-RCXW368-105IT6CS15-35D	35 X 3~	208 DELTA	10.0	36	70” Vert	17
Power Monitoring	PDUG-RCXW308-105IN6CS15-D	50 X 3~	208 DELTA	14.4	30	72” Vert	17
Power Monitoring	PDUG-RCXW308-106IN6PS15-D	60 X 3~	208 DELTA	17.2	30	72” Vert	17
Switched	PDUG-RCMW240-103S15TL5-OD	30	120	2.8	24	70” Vert	20
Switched	PDUG-RCMW240-103PJ4TL6-OD	30	208	4.9	24	70” Vert	20
Switched	PDUG-RCMW248-103PK3TL21-OD	30 X 3~	120 / 208 WYE	8.6	24	72” Vert	21
Switched	PDUG-RCMW248-103PK3TL15-OD	30 X 3~	208 DELTA	8.6	24	72” Vert	21
Switched Ultra	PDUG-RCURN082-002L13C20-OD	20	120 or 208	1.9 or 3.3	8	19” Hor	24
Switched Ultra	PDUG-RCUBN248-102PK3TL21-OD	20 X 3~	120 / 208 WYE	5.7	24	66” Vert	24
Switched Ultra	PDUG-RCUW240-103PJ4TL6-OD	30	208	4.9	24	70” Vert	24
Switched Ultra	PDUG-RCUW248-103PK3TL21-OD	30 X 3~	120 / 208 WYE	8.6	24	72” Vert	24
Switched Ultra	PDUG-RCUW248-105PK3CS15-35OD	35 X 3~	208 DELTA	10.0	24	72” Vert	25
Switched Ultra	PDUG-RCUB248-106PH6PS15-OD	60 X 3~	208 DELTA	17.2	24	66” Vert	25
Environmental Control Parts and Accessories							26-39

Type	Part Number	Receptacle Type / Qty		Breaker Amp / Qty	Cord Length	Plug Type	Page #
Basic	PDU-615R-PC	5-20R / 6	-		15’	5-15P	6
Basic	WM-180615-DW	5-20R / 6	-		12” Leads	-	6
Basic	WM-481015-DW	5-20R / 10	-		12” Leads	-	6
Basic	PDU-620R-PC	5-20R / 6	-		15’	5-20P	6
Basic	WM-180615-PC	5-20R / 6	-		15’	5-15P	7
Basic	WM-481015-PC	5-20R / 10	-		15’	5-15P	7
Basic	WM-180620-PC	5-20R / 6	-		15’	5-20P	7
Basic	WM-481020-PC	5-20R / 10	-		15’	5-20P	7
Basic	WM-482430-PC	5-20R / 24	-	15 / 2 X 2P	12’	L5-30P	7
Metered - Power	PDUG-JBCN200-102D20DST5	5-20R / 20	-	-	10’ x 2	5-20P	9
Metered - Power	PDUG-JBCN200-102D20DTL5	5-20R / 20	-	-	10’ x 2	L5-20P	9
Metered - Power	PDUG-VRELCN080-103I44TL6	C-13 / 4	C-19 / 4	15 / 4	10’	L6-30P	9
Metered - Power	PDUG-XPBC240-103D20TL6	6-20R / 24	-	20 / 2 X 2P	10’	L6-30P	9
Metered - Power	PDUG-XPBC300-103IN6TL6	C-13 / 24	C-19 / 6	20 / 2 X 2P	10’	L6-30P	9
Metered - Current	PDUG-VHVBAN248-102D20TL21	6-20R / 24	-	-	10’	L21-20P	10
Metered - Current	PDUG-VHVBAN308-102IN6TL21	C-13 / 24	C-19 / 6	-	10’	L21-20P	10
Metered - Current	PDUG-VHVBAN309-102M11TL21	L6-20R / 6	5-20R / 24	-	10’	L21-20P	10
Metered - Current	PDUG-XPBA248-103D20TL21	6-20R / 24	-	20 / 3 x 2P	10’	L21-30P	11
Metered - Current	PDUG-XPBA308-103IN6TL21	C-13 / 24	C-19 / 6	20 / 3 x 2P	10’	L21-30P	11
Metered - Current	PDUG-XPBA308-103IN6TL15	C-13 / 24	C-19 / 6	20 / 3 x 2P	10’	L15-30P	11
Metered - Current	PDUG-ZPBA300-106IN6PS6	C-13 / 24	C-19 / 6	20 / 3 x 2P	10’	2P / 3W	11
Power Monitoring	PDUG-RCXRN102-102D20ST5-D	5-20R / 10	-	-	10’	5-20P	14
Power Monitoring	PDUG-RCXRN102-102D20TL5-D	5-20R / 10	-	-	10’	L5-20P	14
Power Monitoring	PDUG-RCXRN122-102C13C20-D	C-13 / 12	-	-	-	C-20	14
Power Monitoring	PDUG-RCXBN242-102D20ST5-D	5-20R / 24	-	-	10’	5-20P	15
Power Monitoring	PDUG-RCXBN242-102D20TL5-D	5-20R / 24	-	-	10’	L5-20P	15
Power Monitoring	PDUG-RCXBN302-102IN6ST6-D	C-13 / 24	C-19 / 6	-	10’	6-20P	15
Power Monitoring	PDUG-RCXBN302-102IN6TL6-D	C-13 / 24	C-19 / 6	-	10’	L6-20P	15
Power Monitoring	PDUG-RCXBN243-102D20TL21-D	5-20R / 24	-	-	10’	L21-20P	16
Power Monitoring	PDUG-RCXBN308-102IN6TL21-D	C-13 / 24	C-19 / 6	-	10’	L21-20P	16
Power Monitoring	PDUG-RCXB240-103D20TL5-D	5-20R / 24	-	20 / 2	10’	L5-30P	16
Power Monitoring	PDUG-RCXB240-103D20TL6-D	6-20R / 24	-	20 / 2 x 2P	10’	L6-30P	16
Power Monitoring	PDUG-RCXB300-103IN6TL6-D	C-13 / 24	C-19 / 6	20 / 2 x 2P	10’	L6-30P	16
Power Monitoring	PDUG-RCXB243-103D20TL21-D	5-20R / 24	-	-	10’	L21-30P	17
Power Monitoring	PDUG-RCXB308-103IN6TL21-D	C-13 / 24	C-19 / 6	-	10’	L21-30P	17
Power Monitoring	PDUG-RCXW368-105IT6CS15-35D	C-13 / 30	C-19 / 6	20 / 3 x 2P	10’	3P / 4W	17
Power Monitoring	PDUG-RCXW308-105IN6CS15-D	C-13 / 24	C-19 / 6	20 / 6 x 2P	10’	3P / 4W	17
Power Monitoring	PDUG-RCXW308-106IN6PS15-D	C-13 / 24	C-19 / 6	20 / 6 x 2P	10’	3P / 4W	17
Switched	PDUG-RCMW240-103S15TL5-OD	5-15R / 24	-	20 / 2	10’	L5-30P	20
Switched	PDUG-RCMW240-103PJ4TL6-OD	C-13 / 20	C-19 / 4	20 / 2 x 2P	10’	L6-30P	20
Switched	PDUG-RCMW248-103PK3TL21-OD	C-13 / 21	C-19 / 3	20 / 3 x 2P	10’	L21-30P	21
Switched	PDUG-RCMW248-103PK3TL15-OD	Locking C-13 / 21	Locking C-19 / 3	20 / 3 x 2P	10’	L15-30P	21
Switched Ultra	PDUG-RCURN082-002L13C20-OD	Locking C-13 / 8	-	-	-	C-20	24
Switched Ultra	PDUG-RCUBN248-102PK3TL21-OD	Locking C-13 / 21	Locking C-19 / 3	-	10’	L21-20P	24
Switched Ultra	PDUG-RCUW240-103PJ4TL6-OD	Locking C-13 / 20	Locking C-19 / 4	20 / 2 x 2P	10’	L6-30P	24
Switched Ultra	PDUG-RCUW248-103PK3TL21-OD	Locking C-13 / 21	Locking C-19 / 3	20 / 3 x 2P	10’	L21-30P	24
Switched Ultra	PDUG-RCUW248-105PK3CS15-35OD	Locking C-13 / 21	Locking C-19 / 3	20 / 3 x 2P	10’	3P / 4W	25
Switched Ultra	PDUG-RCUB248-106PH6PS15-OD	Locking C-13 / 18	Locking C-19 / 6	20 / 6 x 2P	10’	3P / 4W	25
Environmental Control Parts and Accessories							26-39

Basic

Available in a range of power capacities and configurations, basic PDUs provide reliable power distribution. They are the best value for simple power distribution in server cabinets and data centers.



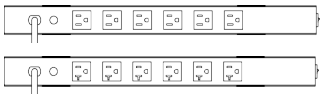
Front View Rear View

Part Number / Description	Receptacles Type / QTY	Breaker Amperage / QTY	Plug / Inlet Type	Monitoring	Dimensions W x H x D (“)
PDU-615R-PC Amps: 15 (Single Phase) Volts: 120 kW: 1.4	5-15R / 6 (on rear)	15 / 1 **On-Off Switch** Yes	5-15P Straight-Blade 15’ Cord	N/A	1U 19” Horizontal 19.00 x 1.75 x 2.57
PDU-620R-PC Amps: 20 (Single Phase) Volts: 120 kW: 1.4	5-20R / 6 (on rear)	20 / 1 **On-Off Switch** Yes	5-20P Straight Blade 15’ Cord	N/A	1U 19” Horizontal 19.00 x 1.75 x 2.57

Includes mounting hardware.

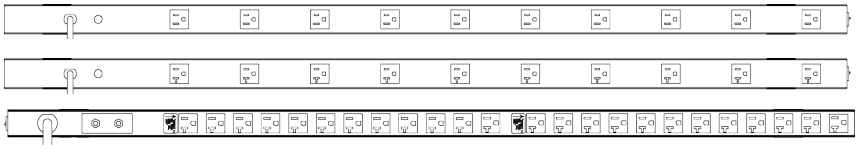
Part Number / Description	Receptacles Type / QTY	Breaker Amperage / QTY	Plug / Inlet Type	Monitoring	Dimensions W x H x D (“)
WM-180615-DW Amps: 15 (Single Phase) Volts: 120 kW: 1.4	5-15R / 6	N/A **On-Off Switch** No	6” Direct Wire Leads Threaded for 3/4” conduit fitting.	N/A	0U 18” Vertical 1.43 x 18.00 x 1.13
WM-481015-DW Amps: 15 (Single Phase) Volts: 120 kW: 1.4	5-15R / 10	N/A **On-Off Switch** No	6” Direct Wire Leads Threaded for 3/4” conduit fitting.	N/A	0U 48” Vertical 1.43 x 48.00 x 1.13

Mounting (p. 41-42): Includes Spring Clips and mounting hardware.



Part Number / Description	Receptacles Type / QTY	Breaker Amperage / QTY	Plug / Inlet Type	Monitoring	Dimensions W x H x D (“)
WM-180615-PC Amps: 15 (Single Phase) Volts: 120 kW: 1.4	5-15R / 6	15 / 1 **On-Off Switch** No	5-15P Straight-Blade 15’ Cord	N/A	0U 18” Vertical 1.62 x 18.00 x 1.21
WM-180620-PC Amps: 20 (Single Phase) Volts: 120 kW: 1.4	5-20R / 6	20 / 1 **On-Off Switch** No	5-20P Straight Blade 15’ Cord	N/A	0U 18” Vertical 1.62 x 18.00 x 1.21

Mounting (p. 41-42): Includes Spring Clips and mounting hardware.



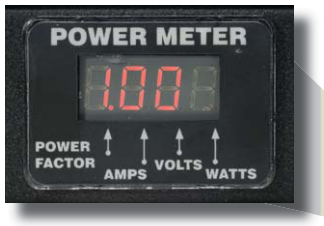
Part Number / Description	Receptacles Type / QTY	Breaker Amperage / QTY	Plug / Inlet Type	Monitoring	Dimensions W x H x D (“)
WM-481015-PC Amps: 15 (Single Phase) Volts: 120 kW: 1.4	5-15R / 10	15 / 1 **On-Off Switch** No	5-15P Straight-Blade 15’ Cord	N/A	0U 48” Vertical 1.62 x 48.00 x 1.21
WM-481020-PC Amps: 20 (Single Phase) Volts: 120 kW: 1.4	5-20R / 10	20 / 1 **On-Off Switch** No	5-20P Straight Blade 15’ Cord	N/A	0U 48” Vertical 1.62 x 48.00 x 1.21
WM-482430-PC Amps: 30 (Single Phase) Volts: 120 kW: 1.4	5-20R / 24	15 / 2 **On-Off Switch** No	L5-30P Locking 12’ Cord	N/A	0U 48” Vertical 1.50 x 48.00 x 2.87

Mounting (p. 41-42): Includes Spring Clips and mounting hardware.

Metered - Power and Current

Metered PDU's

Metered PDUs contain a local meter to provide essential real-time information crucial for rack load capacity and balancing. This data is critical to insure breakers are not tripped by exceeding maximum current capacity. Additional information including voltage, wattage and power factor provide a more comprehensive power overview ideal for preventative maintenance and rack diagnostics.



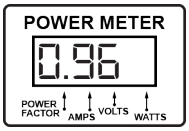
Power Meter

The power meter offers more detailed power information through a scrolling display of the four critical power measurements: Power Factor, Amps, Volts and Watts.

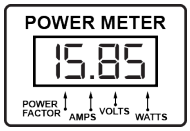
This meter is especially useful when adding, removing or adjusting equipment, because it provides instant power usage feedback, helping you avoid overloading your PDU.

Specification

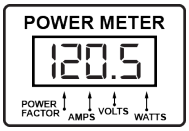
+/- 2% Accuracy with Full Scale
50/60Hz sine wave input



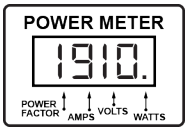
Power Factor –
The ratio of Real Power to Apparent Power. Apparent Power is the calculation of Volts RMS* and Amps RMS*.



Volts –
Displays Voltage RMS*

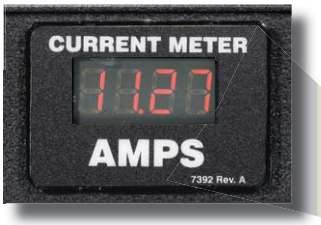


Amps –
Displays Current Draw in Amps RMS*



Watts –
Displays power in Watts RMS*. Value is integration of instantaneous current and volt, referred to as real Power.

* RMS - Acronym for Root Mean Squared



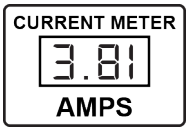
Current Meter

The current meter option provides an accurate True RMS reading of the current draw to monitor PDU performance closely and ensure that equipment power usage is within acceptable ranges - helping avoid nuisance breaker trips.

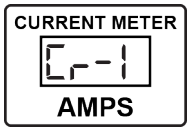
This meter is especially useful when adding, removing or adjusting equipment, because it provides instant power usage feedback, helping you avoid overloading your PDU.

Specification

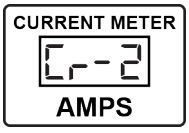
+/- 3.5% Accuracy with Full Scale
50/60Hz sine wave input



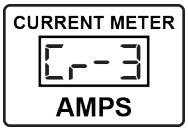
Amps –
Displays current draw in Amps RMS*.



Circuit 1 –
Represents Phase X



Circuit 2 –
Represents Phase Y



Circuit 3 –
Represents Phase Z

* RMS - Acronym for Root Mean Squared

Part Number / Description	Receptacles Type / QTY	Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (local)	Dimensions W x H x D (“)
PDUG-JBCN200-102D20DST5 Amps: 20 x 2 (Single Phase) Volts: 120 x 2 kW: 1.9 x 2 Non-Surge	5-20R / 20	20 / 2 **On-Off Switch** No	(2) 5-20P Straight-Blade 10’ Cord	• Power Meter: (Amps, Volts, Watts, Power Factor)	0U 66” Vertical 1.85 x 66.25 x 1.30
PDUG-JBCN200-102D20DTL5 Amps: 20 x 2 (Single Phase) Volts: 120 x 2 kW: 1.9 x 2 Non-Surge	5-20R / 20	20 / 2 **On-Off Switch** No	(2) L5-20P Twist-Lock 10’ Cord	• Power Meter: (Amps, Volts, Watts, Power Factor)	0U 66” Vertical 1.85 x 66.25 x 1.30

Detailed monitoring specs available on page 8. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.

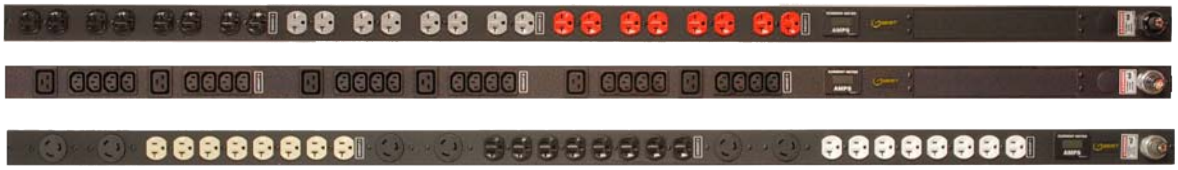
Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (local)	Dimensions W x H x D (“)
PDUG-VRELCN080-103I44TL6 Amps: 30 (Single Phase) Volts: 208 kW: 4.9 Non-Surge	C-13 / 4	C-19 / 4	15 / 4 **On-Off Switch** No	L6-30P Twist-Lock 10’ Cord	• Power Meter: (Amps, Volts, Watts, Power Factor)	0U 17” Vertical 1.72 x 17.00 x 1.85 / 1U 19” Horizontal

Detailed monitoring specs available on page 8. | Mounting (p. 41-42): Includes 19” Horizontal Brackets, Mini “L” Vertical Brackets and mounting hardware.

Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (local)	Dimensions W x H x D (“)
PDUG-XPBC240-103D20TL6 Amps: 30 (Single Phase) Volts: 208 kW: 4.9 Non-Surge	6-20R / 24		20 / 2 X 2P **On-Off Switch** No	L6-30P Twist-Lock 10’ Cord	• Power Meter: (Amps, Volts, Watts, Power Factor)	0U 66” Vertical 2.00 x 66.25 x 2.00
PDUG-XPBC300-103IN6TL6 Amps: 30 (Single Phase) Volts: 208 kW: 4.9 Non-Surge	C-13 / 24	C-19 / 6	20 / 2 X 2P **On-Off Switch** No	L6-30P Twist-Lock 10’ Cord	• Power Meter: (Amps, Volts, Watts, Power Factor)	0U 66” Vertical 2.00 x 66.25 x 2.00

Detailed monitoring specs available on page 8. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.

Metered - Current



Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (local)	Dimensions W x H x D (“)
PDUG-VHVBAN248-102D20TL21 Amps: 20 (3 Phase) Volts: 120 / 208 WYE kW: 5.7 Non-Surge	6-20R / 24		N/A **On-Off Switch** No	L21-20P Twist-Lock 10’ Cord	• Current Meter: (3 Phase Scrolling)	0U 66” Vertical 2.00 x 66.25 x 2.00
PDUG-VHVBAN308-102IN6TL21 Amps: 20 (3 Phase) Volts: 120 / 208 WYE kW: 5.7 Non-Surge	C-13 / 24	C-19 / 6	N/A **On-Off Switch** No	L21-20P Twist-Lock 10’ Cord	• Current Meter: (3 Phase Scrolling)	0U 66” Vertical 2.00 x 66.25 x 2.00
PDUG-VHVBAN309-102M11TL21 Amps: 20 (3 Phase) Volts: 120 / 208 WYE kW: 5.7 Non-Surge	5-20R / 24	L6-20R / 6	N/A **On-Off Switch** No	L21-20P Twist-Lock 10’ Cord	• Current Meter: (3 Phase Scrolling)	0U 66” Vertical 2.00 x 66.25 x 2.00

Detailed monitoring specs available on page 8. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.
3 phase units have color-coded receptacle configurations or labeling for easy identification and load balancing.

Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (local)	Dimensions W x H x D (“)
PDUG-XPBA248-103D20TL21 Amps: 30 (3 Phase) Volts: 120 / 208 WYE kW: 8.6 Non-Surge	6-20R / 24		20 / 3 X 2P **On-Off Switch** No	L21-30P Twist-Lock 10’ Cord	• Current Meter: (3 Phase Scrolling)	0U 66” Vertical 2.00 x 66.25 x 2.00
PDUG-XPBA308-103IN6TL21 Amps: 30 (3 Phase) Volts: 120 / 208 WYE kW: 8.6 Non-Surge	C-13 / 24	C-19 / 6	20 / 3 X 2P **On-Off Switch** No	L21-30P Twist-Lock 10’ Cord	• Current Meter: (3 Phase Scrolling)	0U 66” Vertical 2.00 x 66.25 x 2.00
PDUG-XPBA308-103IN6TL15 Amps: 30 (3 Phase) Volts: 208 DELTA kW: 8.6 Non-Surge	C-13 / 24	C-19 / 6	20 / 3 X 2P **On-Off Switch** No	L15-30P Twist-Lock 10’ Cord	• Current Meter: (3 Phase Scrolling)	0U 66” Vertical 2.00 x 66.25 x 2.00

Detailed monitoring specs available on page 8. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.
3 phase units have color-coded receptacle configurations or labeling for easy identification and load balancing.

Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (local)	Dimensions W x H x D (“)
PDUG-ZPBA300-106IN6PS6 Amps: 60 (Single Phase) Volts: 208 kW: 9.9 Non-Surge	C-13 / 24	C-19 / 6	20 / 3 X 2P **On-Off Switch** No	2P / 3W Pin & Sleeve 10’ Cord	• Current Meter: (3 Breaker Scrolling)	0U 66” Vertical 2.00 x 66.25 x 2.00

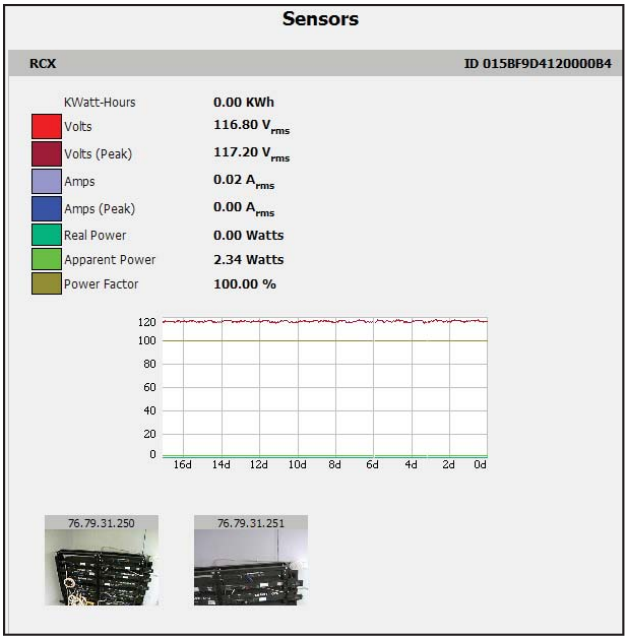
Detailed monitoring specs available on page 8. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.

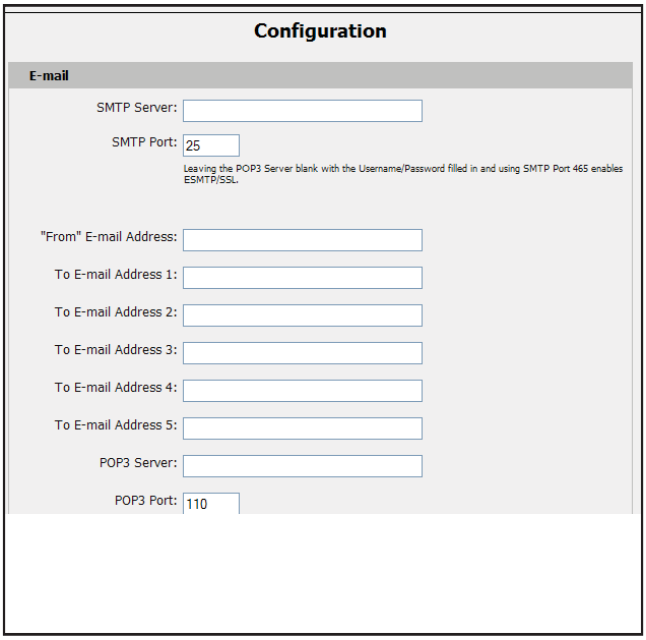
Monitored Power

Power Monitoring PDUs provide a comprehensive remote view of your installation's power utilization. In addition to Amps, Volts, Real Power, Apparent Power, Power Factor and kWatt-Hours, these versatile units provide jacks for optional environmental monitoring. Each of these variables can play a critical role in uptime at your site in addition to insuring energy use efficiency.

These PDUs allow local and remote current monitoring and offers alarms for issues that can arise at the breaker, circuit, phase and aggregate level. With the advantage of seeing current usage feedback in an instant, the chances of overloading the unit when adding, removing or adjusting equipment is minimized.

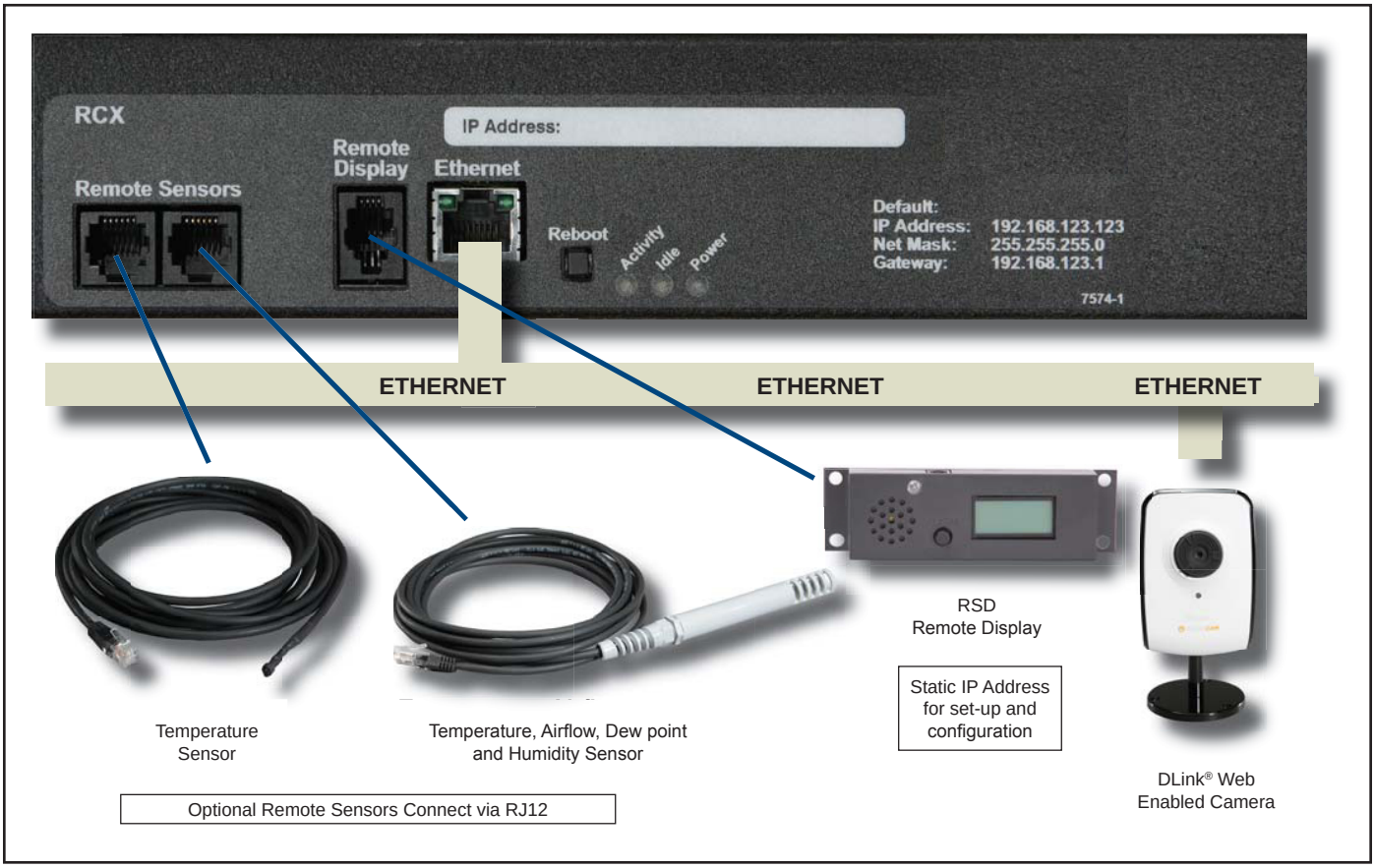
Feature	Benefit
Remote power monitoring	Prevent down-time with early notification of power threshold breach
2 Remote environmental sensor ports	Monitor temperature, air flow, humidity and dew point via connected sensors
Threshold alarms - remote and local	Convenient notification via e-mail, SNMP traps and/or local audible alarm via RSD
Remote LCD display (RSD)	Easily viewable power data via RSD
Interfaces with IP web cameras	Visual monitoring of cabinet or computer room
Accessible via any web browser	Easy installation and maintenance - No external software View data graphs and analyze historical logs.





DCiM software is available and all intelligent units (monitored and switched) have SNMP built in.

Power Monitoring Connectivity Diagram



Specifications

- Ethernet Connection Jack
  Power On Indicator
- Idle Indicator
- Activity Indicator
- Software Reset Button
- External Sensor Connection Ports
  Two RJ12 Jacks - add up to 16 Remote Sensors
- FCC Part 15 Class A Conformance
- Internal Power Sensors
  Volts RMS: 80-280 VAC
  Amps RMS: 0-32A
- Remote Display (RSD2X8) Connection Jack

Monitored - Power

Front View

Rear View

Front View

Rear View

Front View

Rear View

Part Number / Description	Receptacles Type / QTY	Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCXRN102-102D20ST5-D Amps: 20 (Single Phase) Volts: 120 kW: 1.9	5-20R / 10 (on rear) 	N/A **On-Off Switch** No	5-20P Straight-Blade 10’ Cord 	• Aggregate: Total Unit (Amps, Volts, Volt-Amps, Watts, VA, kWh, Power Factor, Frequency)	1U 19” Horizontal 17.00 x 1.75 x 6.5
PDUG-RCXRN102-102D20TL5-D Amps: 20 (Single Phase) Volts: 120 kW: 1.9	5-20R / 10 (on rear) 	N/A **On-Off Switch** No	L5-20P Twist-Lock 10’ Cord 	• Aggregate: Total Unit (Amps, Volts, Volt-Amps, Watts, VA, kWh, Power Factor, Frequency)	1U 19” Horizontal 17.00 x 1.75 x 6.5
PDUG-RCXRN122-102C13C20-D Amps: 20 (Single Phase) Volts: 120 or 208 kW: 1.9 or 3.3	C-13 / 12 (on rear) 	N/A **On-Off Switch** No	C-20 IEC Power Inlet with Retaining Clamp 	• Aggregate: Total Unit (Amps, Volts, Volt-Amps, Watts, VA, kWh, Power Factor, Frequency)	1U 19” Horizontal 17.00 x 1.75 x 6.5

Detailed monitoring specs available on page 13. | Mounting (p. 41-42): Includes 19” Horizontal Adjustable Bracket.
IEC inlet units allow the PDU to supply 120V or 208V. The voltage distributed is determined by the voltage input

Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCXBN242-102D20ST5-D Amps: 20 (Single Phase) Volts: 120 kW: 1.9	5-20R / 24		N/A **On-Off Switch** No	5-20P Straight-Blade 10’ Cord	• Aggregate: Total Unit (Amps, Volts, Volt-Amps, Watts, VA, kWh, Power Factor, Frequency)	0U 66” Vertical 2.00 x 66.25 x 2.25
PDUG-RCXBN242-102D20TL5-D Amps: 20 (Single Phase) Volts: 120 kW: 1.9	5-20R / 24		N/A **On-Off Switch** No	L5-20P Twist-Lock 10’ Cord	• Aggregate: Total Unit (Amps, Volts, Volt-Amps, Watts, VA, kWh, Power Factor, Frequency)	0U 66” Vertical 2.00 x 66.25 x 2.25
PDUG-RCXBN302-102IN6ST6-D Amps: 20 (Single Phase) Volts: 208 kW: 3.3	C-13 / 24	C-19 / 6	N/A **On-Off Switch** No	6-20P Straight-Blade 10’ Cord	• Aggregate: Total Unit (Amps, Volts, Volt-Amps, Watts, VA, kWh, Power Factor, Frequency)	0U 66” Vertical 2.00 x 66.25 x 2.25
PDUG-RCXBN302-102IN6TL6-D Amps: 20 (Single Phase) Volts: 208 kW: 3.3	C-13 / 24	C-19 / 6	N/A **On-Off Switch** No	L6-20P Twist-Lock 10’ Cord	• Aggregate: Total Unit (Amps, Volts, Volt-Amps, Watts, VA, kWh, Power Factor, Frequency)	0U 66” Vertical 2.00 x 66.25 x 2.25

Detailed monitoring specs available on page 13. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.

Monitored - Power

Part Number / Description	Receptacles Type / QTY	Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCXBN243-102D20TL21-D Amps: 20 (3 Phase) Volts: 120 / 208 WYE kW: 5.7	5-20R / 24	N/A **On-Off Switch** No	L21-20P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Phase: X Y Z (Amps, Volts, Watts, VA, kWh, Power Factor)	0U 66” Vertical 2.00 x 66.25 x 2.25
PDUG-RCXBN308-102IN6TL21-D Amps: 20 (3 Phase) Volts: 120 / 208 WYE kW: 5.7	C-13 / 24 C-19 / 6	N/A **On-Off Switch** No	L21-20P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Phase: X Y Z (Amps, Volts, Watts, VA, kWh, Power Factor)	0U 66” Vertical 2.00 x 66.25 x 2.25

Detailed monitoring specs available on page 13. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.
3 phase units have color-coded receptacle configurations or labeling for easy identification and load balancing.

Part Number / Description	Receptacles Type / QTY	Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCXB240-103D20TL5-D Amps: 30 (Single Phase) Volts: 120 kW: 2.8	5-20R / 24	20 / 2 **On-Off Switch** No	L5-30P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Circuit/Breaker: (Amps, Volts, Watts, VA, kWh, Power Factor)	0U 66” Vertical 2.00 x 66.25 x 2.25
PDUG-RCXB240-103D20TL6-D Amps: 30 (Single Phase) Volts: 208 kW: 4.9	6-20R / 24	20 / 2 X 2P **On-Off Switch** No	L6-30P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Circuit/Breaker: (Amps, Volts, Watts, VA, kWh, Power Factor)	0U 66” Vertical 2.00 x 66.25 x 2.25
PDUG-RCXB300-103IN6TL6-D Amps: 30 (Single Phase) Volts: 208 kW: 4.9	C-13 / 24 C-19 / 6	20 / 3 X 2P **On-Off Switch** No	L6-30P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Circuit/Breaker: (Amps, Volts, Watts, VA, kWh, Power Factor)	0U 66” Vertical 2.00 x 66.25 x 2.25

Detailed monitoring specs available on page 13. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.

Part Number / Description	Receptacles Type / QTY	Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCXB243-103D20TL21-D Amps: 30 (3 Phase) Volts: 120 / 208 WYE kW: 8.6	5-20R / 24	20 / 3 **On-Off Switch** No	L21-30P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Phase: X Y Z (Amps, Volts, Watts, VA, kWh, Power Factor)	0U 66” Vertical 2.00 x 66.25 x 2.00
PDUG-RCXB308-103IN6TL21-D Amps: 30 (3 Phase) Volts: 120 / 208 WYE kW: 8.6	C-13 / 24 C-19 / 6	20 / 3 **On-Off Switch** No	L21-30P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Phase: X Y Z (Amps, Volts, Watts, VA, kWh, Power Factor)	0U 66” Vertical 2.00 x 66.25 x 2.00

Detailed monitoring specs available on page 13. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.
3 phase units have color-coded receptacle configurations or labeling for easy identification and load balancing.

Part Number / Description	Receptacles Type / QTY	Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCXW308-106IN6PS15-D Amps: 60 (3 Phase) Volts: 208 DELTA kW: 17.2	C-13 / 24 C-19 / 6	20 / 6 X 2P **On-Off Switch** No	3P / 4W Pin & Sleeve 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Phase: X Y Z (Amps) • Circuit: XY YZ ZX (Volts, Watts, VA, kWh, Power Factor)	0U 72” Vertical 2.30 x 72.00 x 3.45

Detailed monitoring specs available on page 13. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.
3 phase units have color-coded receptacle configurations or labeling for easy identification and load balancing.

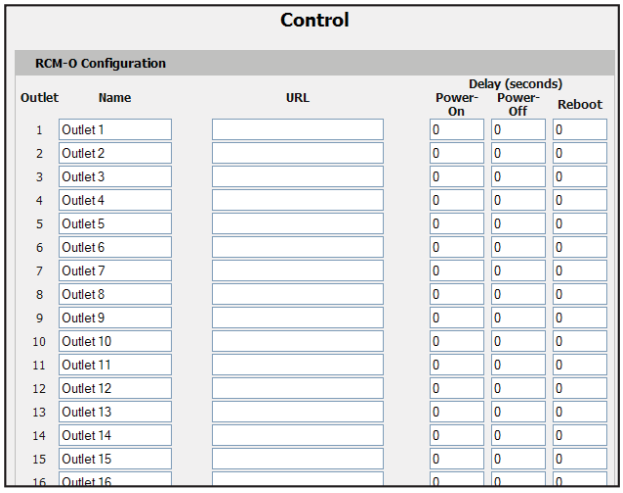
Part Number / Description	Receptacles Type / QTY	Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (‘)
PDUG-RCXW368-105IT6CS15-35D Amps: 35 (3 Phase) Volts: 208 DELTA kW: 10.0	C-13 / 30 C-19 / 6	20 / 3 X 2P **On-Off Switch** No	3P / 4W (CA Style) 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Phase: X Y Z (Amps) Circuit/Breaker: • XY YZ ZX (Volts, Watts, VA, kWh, Power Factor)	0U 70” Vertical 2.00 x 70.00 x 2.25
PDUG-RCXW308-105IN6CS15-D Amps: 50 (3 Phase) Volts: 208 DELTA kW: 14.4	C-13 / 24 C-19 / 6	20 / 6 X 2P **On-Off Switch** No	3P / 4W (CA Style) 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Phase: X Y Z (Amps) • Circuit: XY YZ ZX (Volts, Watts, VA, kWh, Power Factor)	0U 72” Vertical 2.30 x 72.00 x 3.45

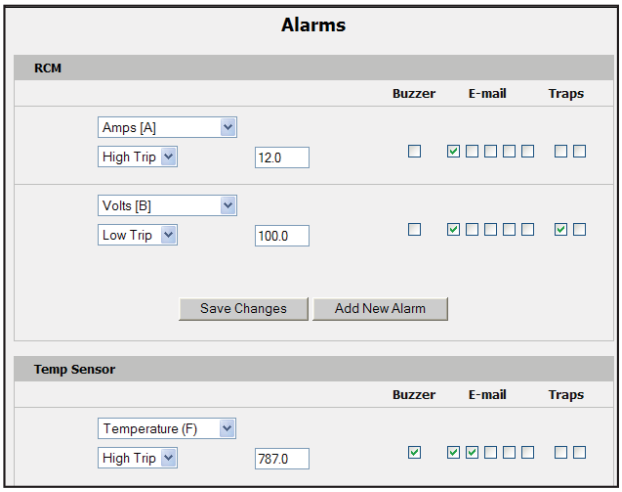
Detailed monitoring specs available on page 13. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.
3 phase units have color-coded receptacle configurations or labeling for easy identification and load balancing.

Switched Power

Switched PDUs provide hands-on control remotely. While Monitored PDUs can display information remotely, Switched units offer the ability to use that information and stay in control of individual power outlets. These PDUs manage whatever issues arise with the click of a few buttons on a smart phone or computer. Also, disable problem equipment by cutting power to specific outlets, reboot equipment remotely by turning power on and off, and save time and money by avoiding sending live technicians to the source of the issue.

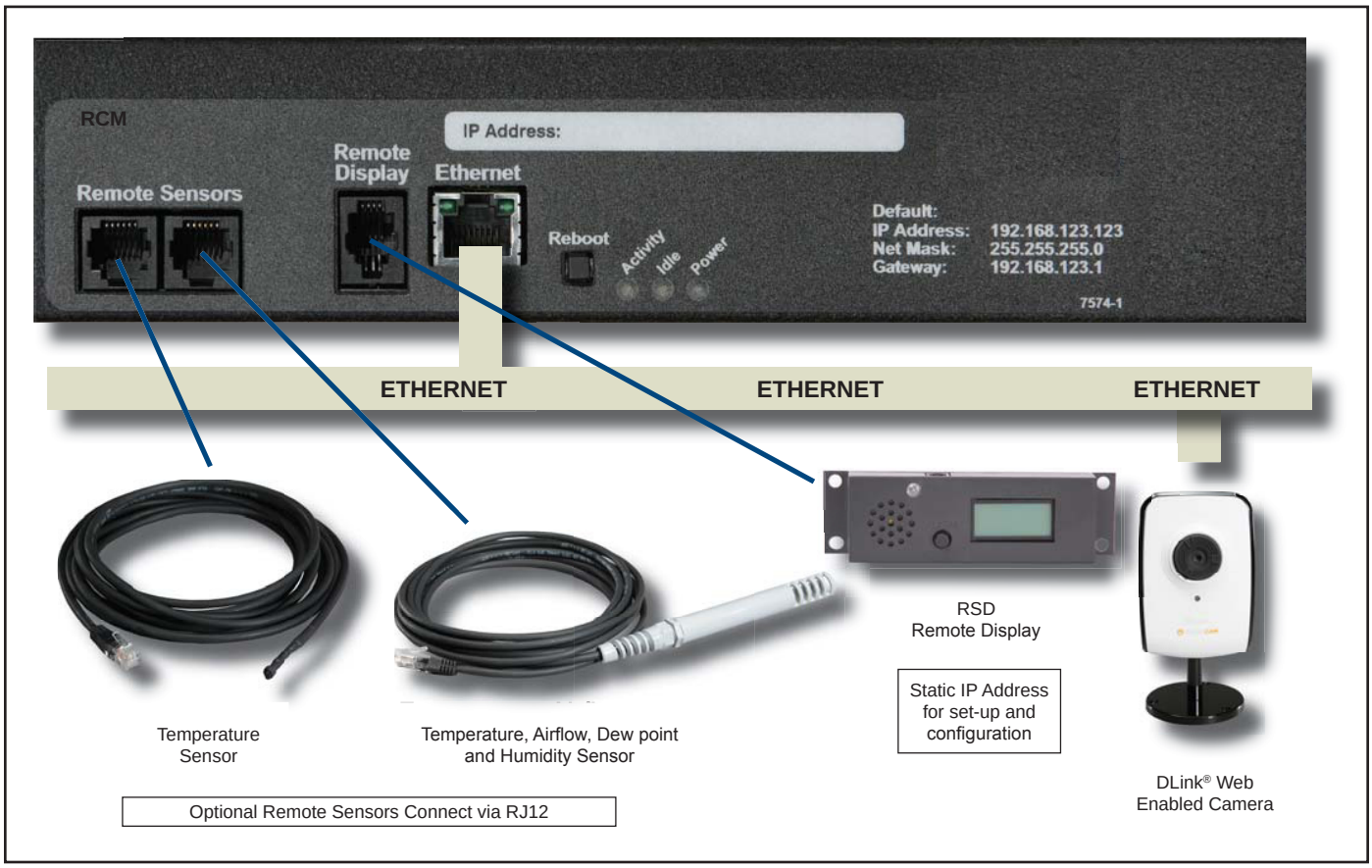
Feature	Benefit
Remote switching of individual receptacles	Eliminate emergency service calls by rebooting unresponsive equipment via your smart phone Conserve energy with remote shut down of equipment during non-working hours
Sequential start-up	Avoid power interruptions due to high in rush currents Equipment start up in desired sequence
Remote circuit level power monitoring	Prevent down-time with early notification of power threshold breaches
2 Remote environmental sensor ports	Monitor temperature, air flow, humidity and dew point via connected sensors
Threshold alarms - remote and local	Convenient notification via e-mail, SNMP traps XML and/or local audible alarm (RSD for audible)
Remote LCD display (RSD)	Easily viewable power and environmental data
Interfaces with IP web cameras	Visual monitoring of cabinet or computer room
Accessible via any web browser	Easy installation and maintenance - No external software





DCiM software is available and all intelligent units (monitored and switched) have SNMP built in.

Switched Power Connectivity Diagram



Specifications

- Internal Power Sensors
  - Volts RMS: 80-280 VAC
  - Amps RMS: 0-32A
- Ethernet Connection Jack
- Power On Indicator
- Idle Indicator
- Activity Indicator
- Software Reset Button
- Remote Display Connection Jack
- External Sensor Connection Ports
  - Two RJ12 Jacks - connect up to 16 Remote Sensors via Splitters

Switched

Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCMW240-103S15TL5-OD Amps: 30 (Single Phase) Volts: 120 kW: 2.8	5-15R / 24		20 / 2 **On-Off Switch** No	L5-30P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Circuit/Breaker: (Amps, Volts, Watts, VA, kWh, Power Factor)	0U 70” Vertical 2.50 x 70.00 x 2.25
PDUG-RCMW240-103PJ4TL6-OD Amps: 30 (Single Phase) Volts: 208 kW: 4.9	C-13 / 20	C-19 / 4	20 / 2 **On-Off Switch** No	L6-30P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Circuit/Breaker: (Amps, Volts, Watts, VA, kWh, Power Factor)	0U 70” Vertical 2.50 x 70.00 x 2.25

Detailed monitoring specs available on page 19. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.

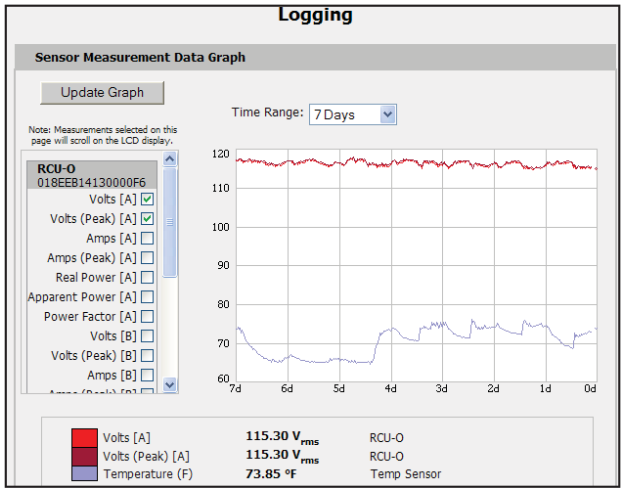
Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCMW248-103PK3TL15-OD Amps: 30 (3 Phase) Volts: 208 DELTA kW: 8.6	Locking C-13 / 21	Locking C-19 / 3	20 / 3 X 2P **On-Off Switch** No	L15-30P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Phase: X Y Z (Amps) • Circuit/Breaker: XY YZ ZX (Volts, Watts, VA, kWh, Power Factor)	0U 72” Vertical 2.50 x 72.00 x 2.25
PDUG-RCMW248-103PK3TL21-OD Amps: 30 (3 Phase) Volts: 208 DELTA kW: 8.6	Locking C-13 / 21	Locking C-19 / 3	20 / 3 X 2P **On-Off Switch** No	L21-30P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Phase: X Y Z (Amps, Volts, Watts, VA, kWh, Power Factor)	0U 72” Vertical 2.50 x 72.00 x 2.25

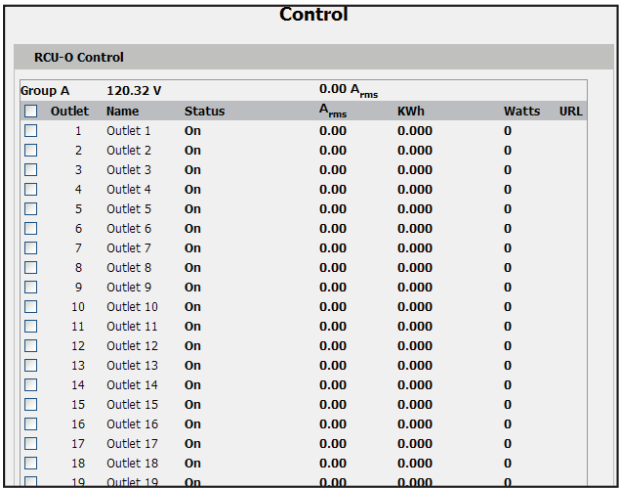
Detailed monitoring specs available on page 19. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.
3 phase units have color-coded receptacle configurations or labeling for easy identification and load balancing.

Ultra Switched Power

These PDUs provide hands-on control remotely. While Monitored PDUs can display information remotely, Switched units offer the ability to use that information and stay in control of individual power outlets. They manage whatever issues arise with the click of a few buttons on a smart phone or computer. Also, disable problem equipment by cutting power to specific outlets, reboot equipment remotely by turning power on and off, and save time and money by avoiding sending live technicians to the source of the issue. In addition to their switching capabilities, these units have outlet level power monitoring for granular power consumption data of all equipment. Finally, a Max Group Amps (MGA) feature offers an extra level of protection by preventing circuit overload by letting users set the threshold for maximum number of amps threshold settings.

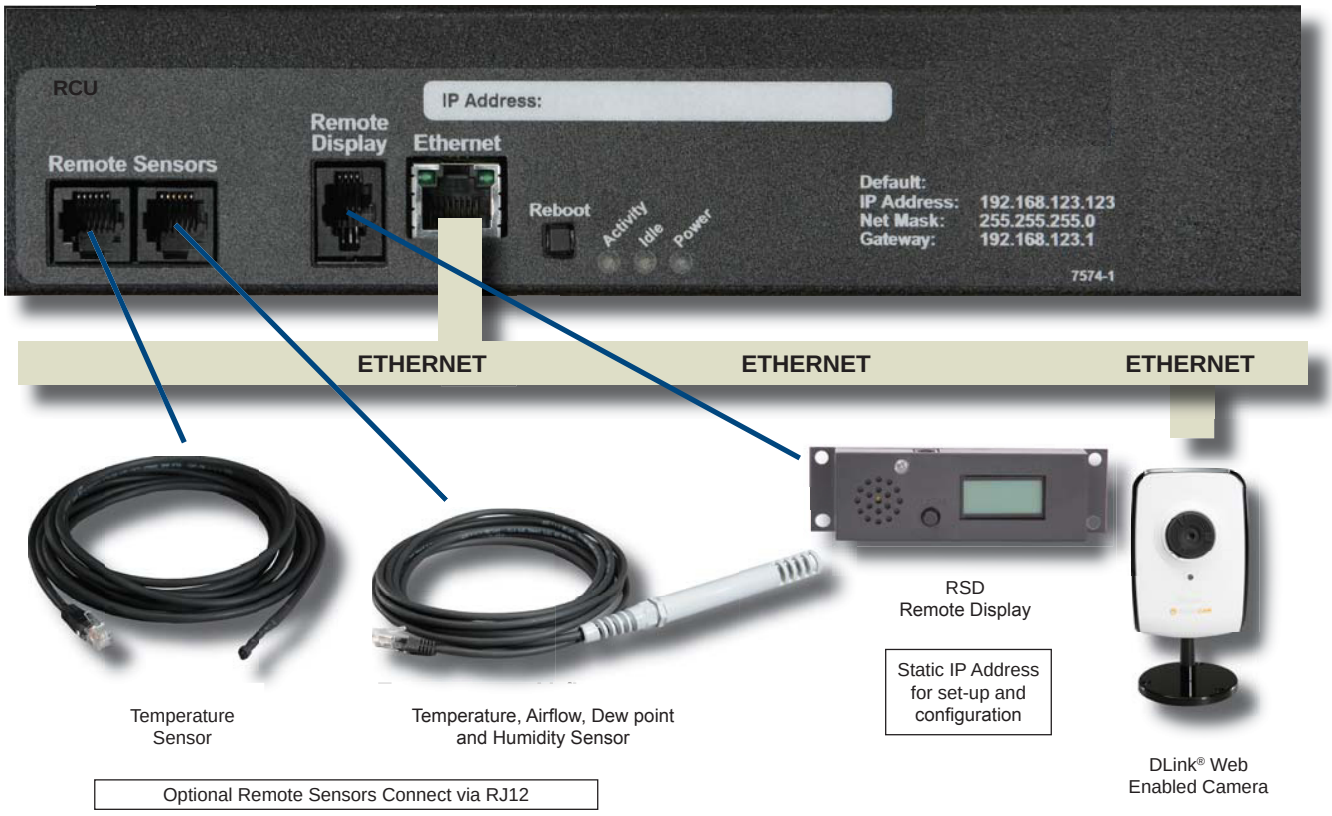
Feature	Benefit
Remote switching of individual receptacles	Eliminate emergency service calls by rebooting unresponsive equipment via your smart phone Conserve energy with remote shut down of equipment during non-working hours
Sequential start-up	Avoid power interruptions due to high in rush currents Equipment start up in desired sequence
Remote circuit level power monitoring	Prevent down-time with early notification of power threshold breaches
Remote outlet level power monitoring	Monitor and log server power consumption data
Max Groups Amps (MGA)	Prevent circuit overload with group amps threshold settings
2 Remote environmental sensor ports	Monitor temperature, air flow, humidity and dew point via connected sensors
Threshold alarms - remote and local	Convenient notification via e-mail, SNMP traps XML and/or local audible alarm (RSD for audible)
Remote LCD display (RSD)	Easily viewable power and environmental data
Interfaces with IP web cameras	Visual monitoring of cabinet or computer room
Accessible via any web browser	Easy installation and maintenance - No external software





DCiM software is available and all intelligent units (monitored and switched) have SNMP built in.

Switched Ultra Power Connectivity Diagram



Specifications

- Internal Power Sensors
  - Volts RMS: 80-280 VAC
  - Amps RMS: 0-32A
- Ethernet Connection Jack
- Power On Indicator
- Idle Indicator
- Activity Indicator
- Software Reset Button
- Remote Display (RSD2X8) Connection Jack
- External Sensor Connection Ports
  - Jack Two RJ12 Jacks - connect up to 15 Remote Sensors via Splitters

Switched Ultra

Front View
Rear View

Part Number / Description	Receptacles Type / QTY	Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCURN082-002L13C20-OD Amps: 20 (Single Phase) Volts: 120 or 208 kW: 1.9 or 3.3	Locking C-13 / 8 (on rear)	N/A **On-Off Switch** No	C-20 IEC Power Inlet with Retaining Clamp	• Aggregate: Total Unit (Amps, Volts, Volt-Amps, Watts, VA, kWh, Frequency, Power Factor) • Outlet: (Amps, Volts, Watts, kWh)	1U 19” Horizontal 17.00 x 1.75 x 8.50

Detailed monitoring specs available on page 23. | Mounting (p. 41-42): Includes 19” Horizontal Adjustable Bracket.
IEC inlet units allow the PDU to supply 120V or 208V. The voltage distributed is determined by the voltage input.

Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCUBN248-102PK3TL21-OD Amps: 20 (3 Phase) Volts: 120 / 208 WYE kW: 5.7	Locking C-13 / 21	Locking C-19 / 3	N/A **On-Off Switch** No	L21-20P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Outlet: (Amps, Volts, Watts, kWh) • Phase: X Y Z (Amps, Volts, Watts, VA, kWh, Power Factor)	0U 66” Vertical 2.50 x 66.25 x 2.25

Detailed monitoring specs available on page 23. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.
3 phase units have color-coded receptacle configurations or labeling for easy identification and load balancing.

Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCUW240-103PJ4TL6-OD Amps: 30 (Single Phase) Volts: 208 kW: 4.9	Locking C-13 / 20	Locking C-19 / 4	20 / 2 X 2P **On-Off Switch** No	L6-30P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Circuit/Breaker: (Amps, Volts, Watts, VA, kWh, Power Factor) • Outlet: (Amps, Volts, Watts, kWh)	0U 70” Vertical 2.50 x 70.00 x 2.25

Detailed monitoring specs available on page 23. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.

Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCUW248-103PK3TL21-OD Amps: 30 (3 Phase) Volts: 120 / 208 WYE kW: 8.6	Locking C-13 / 21	Locking C-19 / 3	20 / 3 X 2P **On-Off Switch** No	L21-30P Twist-Lock 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Outlet: (Amps, Volts, Watts, kWh) • Phase: X Y Z (Amps, Volts, Watts, VA, kWh, Power Factor)	0U 72” Vertical 2.50 x 72.00 x 2.25

Detailed monitoring specs available on page 23. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.
3 phase units have color-coded receptacle configurations or labeling for easy identification and load balancing.

Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCUW248-105PK3CS15-35OD Amps: 35 (3 Phase) Volts: 208 DELTA kW: 10.0	Locking C-13 / 21	Locking C-19 / 3	20 / 3 X 2P **On-Off Switch** No	3P / 4W (CA Style) 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Outlet: (Amps, Volts, Watts, kWh) • Phase: X Y Z (Amps) • Circuit/Breaker: XY YZ ZX (Volts, Watts, VA, kWh, Power Factor)	0U 72” Vertical 2.50 x 72.00 x 2.25

Detailed monitoring specs available on page 23 | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.
3 phase units have color-coded receptacle configurations or labeling for easy identification and load balancing

Part Number / Description	Receptacles Type / QTY		Breaker Amperage / QTY	Plug / Inlet Type	Monitoring (remote)	Dimensions W x H x D (“)
PDUG-RCUB248-106PH6PS15-OD Amps: 60 (3 Phase) Volts: 208 DELTA kW: 17.2	Locking C-13 / 18	Locking C-19 / 6	20 / 6 X 2P **On-Off Switch** No	3P / 4W Pin & Sleeve 10’ Cord	• Aggregate: Total Unit (kWh, Watts) • Outlet: (Amps, Volts, Watts, kWh) • Phase: X Y Z (Amps) • Circuit: XY YZ ZX (Volts, Watts, VA, kWh, Power Factor) • Breaker: XY XY YZ YZ ZX ZX (Amps, Volts)	0U 66” Vertical 4.00 x 66.25 x 3.45

Detailed monitoring specs available on page 23. | Mounting (p. 41-42): Includes Full Length Bracket and mounting hardware.
3 phase units have color-coded receptacle configurations or labeling for easy identification and load balancing.

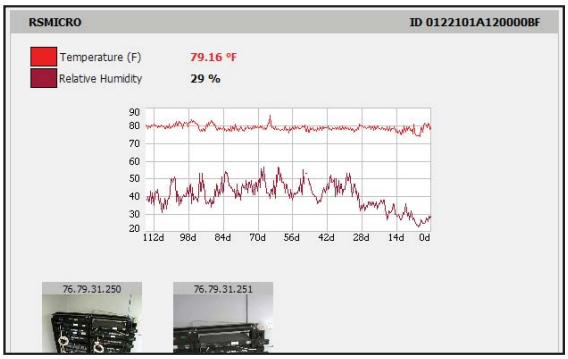
Environmental Monitoring

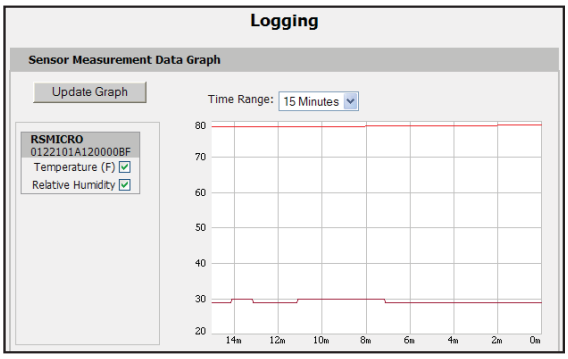
Temperature, Humidity and Dew Point are three of the most critical conditions to monitor in computing space. While temperature is often given moderate attention, relative humidity and dew point levels can often be overlooked. As a site works to decrease temperature, they may inadvertently decrease humidity below recommended levels. Humidity and dew point have the potential to create condensation leading to corrosion and the possibility of electrical failures or if relative humidity is too low, static discharges can cause serious problems.

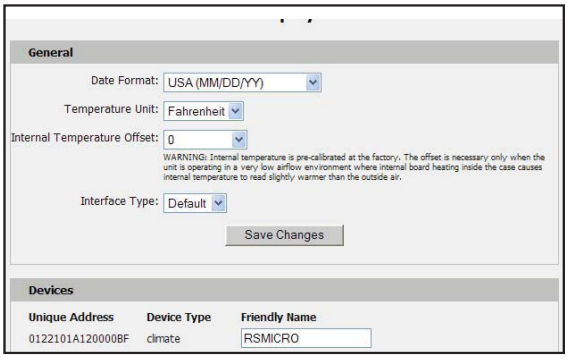
Part Number

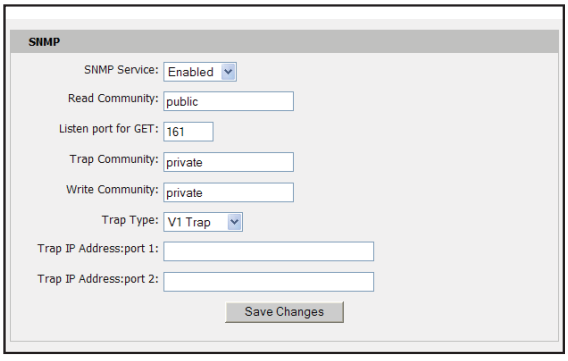
PDUG-GBB15

Feature	Benefit
Power over Ethernet enabled	Does not require power outlet access (PoE injector needed to facilitate PoE function)
On-board temperature sensor	Real-time status and trend data for temperature conditions
On-board dew point and humidity sensor	Real-time status and trend data for humidity and dew point conditions
Threshold alarms	Convenient notification via e-mail, SNMP traps and/or XML
Small profile	Allows you to mount it in tight locations such as wall mounted cabinets
Interfaces with IP web cameras	Visual monitoring of cabinet or computer room
Accessible via any web browser	Easy installation and maintenance - No external software
View data graphs and analyze historical logs	Easy installation and maintenance - No external software View data graphs and analyze historical logs









DCiM software is available and all intelligent units (monitored and switched) have SNMP built in.

Environmental Monitor Connectivity Diagram

Specifications

- Ethernet Connection Jack
- External Sensor Connection Ports
  Two RJ12 Jacks - connect up to 4 Remote Sensor (excluding IOE and Satellite Current monitoring)
- On-board Environmental Sensors
  Temperature Range: -4 to 176F
  Temperature Accuracy: +/-.09F typical
  Humidity: 20% to 80%, +/-2% typical
  Dew Point: -35 to 167F, +/-4.5F (20-80%RH)
- Dimensions: 1.50” x 5.25” x 1.50” (HxWxD)
- FCC Part 15 Class A Conformance
- DC Connection Jack
  6VDC Power Supply Included

Note

This Environmental Monitor features PoE (Power over Ethernet) is ideal if you are having trouble accessing power but need to monitor temperature, humidity and dew point. These small modules can be placed discreetly and be up and running within minutes with only a single ethernet connection for access.

Part Number

PDUG-POI-2000

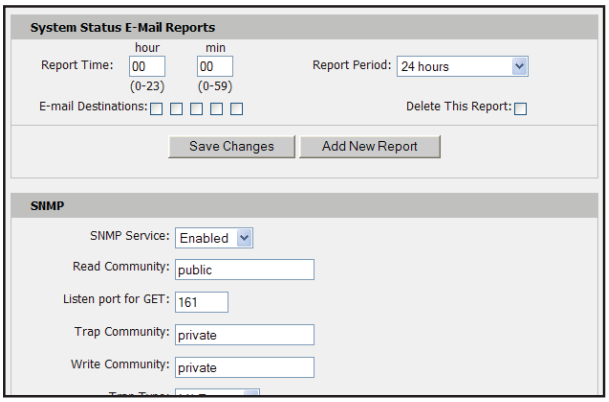
Temperature Monitoring

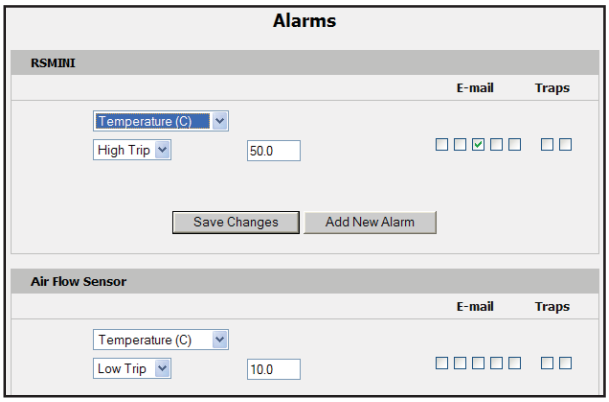
The Temperature Monitor Plus is well suited for strategic temperature monitoring in tight locations, plus monitoring up to 16 additional external sensors. Choose from a wide variety of external sensors, including web-enabled cameras, to monitor all critical environmental conditions in your data center.

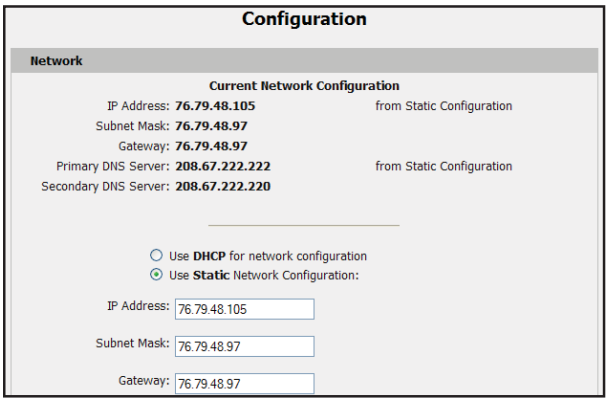
Part Number

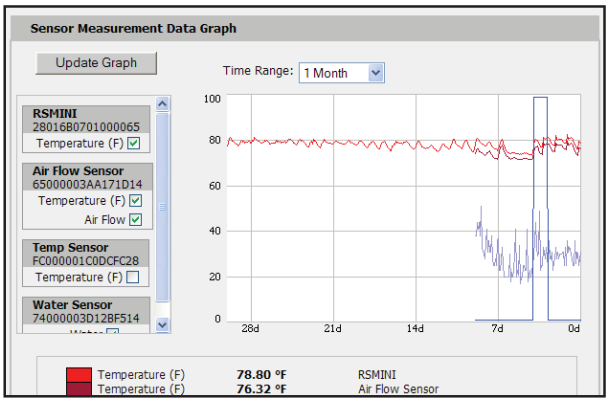
PDUG-RSMINI-P

Feature	Benefit
On-board temperature sensor	On-board temperature sensor Current status and trend data for temperature conditions
RJ12 port	5-port or 16-port splitters to connect up to 16 external sensors Connect I/O sensors using CCATs to adapt them to RJ12 connections
Threshold alarms	Convenient notification via e-mail, SNMP traps and/or XML
Small profile	Allows mounting in tight locations such as wall mounted cabinets
Interfaces with IP web cameras	Visual monitoring of cabinet or computer room
Accessible via any web browser	Easy installation and maintenance - No external software View data graphs and analyze historical logs



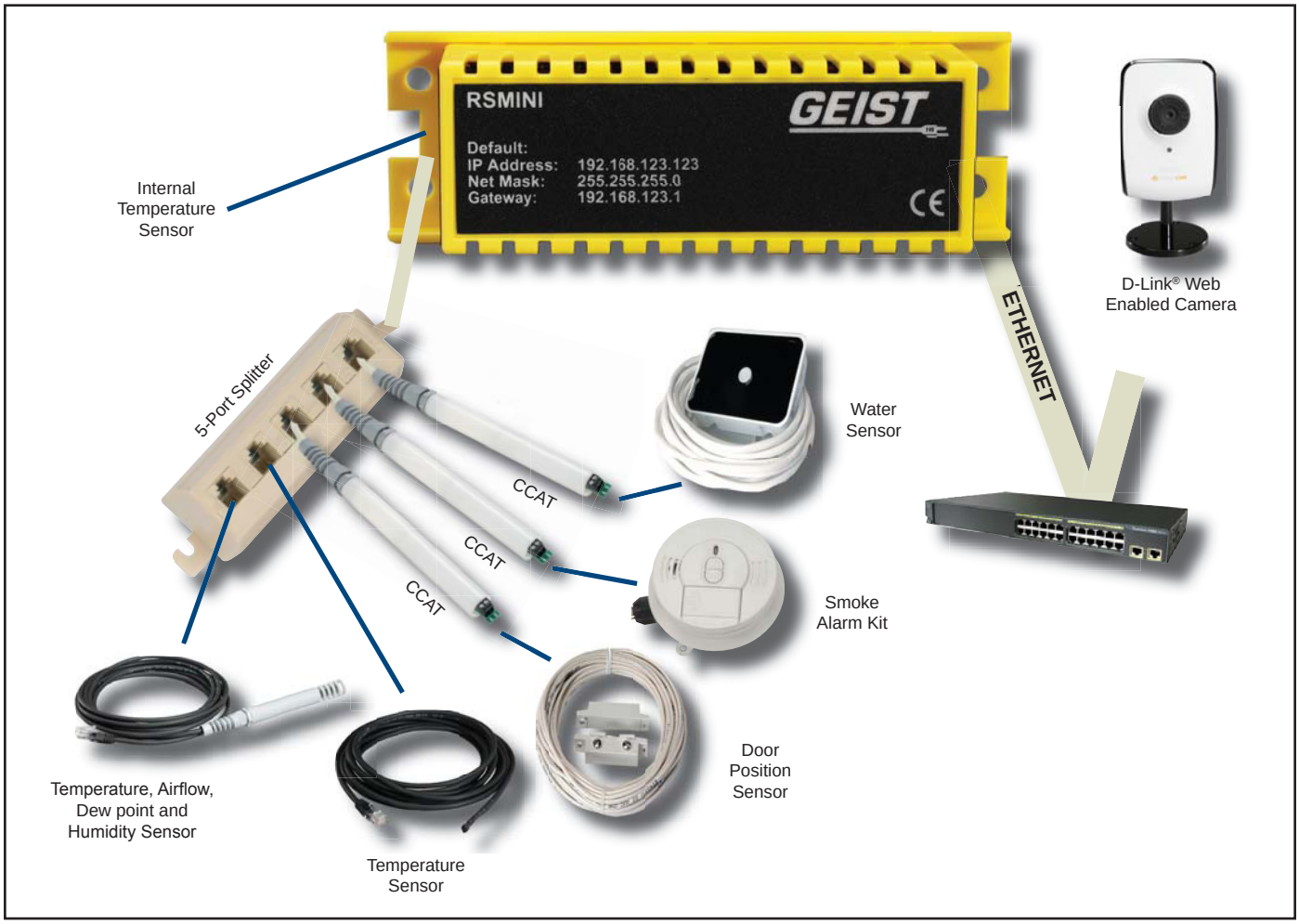






DCiM software is available and all intelligent units (monitored and switched) have SNMP built in.

Temperature Monitor Connectivity Diagram



Specifications

- Ethernet Connection Jack
- Internal Environmental Sensors
  Temperature Range:-40F to 254F
  Temperature Accuracy: +/- 1.8F from 40F to 122F
- External Sensor Connection Ports
  One RJ12 Jack - connect up to 16 Remote Sensors
- Dimensions: 1.50” x 5.25” x 1.50” (HxWxD)
- FCC Part 15 Class A Conformance
- DC Connection Jack
  6VDC Power Supply Included

Environmental Monitoring

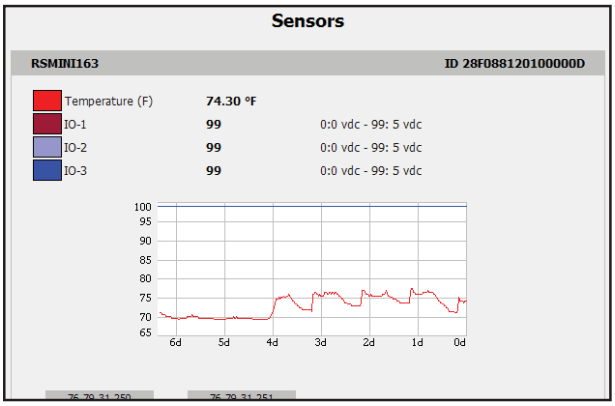
Monitoring Aggregator

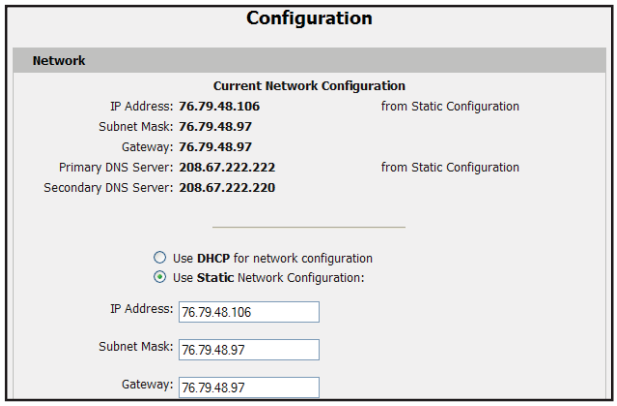
Airflow dynamics can create pockets of hot air which adversely affect the performance and life span of your IT equipment. The monitoring aggregator is ideal for connecting up to 19 sensors in a convenient, 1U device. Satisfy current ASHRAE standards by monitoring top, middle and bottom cabinet inlet temperatures on up to 5 cabinets with a single monitoring device. Addition of I/O senors allow additional parameter monitoring of water, smoke or power failure.

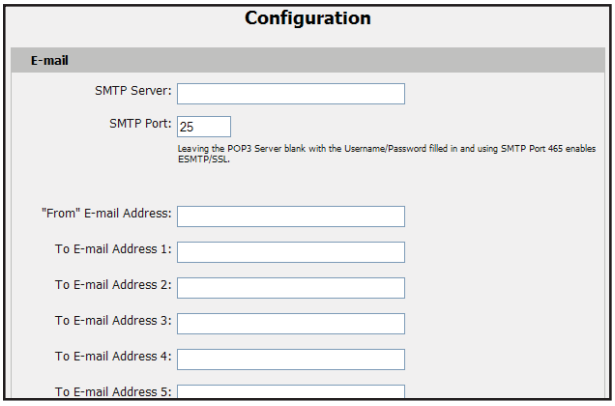
Part Number

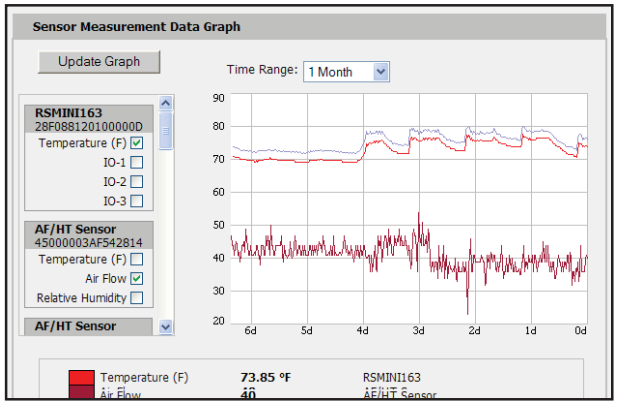
PDUG-RSMINI163

Feature	Benefit
On-board temperature sensor	Current status and trend data for temperature conditions Automatically begins logging data as soon as the unit is powered up
3 I/O sensor ports	Ability to monitor contact closure devices or scale 0-5V signals
16 Remote climate RJ12 sensor ports	Eliminate the use of splitters Monitor temperature, airflow, humidity and dew point via connected sensors
Threshold alarms	Convenient notification via e-mail, SNMP traps and/or XML
Interfaces with IP web cameras	Visual monitoring of cabinet or computer room
Accessible via any web browser	Easy installation and maintenance - No external software View data graphs and analyze historical logs



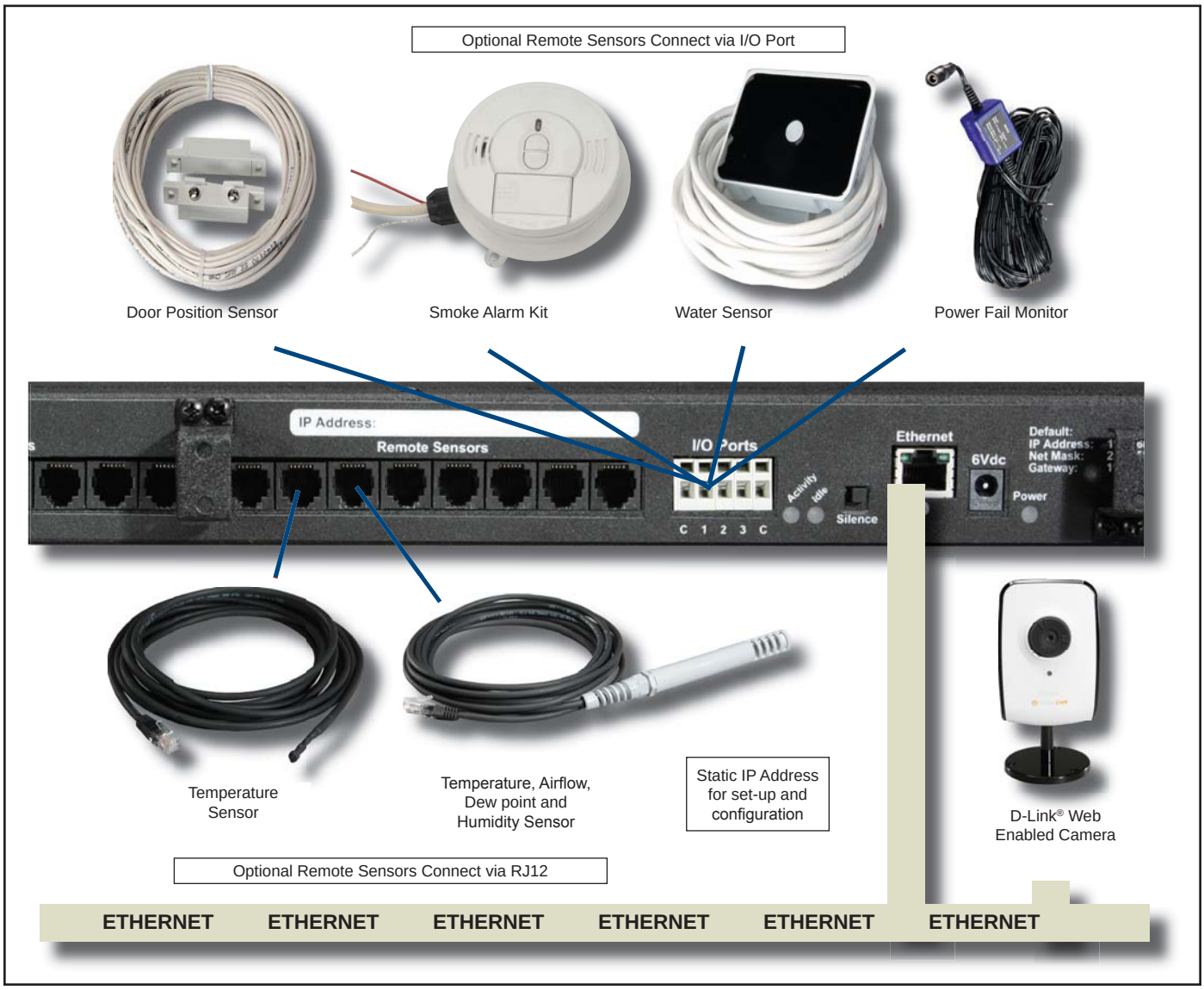






DCiM software is available and all intelligent units (monitored and switched) have SNMP built in.

Monitoring Aggregator Connectivity Diagram



Specifications

- Ethernet Connection Jack
- Power On Indicator
- Idle Indicator
- Activity Indicator
- Dimensions: 1.61” x 17.00” x 1.61” (HxWxD)
- Software Reset Button
- FCC Part 15 Class A Conformance
- External Sensor Connection Ports
  16 RJ12 Jacks - add up to 16 Remote Sensors
  Three I/O Ports- 0-5 VDC analog or contact closure
- Internal Environmental Sensors
  Temperature Range: -40F to 254F
  Temperature Accuracy: +/- 1.8F from 40F to 122F
- DC Connection Jack
  6VDC Power Supply Included

Environmental Monitoring

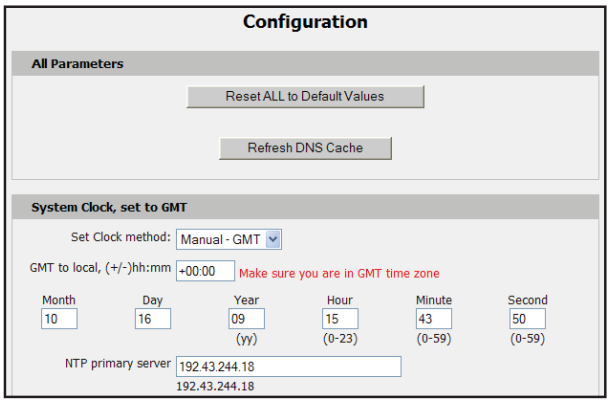
Environmental Monitoring Plus

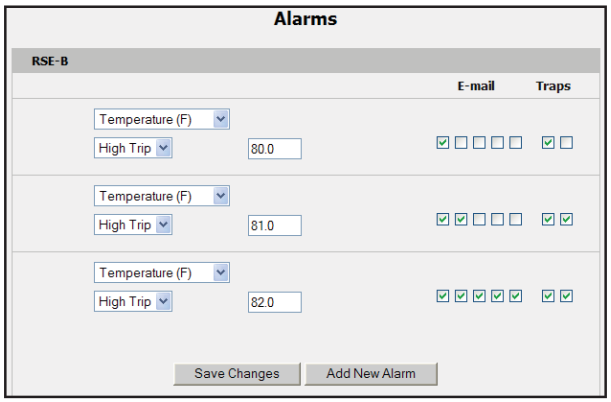
IT managers must operate equipment within a fairly narrow temperature range to ensure reliable long lasting computer and network gear. Server failure rates are known to increase as the temperature rises above the manufacturer's set parameters. Humidity, airflow, water and security all introduce potential points of failure if not closely monitored and controlled. The Environmental Monitor Plus can address each of these threats and more with 5 internal sensors and expansion capacity for up to 16 remote sensors. Lights out site managers around the world rest easier knowing they have access to a clear picture of their environmental conditions and will be alerted with ample time to respond to critical conditions before they become detrimental.

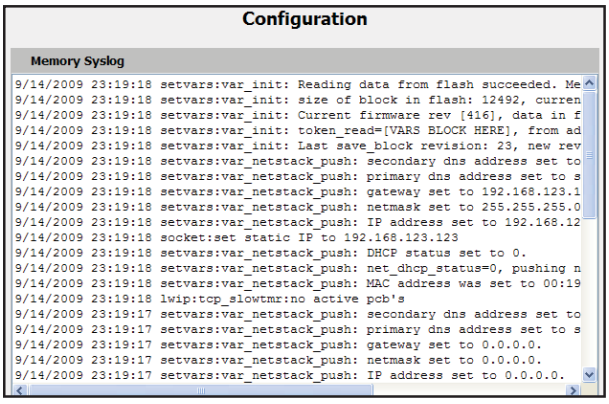
Part Number

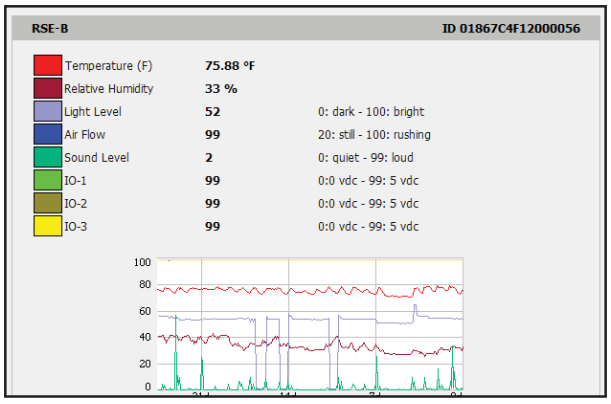
PDUG-RSE-B

Feature	Benefit
5 On-board environmental sensors	Current status and trend data for environmental conditions including temperature, relative humidity, airflow, light and sound
3 I/O sensor ports	Ability to monitor contact closure devices or scale 0-5V signals
5 Remote climate sensor ports	Add additional temperature, airflow, humidity and dew point sensors
Threshold alarms	Convenient notification via e-mail, SNMP traps and/or XML
Interfaces with IP web cameras	Visual monitoring of cabinet or computer room
Accessible via any web browser	Easy installation and maintenance - No external software View data graphs and analyze historical logs









DCiM software is available and all intelligent units (monitored and switched) have SNMP built in.

Environmental Monitor Plus Connectivity Diagram

Specifications

- Ethernet Connection Jack
- Power On Indicator
- Idle Indicator
- Activity Indicator
- Dimensions: 1.61” x 17.00” x 1.61” (HxWxD)
- DC Connection Jack
  6VDC Power Supply Included
- Software Reset Button
- External Sensor Connection Ports
  Five RJ12 Jacks - add up to 16 Remote Sensors
  Three I/O Ports - 0-5 VDC analog or contact closure
- Cable Management Brackets Attached
- FCC Part 15 Class A Conformance
- Internal Environmental Sensors
  Temperature Range: -40F to 254F
  Temperature Accuracy: +/- .9F from 50F to 185F
  Humidity: 0-100%, +/- 5%
  Airflow: 0-99, relative
  Sound Level: 0-99, relative
  Light Level: 0-99, relative

Environmental Monitoring

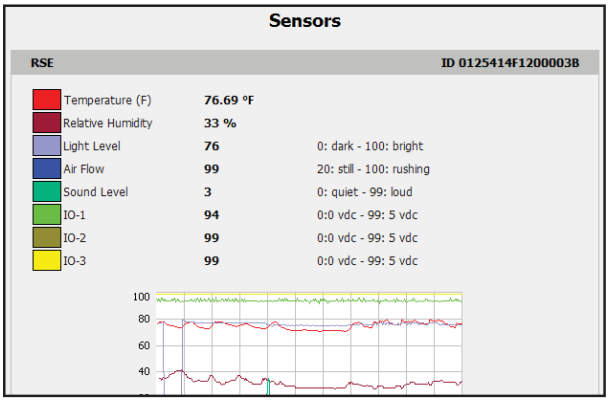
Environmental Monitoring + Display

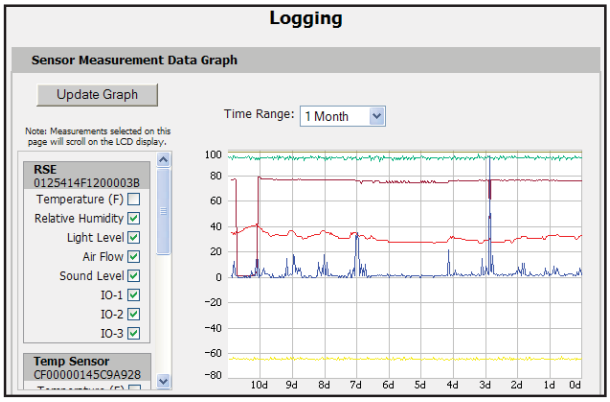
Comprehensive environmental monitoring is crucial to providing a reliable and stable data center. Round the clock measurements facilitate trend and pattern analysis. This data will reveal use patterns which vary with time of day and day of week as well as uncover adverse affects caused by equipment modifications within the cabinet. Detailed information can provide opportunity for energy savings in addition to the maximization of uptime. Within minutes of connecting the Environmental Monitor + Display you will have temperature, humidity, airflow, sound level and light level readings at your finger tips. Additionally the local display can simplify moves, adds and changes by providing instantaneous feedback to the installer.

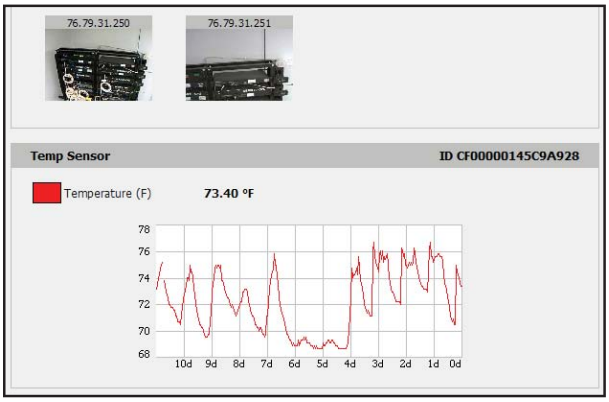
Part Number

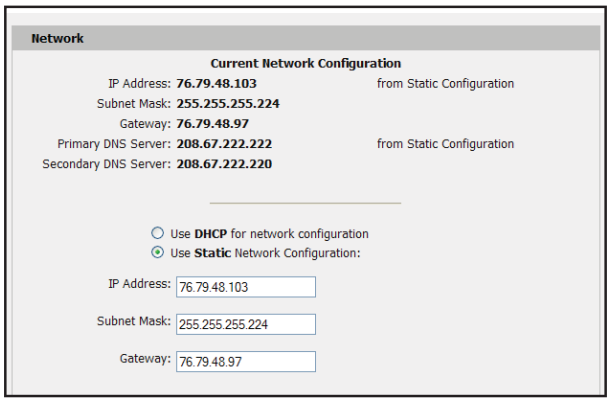
PDUG-RSE2X16

Feature	Benefit
On board scrolling display	Provides local reading of user selected critical data
5 On-board environmental sensors	Current status and trend data for environmental conditions including temperature, relative humidity, airflow, light and sound
3 I/O sensor ports	Ability to monitor contact closure devices or scale 0-5V signals
5 Remote climate sensor ports	Add additional temperature, airflow, humidity and dew point sensors
Threshold alarms	Convenient notification via e-mail, SNMP traps and/or XML
Interfaces with IP web cameras	Visual monitoring of cabinet or computer room
Accessible via any web browser	Easy installation and maintenance - No external software View data graphs and analyze historical logs



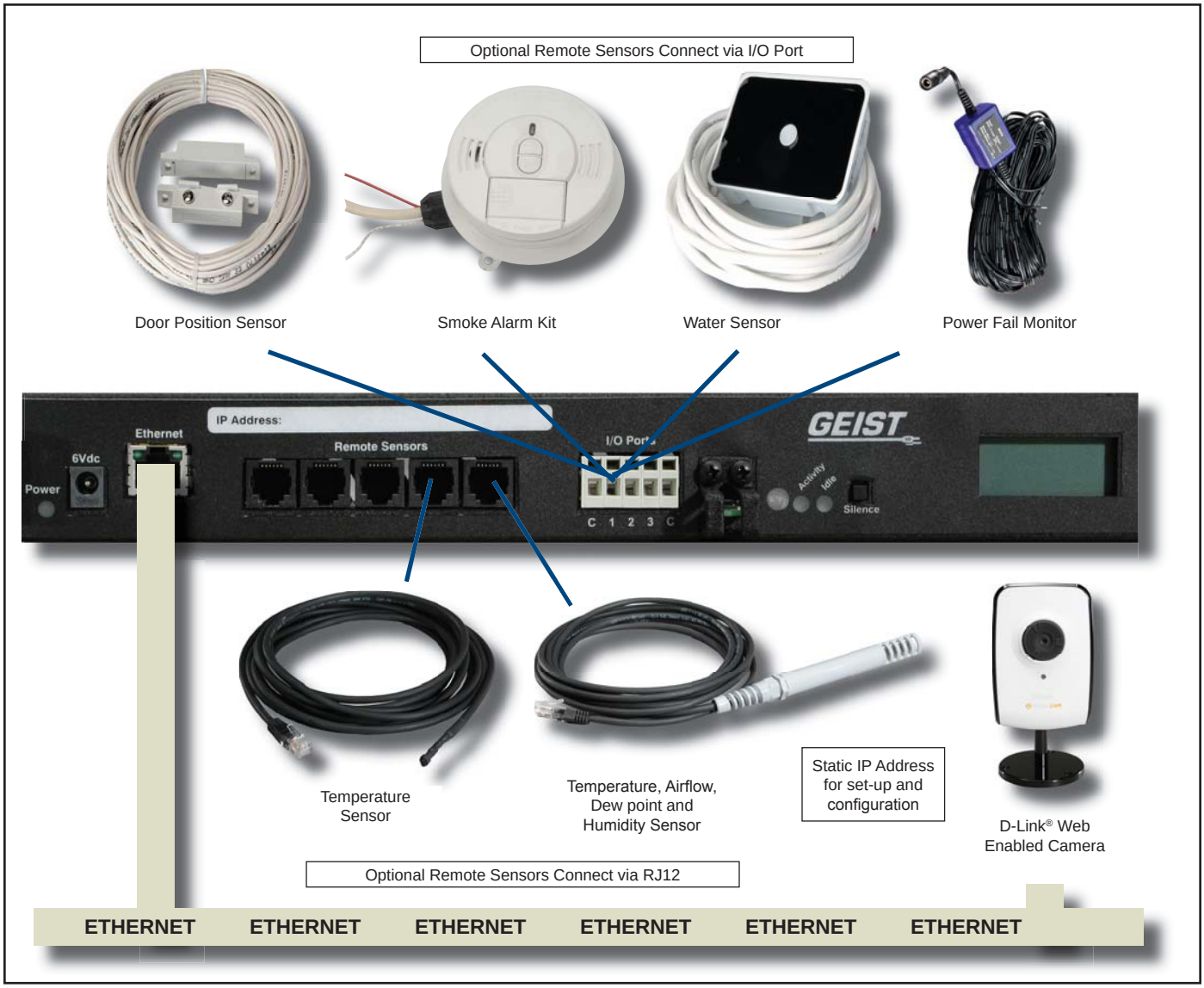






DCiM software is available and all intelligent units (monitored and switched) have SNMP built in.

Environmental Monitor + Display Connectivity Diagram



Specifications

- Ethernet Connection Jack
- Power On Indicator
- Idle Indicator
- Activity Indicator
- LCD Display
- Audible Alarm
- Dimensions: 1.61” x 17.00” x 1.61” (HxWxD)
- Software Reset Button
  External Sensor Connection Ports
  Five RJ12 Jacks - add up to 16 Remote Sensors
  Three I/O Ports - 0-5 VDC analog or contact closure
- Cable Management Brackets
- FCC Part 15 Class A Conformance
- DC Connection Jack
  6VDC Power Supply Included
- Internal Environmental Sensors
  Temperature Range: -40F to 254F
  Temperature Accuracy: +/- .9F from 50F to 185F
  Humidity: 0-100%, +/- 5%
  Airflow: 0-99, relative
  Sound Level: 0-99, relative
  Light Level: 0-99, relative

Environmental Monitoring

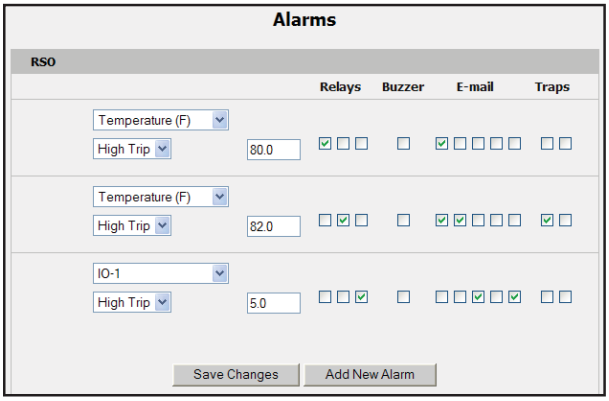
Environmental Monitoring + Relays

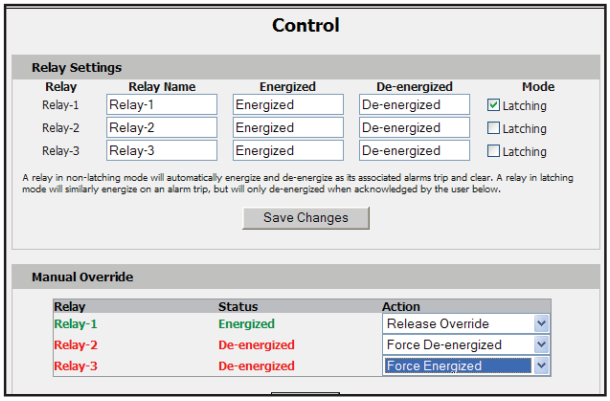
Data center managers are faced daily with the task of keeping servers cool enough to perform optimally in order to reduce energy wasted by over cooling. To succeed at this delicate balancing act, managers must collect strategic environmental data and have a rapid means to respond to changes in conditions. The Environmental Monitor + Relays provides IT managers with the information and tools needed to minimize excess cooling and maximize uptime. Remote sensors selected for your specific installation are monitored and alarmed based on user defined thresholds. Relay control actions are configured to respond to conditions which are outside acceptable ranges. Site managers can circumvent overheating through event trigger actuation of air conditioners, vents or sirens for audible alarming. These simple and timely precautions optimize energy efficiency.

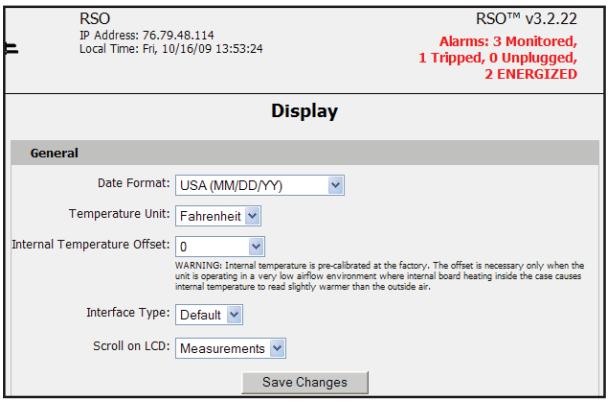
Part Number

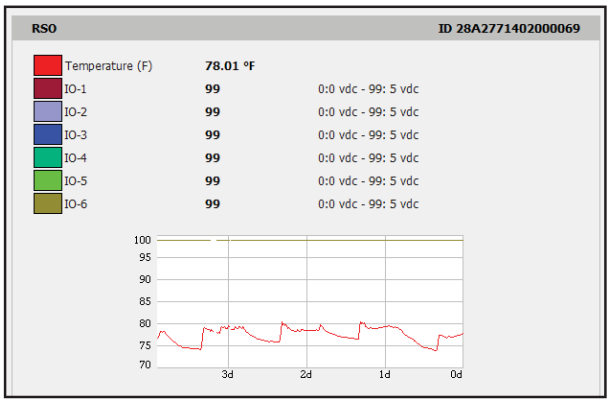
PDUG-RSO

Feature	Benefit
On board scrolling display	Provides local reading of user selected critical data
On-board temperature sensor	Current status and trend data for temperature conditions
6 I/O sensor ports	Ability to monitor contact closure devices or scale 0-5V signals
4 Remote climate sensor ports	Add additional temperature, airflow, humidity and dew point sensors
3 Internal control relays	Control external devices such as air conditioners, heaters, vents, sirens, etc. to counteract unacceptable site conditions
Threshold alarms	Convenient notification via e-mail, SNMP traps and/or XML
Interfaces with IP web cameras	Visual monitoring of cabinet or computer room
Accessible via any web browser	Easy installation and maintenance - No external software View data graphs and analyze historical logs



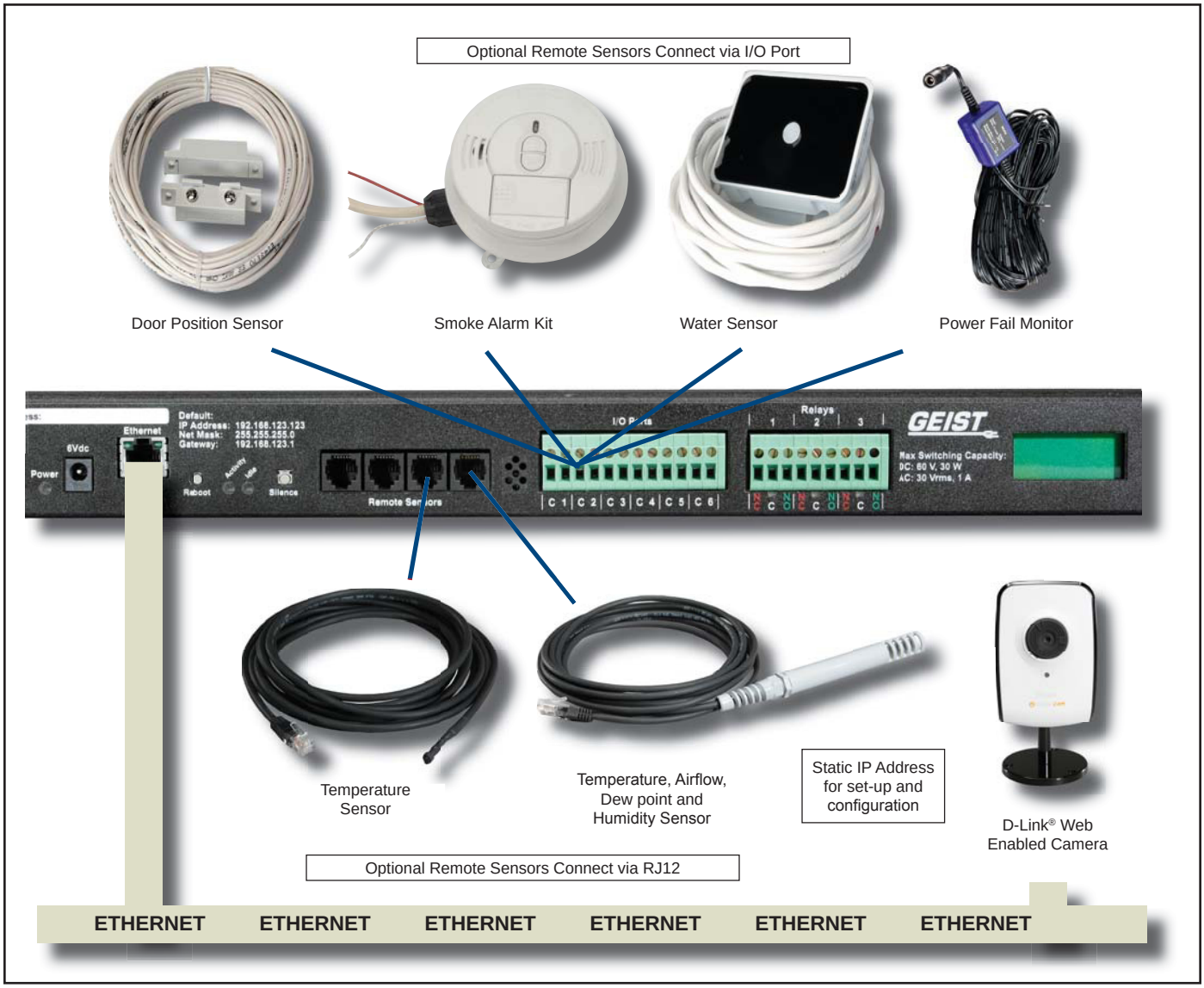






DCiM software is available and all intelligent units (monitored and switched) have SNMP built in.

Environmental Monitor + Relay Connectivity Diagram



Specifications

- Ethernet Connection Jack
- Power On Indicator
- Idle Indicator
- Activity Indicator
- LCD Display
- Audible Alarm
- Dimensions: 1.61” x 17.00” x 2.50” (HxWxD)
- Software Reset Button
- External Sensor Connection Ports
  Four RJ12 Jacks - add up to 16 Remote Sensors
- Six I/O Ports - 0-5 VDC analog or contact closure
  Three Internal Control Relays - DC: 60V, 30W
  AC: 30VRMS, 1A
- Internal Environmental Sensors
  Temperature Range: -40F to 254F
  Temperature Accuracy: +/- 1.8 from 40F to 122F
- DC Connection Jack
  6VDC Power Supply Included
- FCC Part 15 Class A Conformance

Environmental Monitoring Accessories

RJ Port Sensors

These optional remote sensors connect via RJ12 ports.

Temperature Sensor

Precisely monitor “hot spots” throughout your installation.

- Temperature: -40F to 254F
- Temperature Accuracy: +/- 1.8F from 40F to 122F
- 12’ Cord

Part Number

PDUG-SRT-12

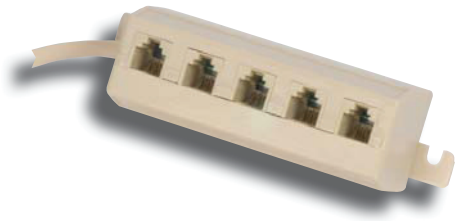
Temperature, Airflow, Humidity and Dew Point Sensor

Monitor four environmental conditions in this single cord sensor. Ideal for placement near air intake (coldest/driest conditions) and air exhaust (warmest/moistest conditions).

- Temperature: -40F to 254F
- Temperature Accuracy: +/- .9F from 50F to 185F
- Airflow ow: 0-99 - relative
- Humidity: RH Accuracy +/- 2% RH, Range: 0 to 100 % RH, non-condensing
- 12’ Cord

Part Number

PDUG-RTAFHD3-12



RJ12 5-Port Splitter

Expand the number of sensors connected to your PDU with RJ12 sensor ports. Especially ideal for compact units such as the Temperature Monitor Plus.

Part Number

PDUG-SP-5

I/O Port Sensors

These optional remote sensors connect via I/O port or CCAT.

Door Position Sensor Magnetic Switch 0-99 - relative

Monitor cabinet door position -open vs. closed- with this magnetic sensor. Set alarms to alert when a secure cabinet has been opened. (30’ Cord)

Part Number

PDUG-RDPS

Water Sensor 0-99 - relative

Acts as a conductivity bridge to detect the presence of moisture or water in your facility. (20’ Cord)

Part Number

PDUG-RWS

Smoke Alarm Kit 0-99 - relative

Integrate smoke alarm functionality into your system and receive remote alarm notification. Kit features Kidde® 1275 with interface module and 5-15P straight-blade plug.

Part Number

PDUG-SA-1

Power Fail Monitor 0-99 - relative

This sensor is connected directly to your utility power feed to alert you when utility power has been affected. Ideal for down-time prevention when PDUs are connected directly to a UPS. Notification of a possible outage prior to UPS battery exhaustion is critical. Power supply included. (100’ cord)

Part Number

PDUG-RCP-2-100 US

I/O to RJ Remote Sensor Converter

This handy accessory enables connection of I/O devices into RJ12 jacks. Device is programmed for the specific sensor and available for use with I/O remote sensors.

Part Number

PDUG-CCAT-Digital

I/O Port Water Sensing Cable Kits

With the advent of liquid cooling in data centers, water has become increasingly integrated into the computer room environment. Water Sensing Cable Kits feature detection cables which sense the presence of water along the entire cable length. These kits are ideal for detecting moisture over a wide area such as the perimeter of a group of racks and cabinets. When connected to PDU's with I/O ports, you can be alerted to potential dangers via e-mail or SNMP traps. Select from one of two kits.

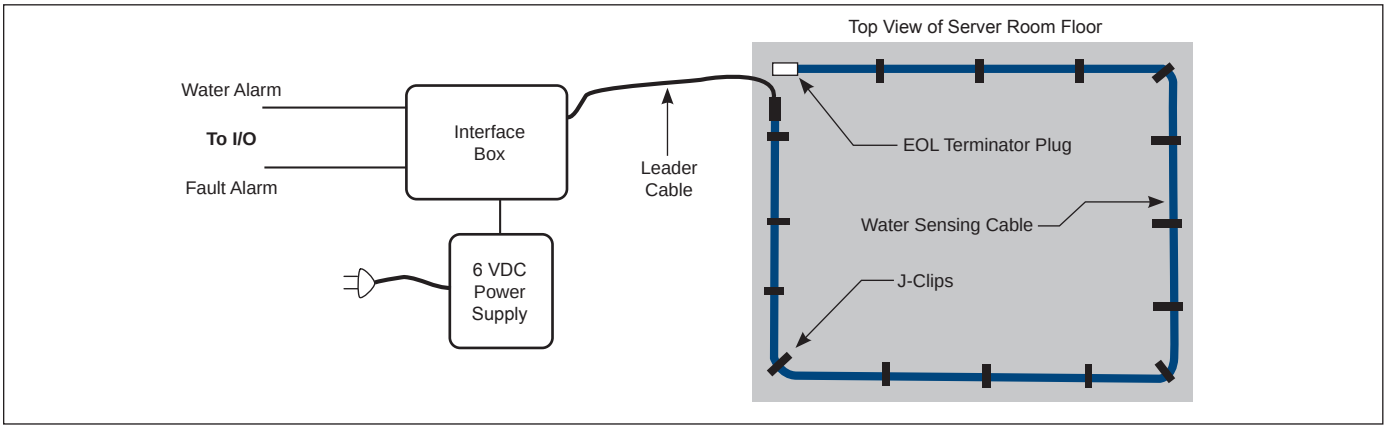
Specifications

- Plenum Rating: CL2P/CMP C(UL)
- Sheer Strength: >180 lbs.
- Cut Resistance: >40 lbs. with .005" blade
- Abrasion Resistance: 60 cycles per UL 719
- Connector: 4 pin, 0.96" diameter

Operating Environment

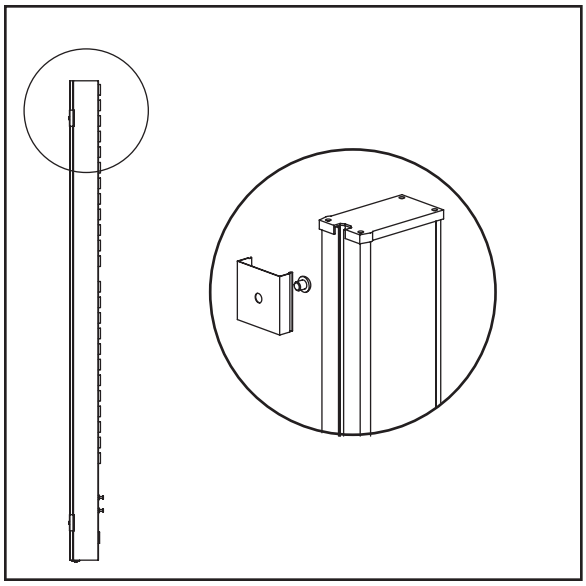
- Temperature: 32º to 167ºF
- Humidity: 5% to 95% RH, non-condensing
- Altitude: 10,000 ft. max.
- Storage: -22º to 185ºF
- Diameter of cable: not more than 0.25"
- Weight: .02 lbs/ft

Water Sensing Cable Kit Application

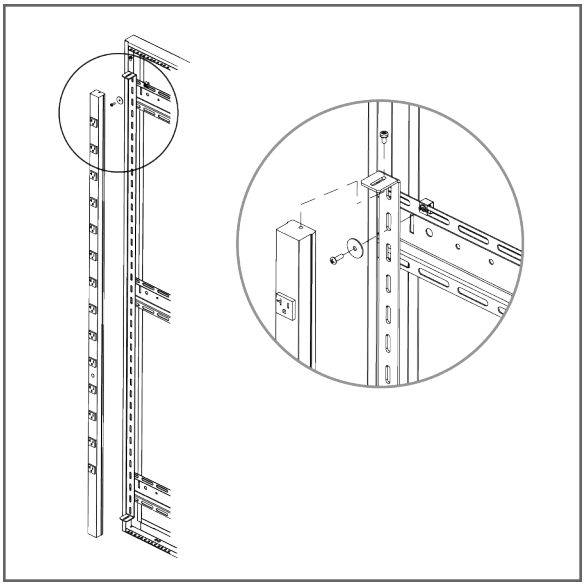


Part Number	Kit Contents
PDUG-WSCK-10	Interface Box
	15' Leader Cable
	10' Leak Detection Cable with EOL (end of line) connector
	Power Supply (6' length)
	50' Connection Wire (interface box to I/O port)
	J Clips (10 pack)

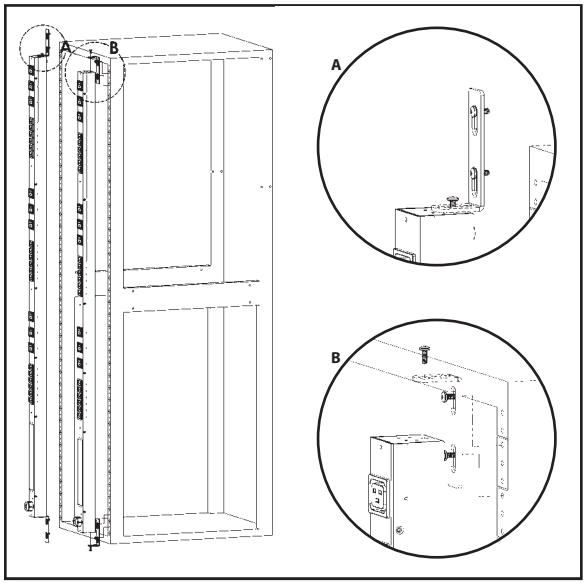
Part Number	Kit Contents
PDUG-WSCK-40	Interface Box
	15' Leader Cable
	40' Leak Detection Cable with EOL (end of line) connector
	Power Supply (6' length)
	50' Connection Wire (interface box to I/O port)
	J Clips (25 pack)



Spring Clips
Included with each 18” and 48” vertical unit. Attach the spring clips to the cabinet making sure the top clip is no more than 1 inch from the top of the unit. Once the spring clips are secure, snap the PDU into position. Stand off brackets are included.

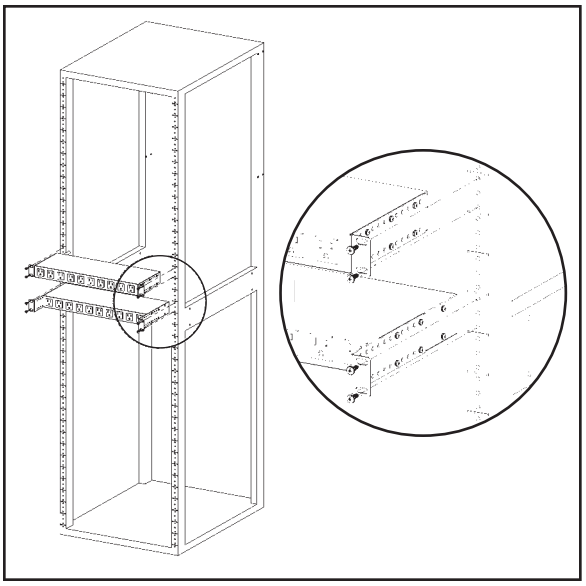


Full Length Bracket
Included with each 66”, 70” and 72” vertical unit. Easily mounts to the struts inside of the cabinet. Allows up to 180° rotation on most PDUs.

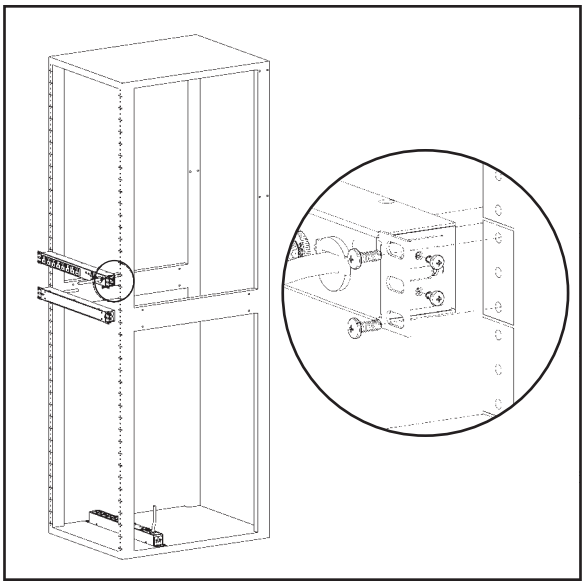


Mini “L” Brackets
Included with 17” vertical units for vertical mounting. Turned into the unit, these brackets are ideal for rack rail mounting. Turned away from the unit, they extend your mounting options by 8”.

Horizontal Mounting Brackets



19” Horizontal Adjustable Brackets
Included with 19” horizontal units. These steel brackets allow numerous recess and flush mounting options.



19” Horizontal Brackets
Included with 17” vertical units for horizontal mounting. These versatile brackets allow for 19” flush rack mounting.

What is an Amp?
An Amp (or Ampere) is the standard measure of electrical current. Much like water flowing through a pipe, the Amp is a measure of how much electricity is moving through a wire at a given time. The Amp draw of a circuit is dependent on the needs of the devices plugged into it, and is limited by the branch circuit protection.

What is a Volt?
A Volt is the standard measure of electrical potential and a fixed value for every circuit. Voltage is measured with respect to a reference point (usually between the two respective conductors of the circuit). Voltage is analogous to pressure in a water pipe. Higher pressures, or higher voltages, allow more energy to flow within a given amount of time for a given wire size.

What is a Watt?
A Watt is the measure of total work performed by the energy consumed in a system. The calculation is: Watts = Volts x Amps x Power Factor.

What is Energy?
Energy is electricity as a raw material, measured in Volts and Amps available to do work.

What is AC?
Alternating Current, or AC, is energy delivered in a form that can travel the long distances necessary from generating plants to homes and businesses. The term AC reflects the fact that the voltage and current are always changing in value, or alternating between a positive and negative threshold over a centerline.

What is DC?
Direct Current, or DC, is energy that does not alternate over a fixed period of time, but rather has a steady value with reference to zero. DC does not travel great distances well.

What is Apparent Power?
Apparent Power is the instantaneous calculation of Volts x Amps.

What is Power Factor?
Power Factor is the ratio of Real Power to Apparent Power. Its value ranges from 0 to 1. A value of 1, or 100% is unity power. Lower values of Power Factor indicate that the circuit is wasting energy. Any difference between the RMS value of Watts and the Volt-Amps value indicates inefficiencies in the way power is being used by the equipment on the circuit.

What does RMS mean?
RMS stands for Root-Mean-Squared. It is used in conjunction with AC Volts and AC Amps to express an average value. A true RMS calculation takes into account the shape and phases of the wave forms being delivered to a circuit. AC voltage and current are ever-changing values. Using RMS measurements provides useful values.

What rating should I use to correctly select a PDU for my installation?
There are several factors to consider when selecting a PDU to ensure that the PDU has sufficient capacity for the intended application. The three main factors to consider are:

- NAMEPLATE: The nameplate rating marked on a PDU is the intended operating voltage range and maximum operating input current. Nameplate ratings are based on both regulatory requirements and design factors and represent the continuous total current that the PDU will be able to deliver to a load. The PDU should not be installed in an application where the nameplate ratings are exceeded.

- RECEPTACLE: The PDU's output power is connected to information technology equipment through either NEMA or IEC receptacles. The PDU should not be installed in a manner that will exceed the maximum current rating of any individual receptacle. For example, a NEMA 5-15R receptacle should not be loaded to over 15A regardless of the nameplate rating of the PDU it is installed in.

- INTERNAL BREAKERS: Our PDUs can be equipped with internal circuit breakers that are used to protect the circuit in case of overload or earth fault conditions. For PDUs rated 12A or 16A, the circuit breakers are optional components that act as supplementary protectors. For PDUs rated higher than 16A, the circuit breakers are required components that provide primary overcurrent and earth fault protection for the PDU's internal circuits. The PDU should not be connected to a load that will exceed the current rating of an internal breaker. For maximum protection against nuisance tripping, it is recommended that internal breakers are only loaded to 80% of the breaker current rating.

Reference

Why are the cord-connected units listed with a de-rated Amperage?
Our cord-connected PDUs carry a nameplate current rating that is 80% of the branch circuit rating listed in the catalog specification. The nameplate current rating has been lowered in order to comply with UL®/NEC requirements.

Can I purchase a PDU without a circuit breaker?
Yes, some configurations can be purchased without an internal circuit breaker. All PDUs require an appropriately sized branch circuit breaker in the building installation. Branch circuit breakers should be sized according to the PDUs namplate rating, and electrical code requirements. To comply with the NEC the circuit breaker in the building installation should have a trip current rating that is 25% higher than the PDU's nameplate. For example, a 16A rated PDU requires a 20A circuit breaker.

What are the benefits of utilizing two 20A breakers versus two 15A breakers on a 30A PDU?
20A breakers in a 30A unit allow maximum flexibility of load connection without nuisance tripping. The receptacles in a 30A PDU are divided into two independent groups. A 30A PDU distributing to 15A or 20A receptacles must be broken down into either 15A or 20A circuits internally. By opting for 20A internal circuits, PDU circuit balance is less critical. One circuit may be loaded to >15A. This would not be possible if each breaker were rated at 15A.

What are the advantages of bringing 3 Phase power to my cabinet?
- Less wire under the floor improves airflow and reduces wiring confusion. A 20A 3 Phase installation contains 5 wires where the equivalent single phase system would require 9 wires (3x3).
- Fewer whips to pull save you time and money. A 3 Phase system has one whip for the electrician to bring to the cabinet where the equivalent single phase system would have 3 whips. This saves both material and labor cost.
- Simplified load balancing reduces technician installation and troubleshooting time. With all 3 Phases available in a single cabinet, load balancing can be achieved at the cabinet level where similar type equipment is often found. In a single phase system, a minimum of 3 cabinets may need to be looked at to balance the same load.

Why should I consider designing my installation with 208V instead of 120V?
The electrical power consumption of electrical appliances is measured in Watts (W). Wattage (Watts value) is a product of the rated Voltage (V) and Current (I). W = V x I. The higher the Voltage the lower the current required to supply the same Watts. The same size wire can carry nearly 2x as much power (Watts) @ 208V versus 120V. A Voltage of 208V instead of 120V, yields 1.73 times more power.

Can you distribute both 120V and 208V from a PDU with a single input cord?
PDUs with 3 Phase WYE input allow for the option of distributing 120V and 208V in a single power strip. 3 phase WYE consists of 3 Phases, 1 Neutral and 1 Ground conductor. 208V output is achieved across two phase conductors and 120V output is achieved across one phase conductor and the neutral conductor.

Plug & Receptacle Configuration Chart

NEMA

AMP	VOLT	STRAIGHT-BLADE PLUG	STRAIGHT-BLADE RECEPTACLE	AMP	VOLT	STRAIGHT-BLADE PLUG	STRAIGHT-BLADE RECEPTACLE
15	125	5-15P	5-15R	20	250	6-20P	6-20R
20	125	5-20P	5-20R				

AMP	VOLT	TWIST-LOCK PLUG	TWIST-LOCK RECEPTACLE	AMP	VOLT	TWIST-LOCK PLUG	TWIST-LOCK RECEPTACLE
15	125	L5-15P	L5-15R	20	120/208 x 3~ WYE	L21-20P	L21-20R
20	125	L5-20P	L5-20R	20	230/400 x 3~ WYE	L22-20P	L22-20R
30	125	L5-30P	L5-30R	30	120/208 x 3~ WYE	L21-30P	L21-30R
20	250	L6-20P	L6-20R	30	230/400 x 3~ WYE	L22-30P	L22-30R
30	250	L6-30P	L6-30R	30	250 x 3~ DELTA	L15-30P	L15-30R
20	125 / 250	L14-20P	L14-20R	CALIFORNIA STYLE			
30	125 / 250	L14-30P	L14-30R	50	250 x 3~ DELTA	3P, 4W	3P, 4W

IEC

AMP	VOLT	POWER INLET	POWER RECEPTACLE	AMP	VOLT	POWER INLET	POWER RECEPTACLE
15/10*	125 OR 250	C-14	C-13	20/16*	125 OR 250	C-20	C-19

AMP	VOLT	POWER INLET	POWER RECEPTACLE	AMP	VOLT	POWER INLET	POWER RECEPTACLE
20/16*	250/230*	2P, 3W	2P, 3W	60/63*	250/230*	2P, 3W	2P, 3W
20	250	3P, 4W	3P, 4W	60	250	3P, 4W	3P, 4W
30/32*	250/230*	2P, 3W	2P, 3W	20/16*	230/400* x 3~ WYE	4P, 5W	4P, 5W
30	250	3P, 4W	3P, 4W	30/32*	230/400* x 3~ WYE	4P, 5W	4P, 5W

* Rating for CE products

Emcor Product Portfolio

Emcor® Enclosures

This standard product lineup includes a range of vertical racks and cabinets, which can be configured or modified with numerous accessories and sizes to meet your diverse needs

ESQ®

G-Series®

10 Series®

Data Center

Emcor® Consoles

This standard product lineup includes a range of monitoring and control consoles, which can be configured and modified in countless modular configurations.

FP1

FP2

ESQ®

Air Traffic Control

Custom Products

For those needs that fall outside of Crenlo's standard Emcor products, we can build completely custom solutions to meet the needs of any customer.

Inverter Enclosure

Kiosk

NEMA

Package Drop Box

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Division of IES INTERNATIONAL EQUIPMENT SOLUTIONS

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