SMART POWER DISTRIBUTION UNIT AND ENVIRONMENTAL MONITOR

INDUSTRY STANDARDS

ANSI/UL 60950 Listed, File No. E214832
cUL Listed CAN/CSA-C22.2 No. 60950, File No. E214832

EIA 310-D (19-in. rack-mount models only)

APPLICATION

Used in applications that require remote monitoring and control, Smart PDU monitors and accessories provide feedback and diagnostic information via a web browser to a remote location. System administrators can set remote displays, audible alarms, SNMP traps and/or e-mail notification options to monitor the system and generate alarm notifications.

FEATURES

- 10-ft. power cord with straight-blade plug (5-20P), software reset button and indicator lights standard on PDUs
- Log data available for export to XML and real-time PDA and WAP screen formats
- Multiple users can access simultaneously; access protected with multi-level passwords and view-only access privilege setting
- Supports DHCP, HTML, HTTPS, ICMP, SNMP, static IP, SMTP, SSL, TCP/IP, Telnet, TLS, UDP and XML protocols
- Accessory sensors can be added at any time
- Remote sensors include temperature, airflow, humidity, door position, water, smoke, air pollution and city power

SPECIFICATIONS

- Steel housing
- Includes mounting brackets

FINISH

Black, low-gloss textured paint

PDU Selection Guide

Type	Built-in Environmental Sensors	Built-in Power Sensors	Max. Number of Remote Sensors	Connectors	Power Monitoring	Power Control	Display	Indicator Lights
Control PDU	No	Volts RMS: 80-280 VAC	15	Two RJ11/RJ12 jacks	Yes	Yes	Remote available	Power on, Activity, Idle
Master PDU	Temperature, humidity, airflow, sound, light	Volts RMS: 80-280 VAC	16	Four RJ11/RJ12 jacks, three I/Os	Yes	No	Remote available	Power on, Activity, Idle
Satellite PDU	No	Volts RMS: 80-280 VAC	16	Four RJ11/RJ12 jacks	Yes, reports through master PDU	No	Remote available	Power on, Activity

CONTROL PDU

Provides circuit-level power monitoring and remote on-off control of individual outlets to avoid accidental overloads

- Facilitates remote rebooting of controlled equipment to minimize emergency service calls
- Can be used alone or in combination with satellite PDUs and environmental sensors
- Vertical model has 16 15 A, 125 VAC outlets
- 19-in. rack-mount model has 8 20 A, 125 VAC outlets
- Two RJ11/RJ12 jacks can connect up to 15 remote sensors using accessory 5-way splitters
- 10/100 Ethernet connection jack

BULLETIN: DPS

Catalog Number	Type	Voltage (VAC)	Load Rating (A)	Height in./mm	Width in./mm	Depth in./mm	No. of Receptacles	Receptacle Style
DPC1N119820	Control PDU, 19-in. Rack-Mount	125	20	1.72 44	17.00 432	8.50 216	8	5-20R
DPC1N1661615	Control Unit, Vertical	125	15	66.25 1683	3.10 79	2.00 51	16	5-15R

MASTER PDU

Provides power distribution plus power and environmental monitoring in a single standalone unit.

- Can be used alone or in combination with satellite PDUs and environmental sensors
- Vertical model has 24 20 A outlets at 125 or 250 VAC, depending on model
- 19-in. rack-mount model has ten 20 A, 125 or 250 VAC outlets, depending on model
- Includes internal environmental and power sensors
- Four RJ11/RJ12 jacks can connect up to 16 remote sensors using the accessory 5-way splitter
- Three I/O ports for 0-5 VDC analog or contact closure
- 10/100 Ethernet connection jack

BULLETIN: DPS

Catalog Number	Type	Voltage (VAC)	Load Rating (A)	Height (in.)	Height (mm)	Width (in.)	Width (mm)	Depth (in.)	Depth (mm)	No. of Receptacles	Receptacle Style
DPM1N1191020	Master PDU, 19-in. Rack-Mount	125	20	1.72	44	17.00	432	2.00	51	10	5-20R
DPM1N1662420	Master PDU, Vertical	125	20	66.25	1683	2.00	51	4.50	114	24	5-20R
DPM1N2191020	Master PDU, 19-in. Rack-Mount	250	20	1.72	44	17.00	432	2.00	51	10	6-20R
DPM1N2662420	Master PDU, Vertical	250	20	66.25	1683	2.00	51	4.50	114	24	6-20R

SATELLITE PDU

Provides expansion capability for the Smart PDU system. Satellite PDUs can be daisy-chained together using RJ11/RJ12 jacks.

- Must be used with a master PDU, control PDU or environmental monitor
- Vertical model has 20 20A, 125 or 250 VAC outlets, depending on model
- 19-in. rack-mount model has ten 20 A, 125 or 250 VAC outlets, depending on model
- Includes internal power sensors
- Four RJ11/RJ12 jacks can connect up to 16 remote sensors using the accessory 5-way splitter
- RJ11/RJ12 jacks can be used to connect to master PDU, other satellites in a daisy-chain configuration, control PDU, environmental monitor or external sensors

BULLETIN: DPS

Catalog Number	Type	Voltage (VAC)	Load Rating (A)	Height (in.)	Height (mm)	Width (in.)	Width (mm)	Depth (in.)	Depth (mm)	No. of Receptacles	Receptacle Style
DPS1N1191020	Satellite PDU, 19-in. Rack-Mount	125	20	1.72	44	17.00	432	4.50	114	10	5-20R
DPS1N1662420	Satellite PDU, Vertical	125	20	66.25	1683	2.00	51	2.00	51	20	5-20R
DPS1N2191020	Satellite PDU, 19-in. Rack-Mount	250	20	1.72	44	17.00	432	4.50	114	10	6-20R
DPS1N2662420	Satellite PDU, Vertical	250	20	66.25	1683	2.00	51	2.00	51	20	6-20R

19-IN. RACK-MOUNT ENVIRONMENTAL MONITOR

Reports power and environmental data reported by internal and by remote sensors connected directly or to satellite PDUs.

- Mounts conveniently with other 19-in. rack-mounted equipment
- Easy-to-read LCD display provides real-time readouts
- Includes five RJ11/RJ12 jacks
- Can connect up to 16 remote environmental sensors and satellite PDUs using accessory 5-way splitters
- Internal temperature sensor
- 10/100 Ethernet connection jack
- 6 VDC power supply with 10-ft. (1.1-m) cord included

BULLETIN: DTHRM

Standard Sizes

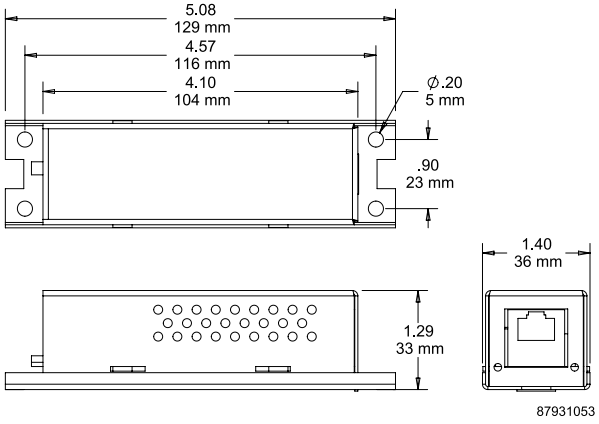
Catalog Number	Type	Voltage (VDC)	Height in./mm	Width in./mm	Depth in./mm
DE19B	Environmental Monitor, 19-in. Rack-Mount	6	1.61 41	17.00 432	1.61 41

COMPACT ENVIRONMENTAL MONITOR

Only 1/3 the size of the rack-mount environmental monitor, it reports the same power and environmental data collected by the internal temperature sensor and by remote sensors connected directly or to satellite PDUs.

- Ideal for wall-mounted and other small cabinet applications where space is limited
- Includes one RJ11/RJ12 jack
- Can connect up to 16 remote environmental sensors and satellite PDUs using accessory 5-way splitters
- Internal temperature sensor
- 10/100 Ethernet connection jack
- 6 VDC power supply with 10-ft. (1.1-m) cord included

BULLETIN: DTHRM



Catalog Number	Voltage (VDC)	Height in./mm	Width in./mm	Depth in./mm
DEPC	6	1.50 38	5.25 133	1.50 38

Environmental Monitor Selection Guide

Type	Built-in Environmental Sensors	Built-in Power Sensors	Max. Number of Remote Sensors	Connectors	Power Monitoring	Power Control	Display	Indicator Lights
19-in. Environmental Monitor	Temperature, airflow, humidity, sound, light	No	16	Five RJ11/RJ12 jacks, three I/Os	Yes, via satellite PDU	No	Built-in display	Power on, Activity, Idle
Compact Environmental Monitor	Temperature	No	16	One RJ11/RJ12 jack	Yes, via satellite PDU	No	No	No

REMOTE TEMPERATURE SENSOR

Monitors temperature at the selected location.
Temperature Range:
-67 F to +175 F, ±0.9 F
(-55 C to +79 C, ±0.5 C)

BULLETIN: DTHRM

Catalog Number	Cable Length (ft.)	Cable Length (m)	Terminal Connection
DST	12.00	3.7	RJ11/RJ12

REMOTE DOOR POSITION SENSOR

Magnetic sensor monitors cabinet door position. Can turn on alarm when the monitored cabinet has been opened. Range: Unitless readings 0-99. Low reading means door is closed; high reading means it is open.

BULLETIN: DTHRM

Catalog Number	Cable Length (ft.)	Cable Length (m)	Terminal Connection
DSD	30.00	9.1	I/O port

REMOTE WATER SENSOR

Detects water at the sensor location. Can turn on alarm when water is detected. Range: Unitless readings 0-99. Low reading means sensor location is dry; high reading means sensor location is wet.

BULLETIN: DTHRM

Catalog Number	Cable Length (ft.)	Cable Length (m)	Terminal Connection
DSW	20.00	6.1	I/O port

WEB-ENABLED CAMERA WITH MOTION DETECTION

Sends continuous live video stream to web address. When motion detector is activated, sends e-mail alert and still images to local hard drive via web browser. Captures video in light levels as low as 1 lux. Connects to Ethernet port on customer-supplied switch. Ethernet cable not included.

BULLETIN: DTHRM

Catalog Number	Terminal Connection
DWCM	RJ45

SMOKE ALARM KIT

Smoke alarm with 5-15P plug and interface module. Provides audible alarm notification; can provide e-mail notification. Range: Unitless readings 0-99. Low reading means alarm location is smoke-free; high reading means smoke is present.

BULLETIN: DTHRM

Catalog Number	Cable Length (ft.)	Cable Length (m)	Terminal Connection
DSSK	30	9.1	5-15R receptacle

CITY POWER MONITOR

Connects directly to city power feed via standard outlet; alerts when city power fluctuates. Ideal for down-time prevention when PDUs are connected directly to an uninterruptible power supply (UPS). Provides advance warning to prevent backup battery exhaustion. Range: Unitless readings 0-99. Low reading means power is off; reading greater than 50 means power level is normal.

BULLETIN: DTHRM

Catalog Number	Cable Length (ft.)	Cable Length (m)	Terminal Connection
DSCP	4.00	1.2	I/O port

REMOTE DISPLAY

Connects to control unit or master PDU and mounts outside the cabinet to provide at-a-glance viewing of user-selected readouts. Built-in audible alarm.

BULLETIN: DTHRM

Catalog Number	Cable Length (ft.)	Cable Length (m)	Terminal Connection
DRD	10.00	3.0	RJ11/RJ12

5-WAY SPLITTER

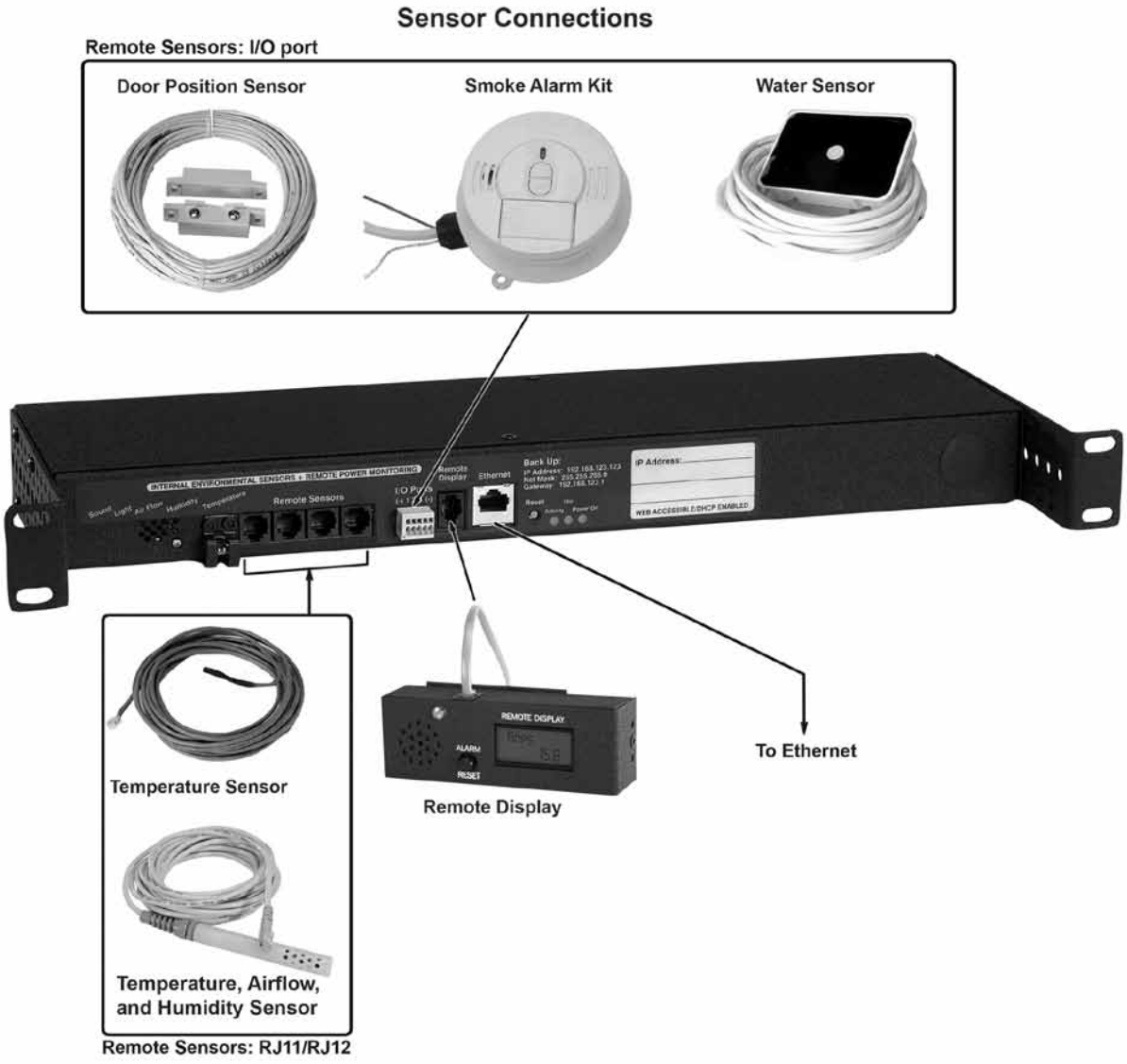
Allows 5 remote sensors to connect to one RJ11/RJ12 receptacle on a PDU, Control Unit or Environmental Monitor.

BULLETIN: DTHRM

Catalog Number	Description	Terminal Connection
DSPLIT	5-Way Splitter	RJ11/RJ12

SENSOR CONNECTION SUMMARY

Remote Sensor Catalog Number	Description	RJ11 / RJ12	I/O Port	RJ45
DST	Temperature Sensor	•		
DSTA	Temperature and Airflow Sensor	•		
DSTAH	Temperature, Airflow and Humidity Sensor	•		
DSD	Door Sensor		•	
DSW	Water Sensor		•	
DSSK	Smoke Alarm Kit		•	
DSCP	City Power Monitor		•	
DPS_	Satellite PDU	•		



SMART PDU SOFTWARE APPLICATION

The complete PDU and environmental monitoring system can be programmed and controlled online from a computer, PDA or WAP terminal.

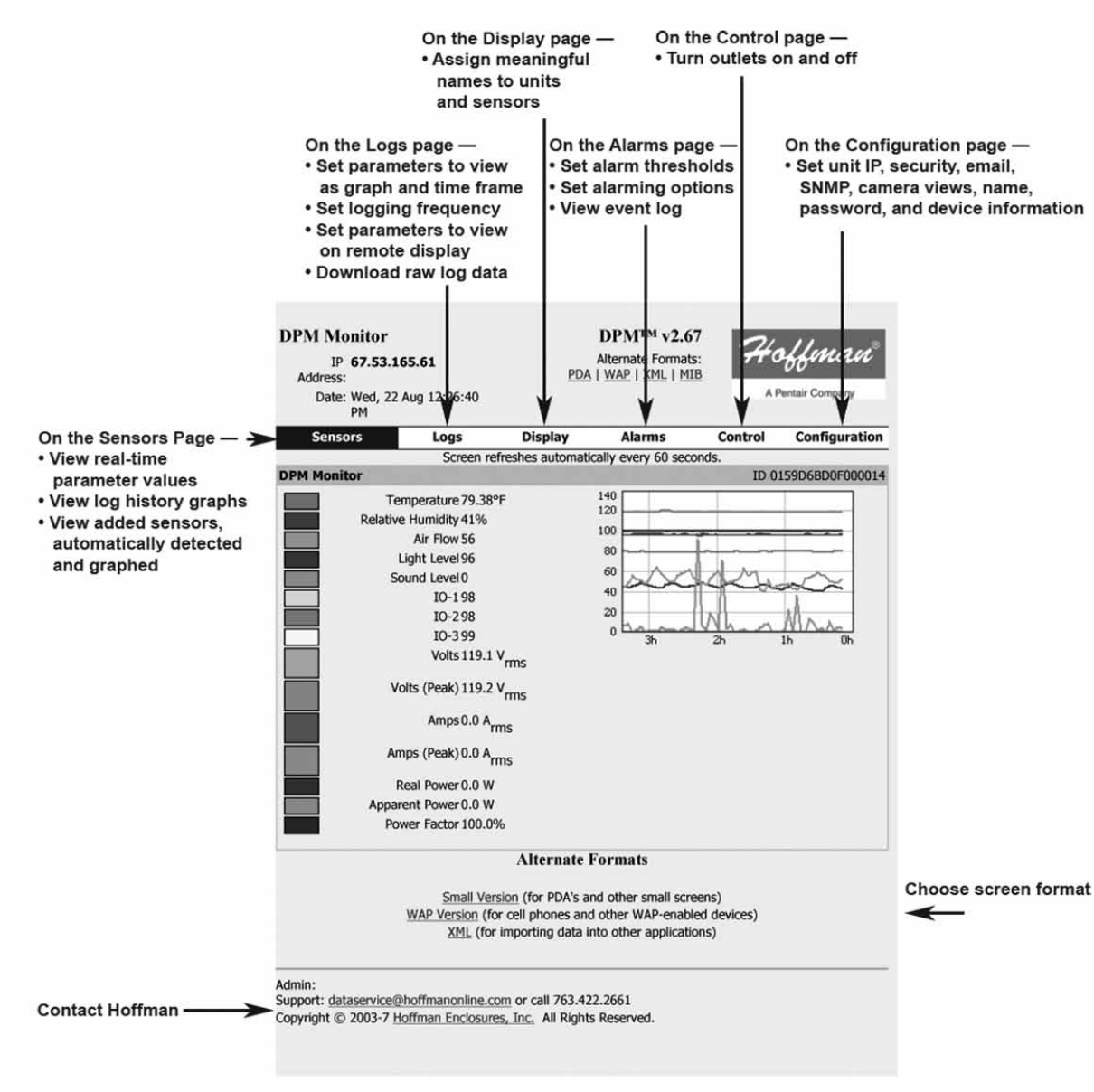
- Integral software interfaces with the remote display and web camera
- Time is automatically set via internet time servers
- Static IP for viewing by web browser
- DHCP IP assignments

Network Protocols Supported

- DHCP
- HTTPS (SSL/TLS)
- SMTP/POP3
- HTTP
- ICMP
- TCP/IPMP

Data Access Formats

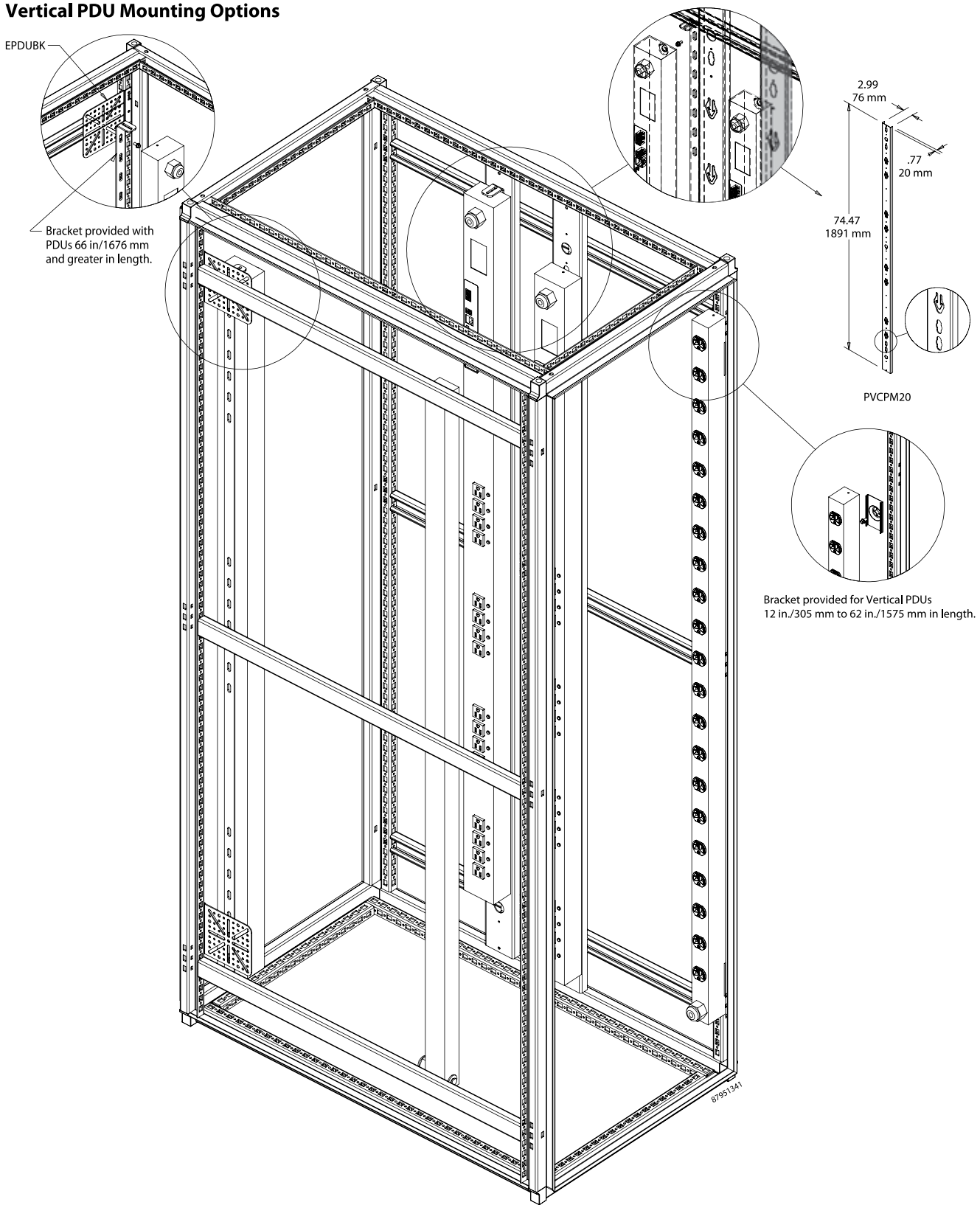
- HTML
- CVS/Plain Text
- WAP
- PDA-formatted HTML
- SNMP
- Telnet
- XML



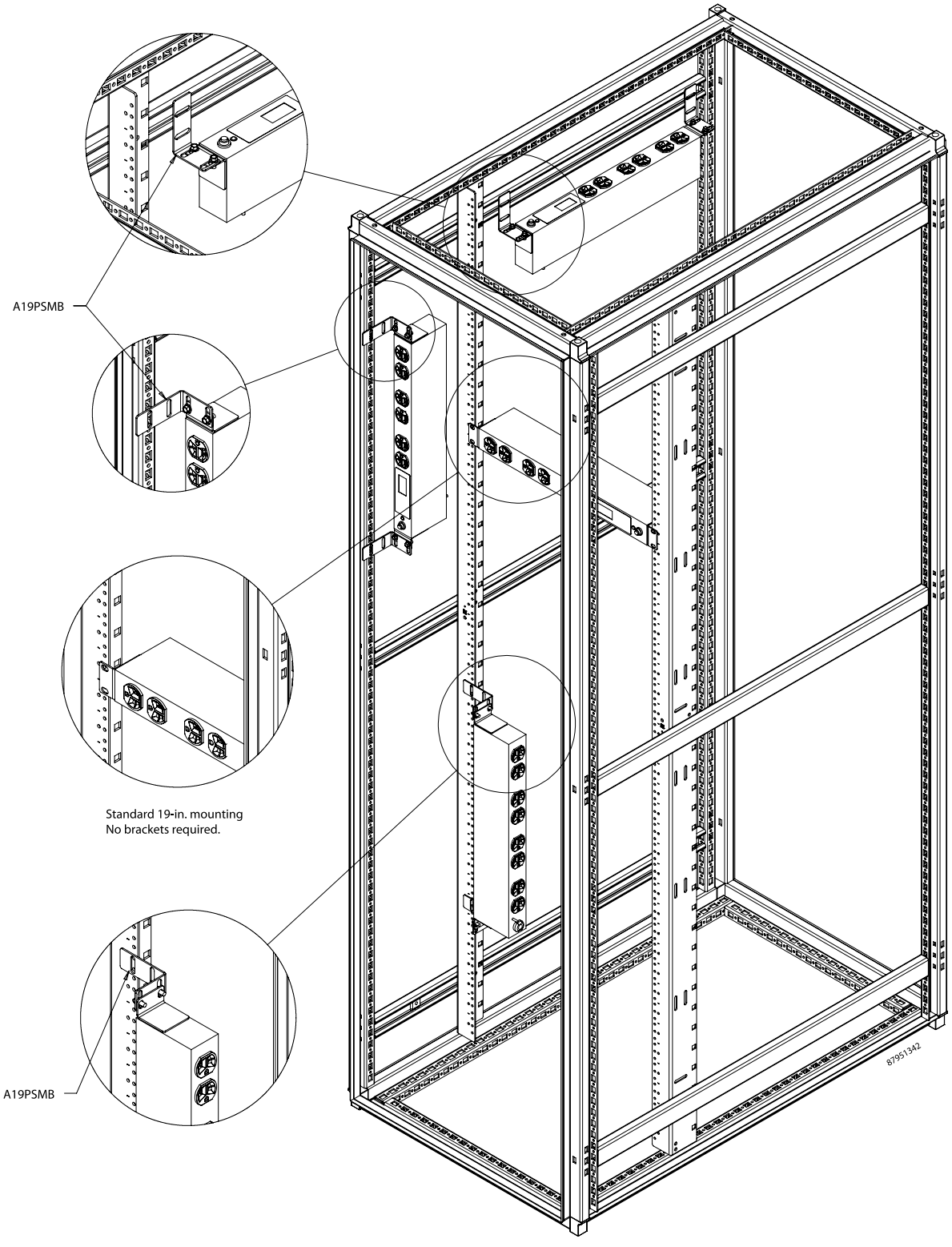
SMART PDU COMPONENT APPLICATION

Remote sensors and displays, environmental monitors and smoke alarms help to build a system that fits the unique requirements of each individual installation.

Vertical PDU Mounting Options



Horizontal PDU Mounting Options



Notes