

20 Amp PanView iQ™ (PViQ™) Switched with Per Outlet Monitoring and Environmental Power Outlet Units

PANDUIT® SPECIFICATION SHEET

specifications

PViQ™ Power Outlet Units shall integrate with the Panduit® PIM™ Software Platform to enable intelligent management of the in-cabinet power usage. This system helps to quickly identify and resolve power issues, find and reclaim available or underutilized power capacity and automate collection of real-time and accurate power information. The units shall have the ability to power cycle individual outlets or a group of outlets on or off to reboot equipment. They shall have remote per outlet monitoring for power consumption and environmental capability to monitor temperature, airflow, humidity or dew point. The units are capable of mounting vertically to the Net-Access™ Cabinets, Net-Serv™ Cabinets or Panduit 4 post racks. The vertical power outlet units shall have 20 amp circuits, which have multiple outlet options with standard IEC compliant receptacles. Power outlet units shall have a black powder-coated finish, with a 10 foot cord using NEMA twist lock plugs. Installed units shall allow quick and easy firmware updates.



technical information

Dimensions:	QL0B1F0BA2411: 66.3"H x 2.5"W x 2.3"D (1683mm x 64mm x 57mm)
	QL0D1K0BA2411: 66.3"H x 2.5"W x 2.3"D (1683mm x 64mm x 57mm)
	QLOB1J0BA2411: 66.3"H x 2.5"W x 2.3"D (1683mm x 64mm x 57mm)
Power outlet unit mounting:	Vertical power strips provide multiple outlets and do not occupy any rack spaces
Power outlet unit packaging:	All power outlet units include 10' power cords, mounting brackets, screws, and tool-less button mounting

key features and benefits

Remote switching capability	Power cycle individual outlets or a group of outlets on or off to reboot equipment or power off individual outlets to stop unauthorized use
Per outlet monitoring	Provides data to determine if power allocations are accurate and the efficiency metric of any server in the data center allowing individual servers to be identified as candidates for additional capacity, redeployment or decommissioning, improving overall data center efficiency
Time delay sequencing	To avoid circuit overload due to high inrush current at equipment start up
Remote access to power consumption data	Web-based GUI provides global network access to real-time power information to improve data center energy efficiency and reduce operating costs through analysis of power usage and trends
Integrates with Panduit® PIM™ Software	Aggregates power and environmental information through a single web based GUI to facilitate easy analysis of data
Environmental monitoring	Measure in-cabinet temperature, humidity, airflow, and dew point remotely to prevent environmental factors that can cause equipment to overheat or malfunction
Alarm messaging capability	Provides user-defined alarm/messaging capabilities for specific events that exceeded thresholds to help minimize network downtime
Certification/agency approvals	Complies with UL and c-UL Listed 60950
Outlet status	Each outlet has a green LED for indication if the outlet is on or off for easy visual identification

applications

Panduit PViQ™ Switched Power Outlet Units can either be utilized standalone for smaller installations or seamlessly feed information directly into the Physical Infrastructure Manager™ (PIM™) Software Platform for larger data centers. The PViQ™ POU's provide continuous real-time power and environmental monitoring via the network for enhanced system management and reliability.

The PViQ™ POU's safely and efficiently manage and distribute power to allow multiple pieces of equipment to share a single power connector to enhance scalability of network build outs. Mounting flexibility allows quick and easy installation and when used with Panduit® Net-Access™ and Net-SERV™ Cabinets the user receives a complete networking solution that will satisfy data center requirements today and into the future.

www.panduit.com

PIM™ Software Platform and Modules

Base functionality module:	PIM-BASE
Power module:	PIM-POWER

PViQ™ C14 Power Cord Adapters

US:	PVQ-C14ADPTR-S
Japan:	PVQ-C14ADPTR-J

Vertical Single Phase, 208V, 20A, 21 IEC-13 and 3 IEC-19 Outlets

Outlet monitoring:	QL0B1F0BA2411
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Vertical 3~ WYE, 208V, 20A, 21 IEC-13 and 3 IEC-19 Outlets

Outlet monitoring:	QLOB1J0BA2411
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Vertical 3~ Phase 230/400V 20A, 21 IEC-13 and 3 IEC-19 Outlets

Outlet monitoring:	QL0D1K0BA2411
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PViQ™ Remote Display Monitor

10' cord:	PVQ-RD
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PViQ™ Environmental Sensors

Temperature 12' cord:	PVQ-EST-12
Temperature, humidity, airflow, dew point, 12' cord:	PVQ-ESTAFHD-12

PViQ™ Environmental Splitter

RJ12 five-way:	PVQ-ESP-5
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Net-Access™ Server Cabinet

32"W x 45 RU:	CS1, CS2 and CS3
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Net-Access™ Switch Cabinet

32"W x 45 RU:	CN1, CN2 and CN3
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Net-SERV™ High Density Server Cabinet with Solid Side Panels

28"W x 42 RU:	S722C122H
28"W x 45 RU:	S752C122H
24"W x 42 RU:	S622C122H
24"W x 45 RU:	S652C122H

Net-SERV™ Standard Density Server Cabinet with Solid Side Panels

28"W x 42 RU:	S722C122F
28"W x 45 RU:	S752C122F
24"W x 42 RU:	S622C122F
24"W x 45 RU:	S652C122F

Net-SERV™ Vertical Patch Panel Server Cabinet with Solid Side Panels

28"W x 42 RU:	S722C122P
28"W x 45 RU:	S752C122P

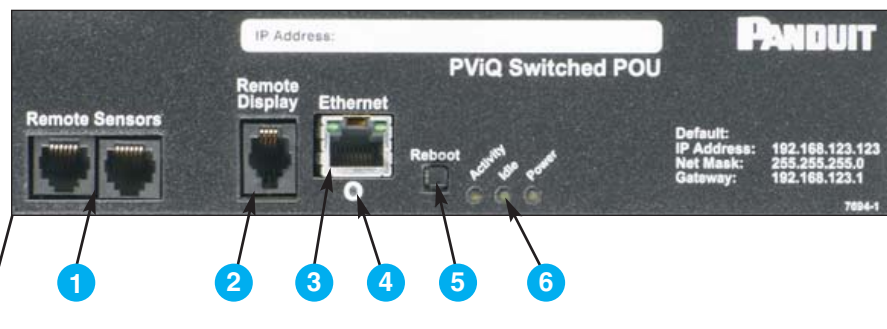
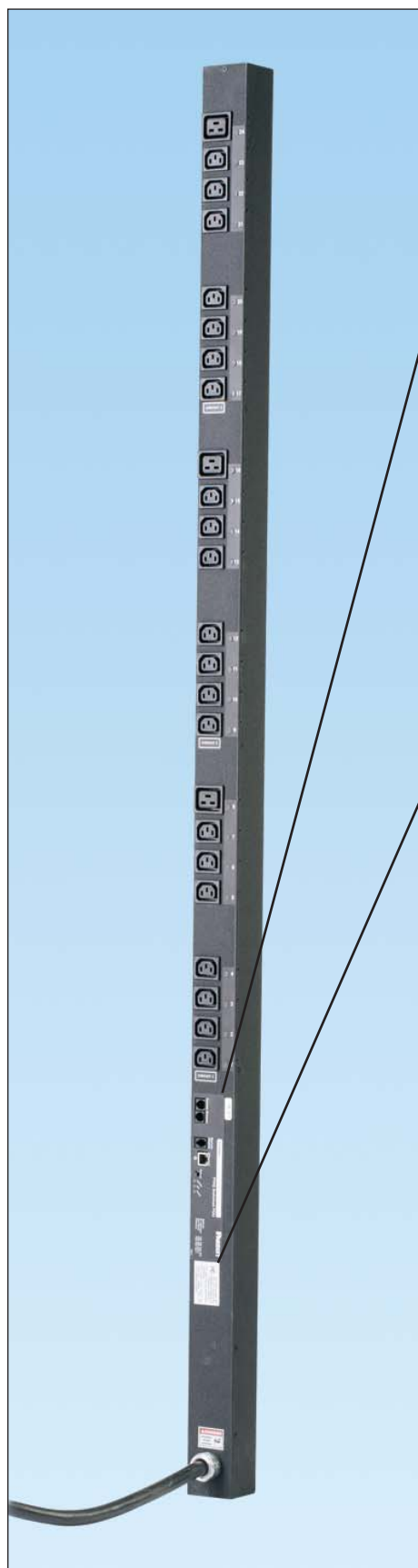
Net-SERV™ Vertical Exhaust Duct Server Cabinet with One Solid Side Panel

28"W x 42 RU:	S722C131HV
28"W x 45 RU:	S752C131HV
24"W x 42 RU:	S622C131HV
24"W x 45 RU:	S652C131HV

Power Cord C13 – C14 End

1.5 foot:	PC14C13BL1.5
2 foot:	PC14C13BL2
3 foot:	PC14C13BL3

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1 Remote Sensors

- Two RJ12 connector ports to monitor temperature and humidity
- Receive SNMP-based or email alert notifications when conditions exceed defined thresholds

2 Remote Display Connection

- Optional 2 line x 8 character LED display (sold separately part number PVQ-RD)
- Based on checked sensor items selected on the Logging screen, the monitor will scroll through and display each measurement
- Can be mounted separate from the unit
- Provides real-time power consumption at the power strip, for improved power manageability and network reliability
- Scrolls through the most recent current measurement (in amps) for each circuit, one at a time
- Local audible alarm when threshold limits have been reached

3 Network Connection

- RJ45 connections for remote power monitoring

4 IP Reset

- Resets the IP address

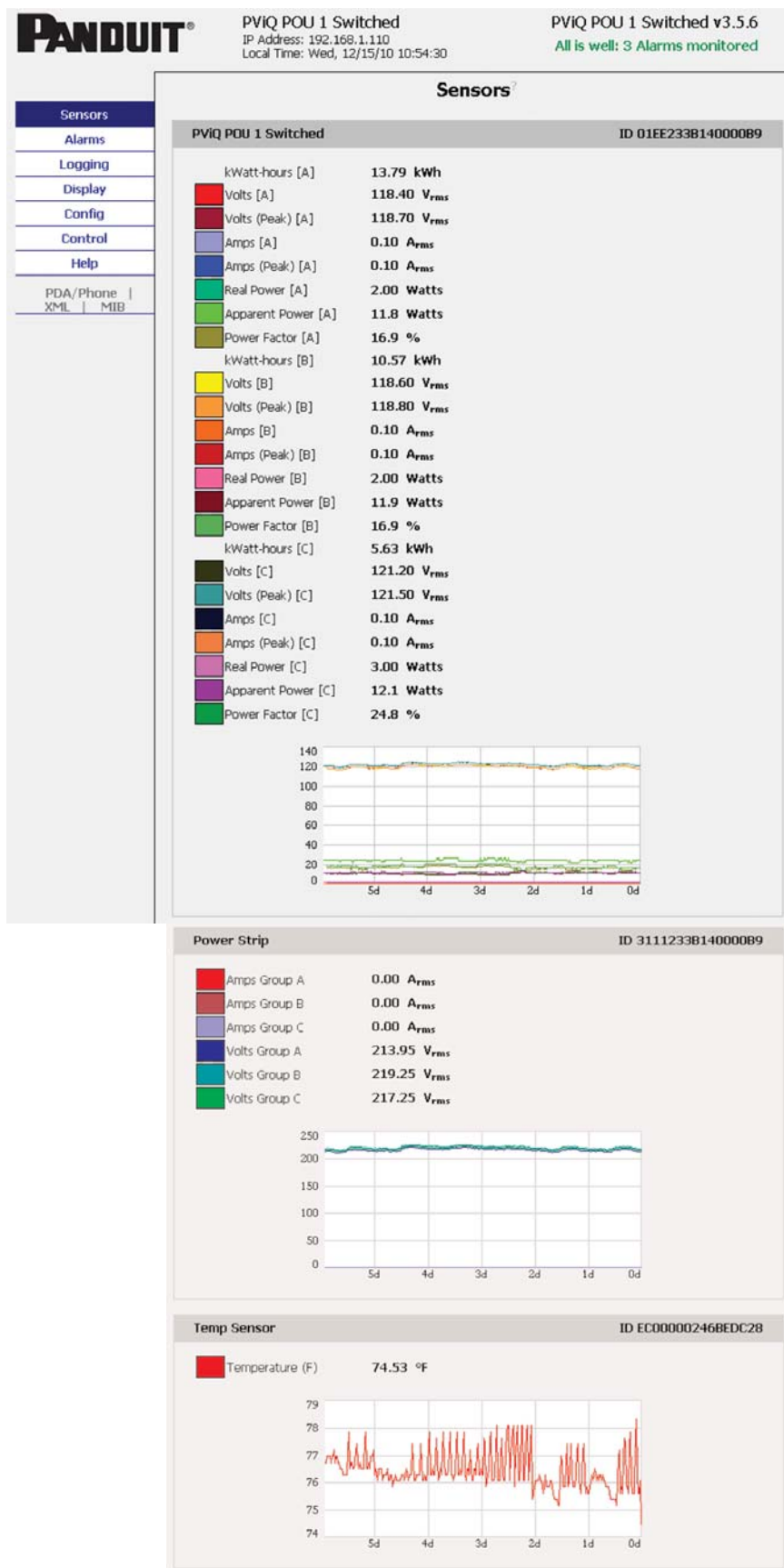
5 Resetting the POU

- If communication is lost, the processor maybe manually rebooted without affecting power to the outlets

6 POU Lights

- Activity and Idle lights will light up when the reset button is used to restore the default IP address. Power light indicates unit is on

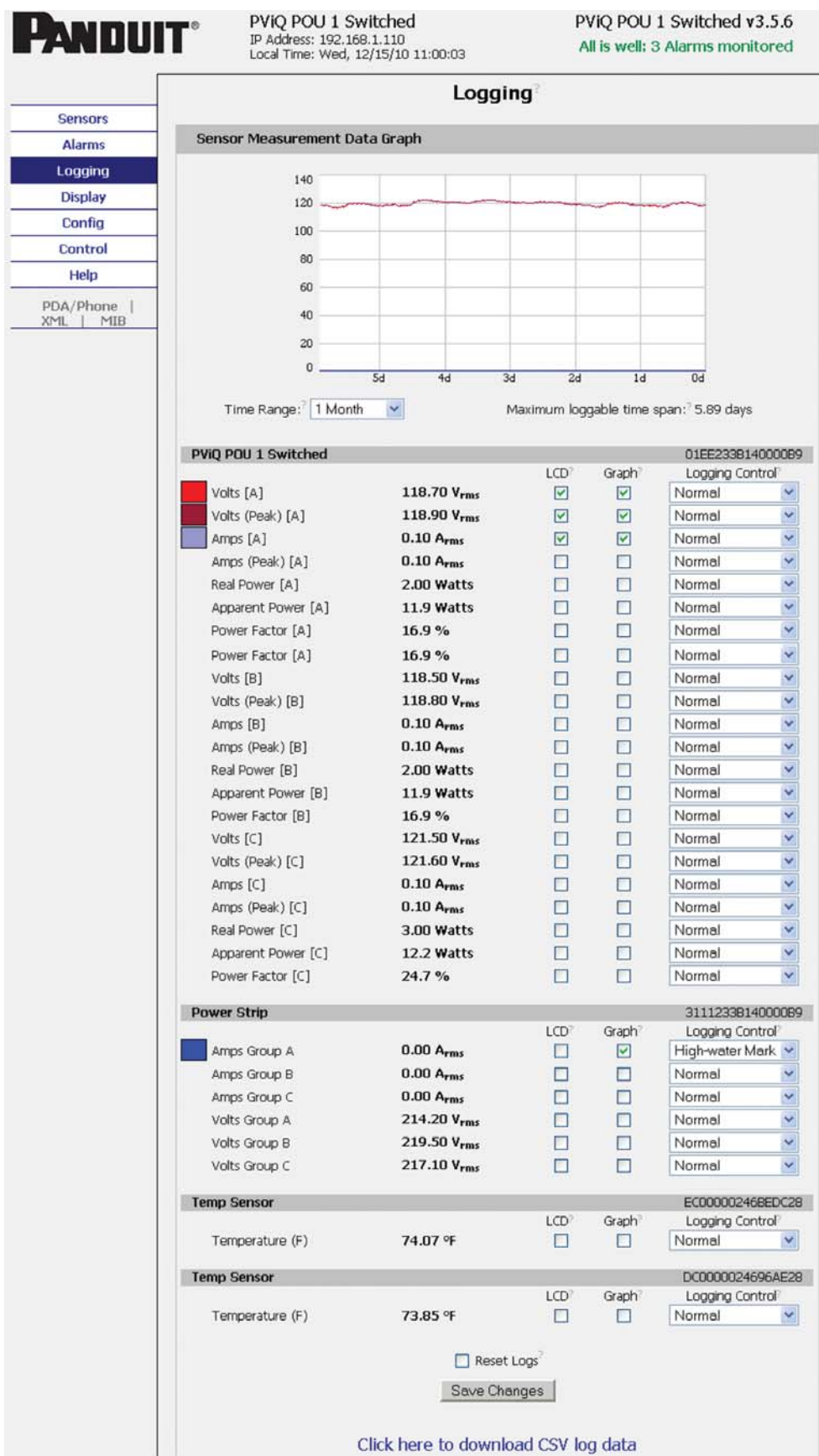
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Sensors

- Provides real time current power information via a standard web browser
- Real time readings provide power and sensor data graphed

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Logging

- Provides historical data by selecting the desired sensors and time range to be graphed
- Checked readings in the Logged Measurements section are logged into the data file at a rate of one point per minute and will be available for graphing and display
- Recorded data is available for download in a comma-separated values (CSV) file

20 Amp PanView iQ™ (PViQ™) Switched with Per Outlet Monitoring and Environmental Power Outlet Units



PViQ POU 1 Switched
IP Address: 192.168.1.110
Local Time: Thu, 01/06/11 11:38:09

PViQ POU 1 Switched v3.5.6
All is well: 3 Alarms monitored

- Sensors
 - Alarms**
 - Logging
 - Display
 - Config
 - Control
 - Help
- PDA/Phone | XML | MIB

Alarms?

PViQ POU 1 Switched

ID 01EE233B140000B9

kWatt-hours [A]
trips if Below
threshold: -999.0

Alarm must remain tripped for
0 min before notification?
Repeat every: No Repeat

E-mail
gni@testdomain.local
(E-mail 2)
(E-mail 3)

Untripped

Save Changes

Add New Alarm

Power Strip

ID 3111233B140000B9

Add New Alarm

Temp Sensor

ID EC00000246BEDC28

Temperature (F)
trips if Above
threshold: 90.0

Alarm must remain tripped for
0 min before notification?
Repeat every: 10 min

(E-mail 4)
(E-mail 5)
Traps
192.168.0.78:162

Untripped

Save Changes

Add New Alarm

Temp Sensor

ID DC0000024696AE28

Temperature (C)
trips if Below
threshold: -999.0

Alarm must remain tripped for
0 min before notification?
Repeat every: No Repeat

E-mail
gni@testdomain.local
(E-mail 2)
(E-mail 3)

Untripped

Save Changes

Add New Alarm

Alarm Behavior

Unplugged Alerts: Enabled

Save Changes

Unit Location:
Unit Description: 00 19 85 E0 3D AC
Admin: or Call
Support: Manuals, cs@panduit.com or Call 800 777 3300
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Alarms

- Alarm status provided if defined thresholds are greater than entered
- Allows the user to establish alarm conditions for each sensor reading
- Alarm conditions can be established with either high or low trip thresholds

20 Amp PanView iQ™ (PViQ™) Switched with Per Outlet Monitoring and Environmental Power Outlet Units



PViQ POU 1 Switched
IP Address: 192.168.1.110
Local Time: Wed, 12/15/10 11:09:46

PViQ POU 1 Switched v3.5.6
All is well: 3 Alarms monitored

Sensors

Alarms

Logging

Display

Config

Control

Actions

Settings

Help

PDA/Phone |
XML | MIB

Control?

PViQ POU 1 Switched Control

Group A		213.80 V		0.00 A _{rms}			
<input type="checkbox"/>	Outlet	Name	Status	A _{rms}	kWh	Watts	URL
<input type="checkbox"/>	1	Outlet 1	On	0.00	1.399	0	
<input type="checkbox"/>	2	Outlet 2	On	0.00	0.020	0	
<input type="checkbox"/>	3	Outlet 3	On	0.00	0.010	0	
<input type="checkbox"/>	4	Outlet 4	On	0.00	0.003	0	
<input type="checkbox"/>	5	Outlet 5	On	0.00	17.763	0	
<input type="checkbox"/>	6	Outlet 6	On	0.00	0.011	0	
<input type="checkbox"/>	7	Outlet 7	On	0.00	0.003	0	
<input type="checkbox"/>	8	Outlet 8	On	0.00	0.005	0	

Group B		218.95 V		0.00 A _{rms}			
<input type="checkbox"/>	Outlet	Name	Status	A _{rms}	kWh	Watts	URL
<input type="checkbox"/>	9	Outlet 9	On	0.00	13.392	0	
<input type="checkbox"/>	10	Outlet 10	On	0.00	0.016	0	
<input type="checkbox"/>	11	Outlet 11	On	0.00	0.003	0	
<input type="checkbox"/>	12	Outlet 12	On	0.00	0.008	0	
<input type="checkbox"/>	13	Outlet 13	On	0.00	0.017	0	
<input type="checkbox"/>	14	Outlet 14	On	0.00	0.003	0	
<input type="checkbox"/>	15	Outlet 15	On	0.00	0.008	0	
<input type="checkbox"/>	16	Outlet 16	On	0.00	0.004	0	

Group C		216.80 V		0.00 A _{rms}			
<input type="checkbox"/>	Outlet	Name	Status	A _{rms}	kWh	Watts	URL
<input type="checkbox"/>	17	Outlet 17	On	0.00	0.009	0	
<input type="checkbox"/>	18	Outlet 18	On	0.00	0.003	0	
<input type="checkbox"/>	19	Outlet 19	On	0.00	0.011	0	
<input type="checkbox"/>	20	Outlet 20	On	0.00	0.008	0	
<input type="checkbox"/>	21	Outlet 21	On	0.00	0.003	0	
<input type="checkbox"/>	22	Outlet 22	On	0.00	0.012	0	
<input type="checkbox"/>	23	Outlet 23	On	0.00	0.008	0	
<input type="checkbox"/>	24	Outlet 24	On	0.00	0.001	0	

Action?

Execute

Control

- The Actions tab on the Control page gives the user control of the outlets
- Outlets can be rebooted or turned on/off with or without pre-programmed delays

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PViQ POU 1 Switched
IP Address: 192.168.1.110
Local Time: Wed, 12/15/10 11:16:15

PViQ POU 1 Switched v3.5.6
All is well: 3 Alarms monitored

Sensors

Alarms

Logging

Display

Config

Network

Monitoring

Diagnostics

Event Log

Admin

Control

Help

PDA/Phone | XML | MIB

Configuration

Network
Current Network Configuration set statically

- ☐ Use DHCP for Network Configuration and DNS Server Addresses
- ☐ Use DHCP for Network Configuration and Static DNS server addresses:
- ☒ Use Static Network Configuration and DNS server addresses:

IP Address:

Subnet Mask:

Gateway:

Primary DNS Server:

Secondary DNS Server:

Save Changes

Web Server

Protocols:

HTTP Port:

HTTPS Port:

Telnet Service:

Save Changes

Unit Location:
Unit Description: 00 19 85 E0 3D AC
Admin: or Call
Support: [Manuals](#), cs@panduit.com or Call 800 777 3300
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Configuration

- Simple network configuration for easy setup

20 Amp PanView iQ™ (PViQ™) Switched with Per Outlet Monitoring and Environmental Power Outlet Units



PVQ-EST-12

Temperature range: -40°F to 254°F
Accuracy: +/- 1.8°F from 40°F to 122°F
Monitor "hot spots" throughout your installation.



PVQ-ESTAFHD-12

Temperature range: -40°F to 254°F
Accuracy: +/- 9°F from 50°F to 185°F
Airflow: 0-99 – relative
Humidity: RH Accuracy +/- 2% RH,
Range: 0 to 100% RH, non-condensing
Single cord monitors four environmental conditions.



PVQ-ESP-5

Expand the number of sensors connected to your unit with RJ12 sensor ports.



PVQ-RD

The local display can be mounted outside the cabinet for ease of viewing power/environmental data without opening the cabinet.

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For a copy of Panduit product warranties, log on to www.panduit.com/warranty

For more information

Visit us at www.panduit.com

Contact Customer Service by email: cs@panduit.com
or by phone: 800.777.3300 and reference PVSP60

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