

# 30, 50, and 60 Amp PanView iQ™ (PViQ™) Switched and Environmental Power Outlet Units

## 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 monitoring for power consumption and environmental capability to monitor temperature, airflow, humidity or dew point. The units shall mount vertically to the Net-Access™ Cabinets, Net-SERV® Cabinets or Panduit 4 post racks. The vertical power outlet units shall have 30 amp circuits, which have multiple outlet options with standard IEC compliant locking receptacles. Power outlet units shall have a black power coated finish with a 10 foot cord utilizing NEMA, California and IEC style plugs. Installed units shall allow quick and easy firmware updates.



## technical information

<b>Dimensions:</b>	QS1A1M2BM24C1: 70.0"H x 2.5"W x 2.3"D (1683mm x 64mm x 57mm) QS1B1L2BN24AA1: 70.0"H x 2.5"W x 2.3"D (1778mm x 64mm x 57mm) QS1B1P3BN2491: 72.3"H x 2.5"W x 2.3"D (1829mm x 64mm x 57mm) QS1D1Q3BN2401: 72.0"H x 2.5"W x 2.3"D (1829mm x 64mm x 57mm) QS1B1P3BN2401: 72.0"H x 2.5"W x 2.3"D (1829mm x 64mm x 57mm) QS1B1N3BN2401: 72.0"H x 2.5"W x 2.3"D (1829mm x 64mm x 57mm) QS1B2T6BN2491: 66.3"H x 4.0"W x 3.4"D (1683mm x 102mm x 86mm) QS1B2G6BN2491: 66.3"H x 4.0"W x 3.4"D (1683mm x 102mm x 86mm)
<b>Power outlet unit mounting:</b>	Vertical power strips provide multiple outlets and do not occupy any rack spaces
<b>Power outlet unit packaging:</b>	All power outlet units include 10' power cords, mounting brackets, screws, and tool-less button mounting

## key features and benefits

<b>Remote switching capability</b>	Power cycle individual outlets or a group of outlets on or off to reboot equipment or power off individual outlets to stop unauthorized use
<b>Time delay sequencing</b>	To avoid circuit overload due to high inrush current at equipment start up
<b>Remote access to power consumption data</b>	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
<b>Integrates with Panduit® PIM™ Software</b>	Aggregates power and environmental information through a single web based GUI to facilitate easy analysis of data
<b>Environmental monitoring</b>	Measure in-cabinet temperature, humidity, airflow, and dew to prevent environmental factors that can cause equipment to overheat or malfunction
<b>Locking IEC receptacles</b>	Support and retain any standard IEC power cords preventing unintentional power loss
<b>Alarm messaging capability</b>	Provides user-defined alarm/messaging capabilities for specific events that exceeded thresholds to help minimize network downtime
<b>Certification/agency approvals</b>	Complies with UL and c-UL Listed 60950
<b>Integrated power</b>	On board display has 2 line x 8 character LED providing real-time power consumption at the power strip
<b>Outlet status</b>	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](http://www.panduit.com)

# PANDUIT®

## SPECIFICATION SHEET

### PIM™ Software Platform and Modules

<b>Base functionality module:</b>	PIM-BASE
<b>Power module:</b>	PIM-POWER

### PViQ™ C14 Power Cord Adapters

<b>US:</b>	PVQ-C14ADPTR-S
<b>Japan:</b>	PVQ-C14ADPTR-J

### Vertical Single Phase 120V, 30A, 24 NEMA 5-15 Outlets

**Aggregate monitoring:** QS1A1M2BM24C1

### Vertical Single Phase, 208V, 30A, 20 IEC 13 and 4 IEC-19 Locking receptacles

**Aggregate monitoring:** QS1B1L2BN24AA1

### Vertical 3~ WYE 208V, 30A, 18 IEC-13 and 6 IEC-19 Locking receptacles

**Phase monitoring (X, Y, Z):** QS1B1P3BN2491

### Vertical 3~ WYE 208/400V, 30A, 21 IEC-13 and 3 IEC-19 Locking receptacles

**Phase monitoring (X, Y, Z):** QS1D1Q3BN2401

### Vertical 3~ WYE 208V, 30A, 21 IEC-13 and 3 IEC-19 Locking receptacles

**Phase monitoring (X, Y, Z):** QS1B1P3BN2401

### Vertical 3~ Delta 208V, 30A, 21 IEC-13 and 3 IEC-19 Locking Outlets

**Phase monitoring (X, Y, Z):** QS1B1N3BN2401

### Vertical 3~ Delta 208V, 50A, 18 IEC-13 and 6 IEC-19 Locking Outlets

**Phase monitoring (X, Y, Z):** QS1B2T6BN2491

### Vertical 3~ Delta 208V, 60A, 18 IEC-13 and 6 IEC-19 Locking Outlets

**Phase monitoring (X, Y, Z):** QS1B2G6BN2491

### PViQ™ Remote Display Monitor

**10' cord:** PVQ-RD

### PViQ™ Environmental Sensors

<b>Temperature 12' cord:</b>	PVQ-EST-12
<b>18' cord:</b>	PVQ-EST-18
<b>Temperature, humidity, airflow, dew point, 12' cord:</b>	PVQ-ESTAFHD-12
<b>18' cord:</b>	PVQ-ESTAFHD-18
<b>Door position 30' cord:</b>	PVQ-ESDPK
<b>Water sensor 20' cord:</b>	PVQ-ESWK

### PViQ™ Environmental Splitter

**RJ12 five-way:** PVQ-ESP-5

### Net-Access™ Server Cabinet

**32"W x 45 RU:** CS1, CS2 and CS3

### Net-Access™ Switch Cabinet

**32"W x 45 RU:** CN1, CN2 and CN3

### Net-SERV® High Density Server Cabinet with Solid Side Panels

<b>28"W x 42 RU:</b>	S722C122H
<b>28"W x 45 RU:</b>	S752C122H
<b>24"W x 42 RU:</b>	S622C122H
<b>24"W x 45 RU:</b>	S652C122H

### Net-SERV® Standard Density Server Cabinet with Solid Side Panels

<b>28"W x 42 RU:</b>	S722C122F
<b>28"W x 45 RU:</b>	S752C122F
<b>24"W x 42 RU:</b>	S622C122F
<b>24"W x 45 RU:</b>	S652C122F

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

<b>28"W x 42 RU:</b>	S722C122P
<b>28"W x 45 RU:</b>	S752C122P

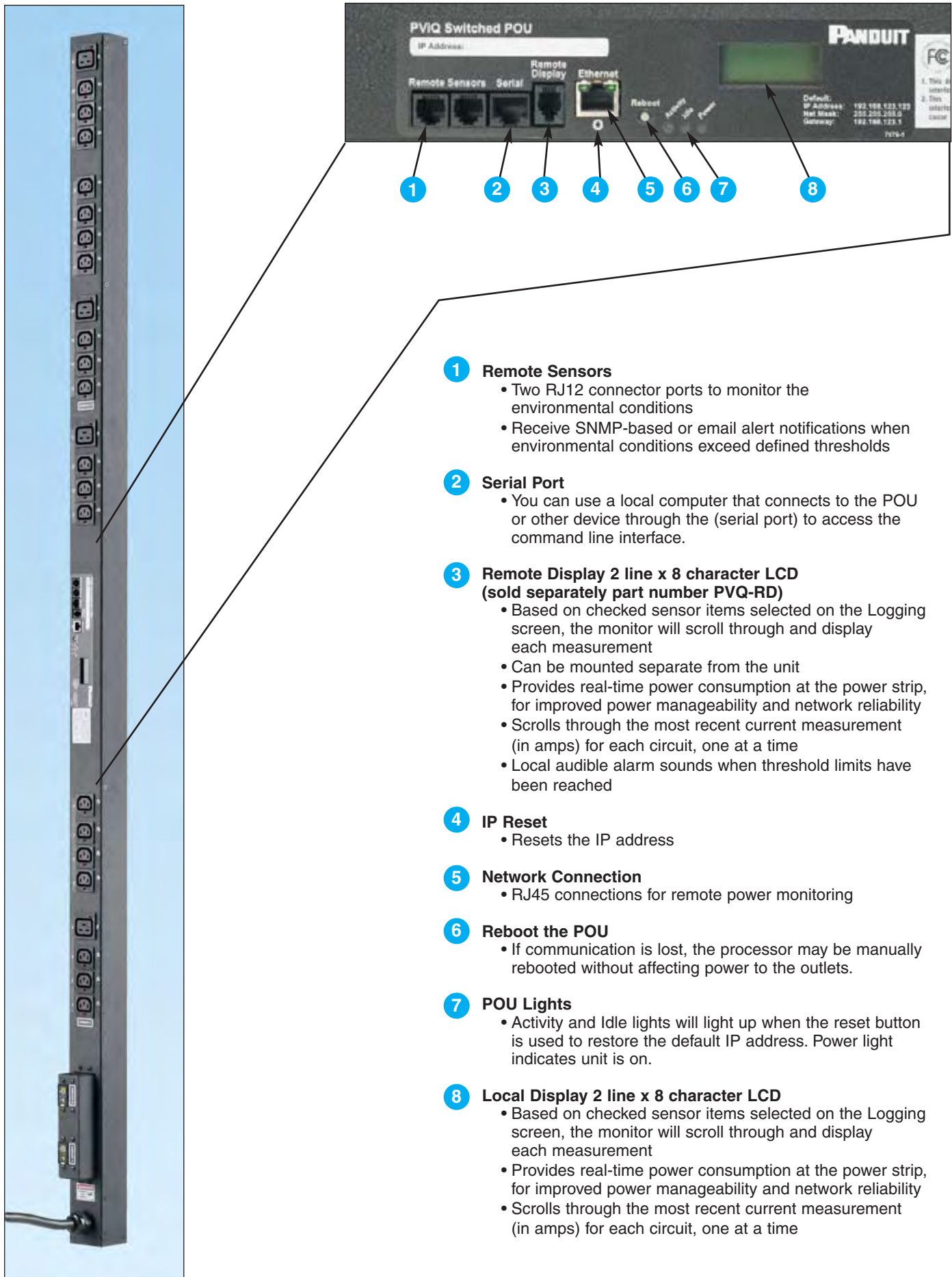
### Net-SERV® Vertical Exhaust Duct Server Cabinet with One Solid Side Panel

<b>28"W x 42 RU:</b>	S722C131HV
<b>28"W x 45 RU:</b>	S752C131HV
<b>24"W x 42 RU:</b>	S622C131HV
<b>24"W x 45 RU:</b>	S652C131HV

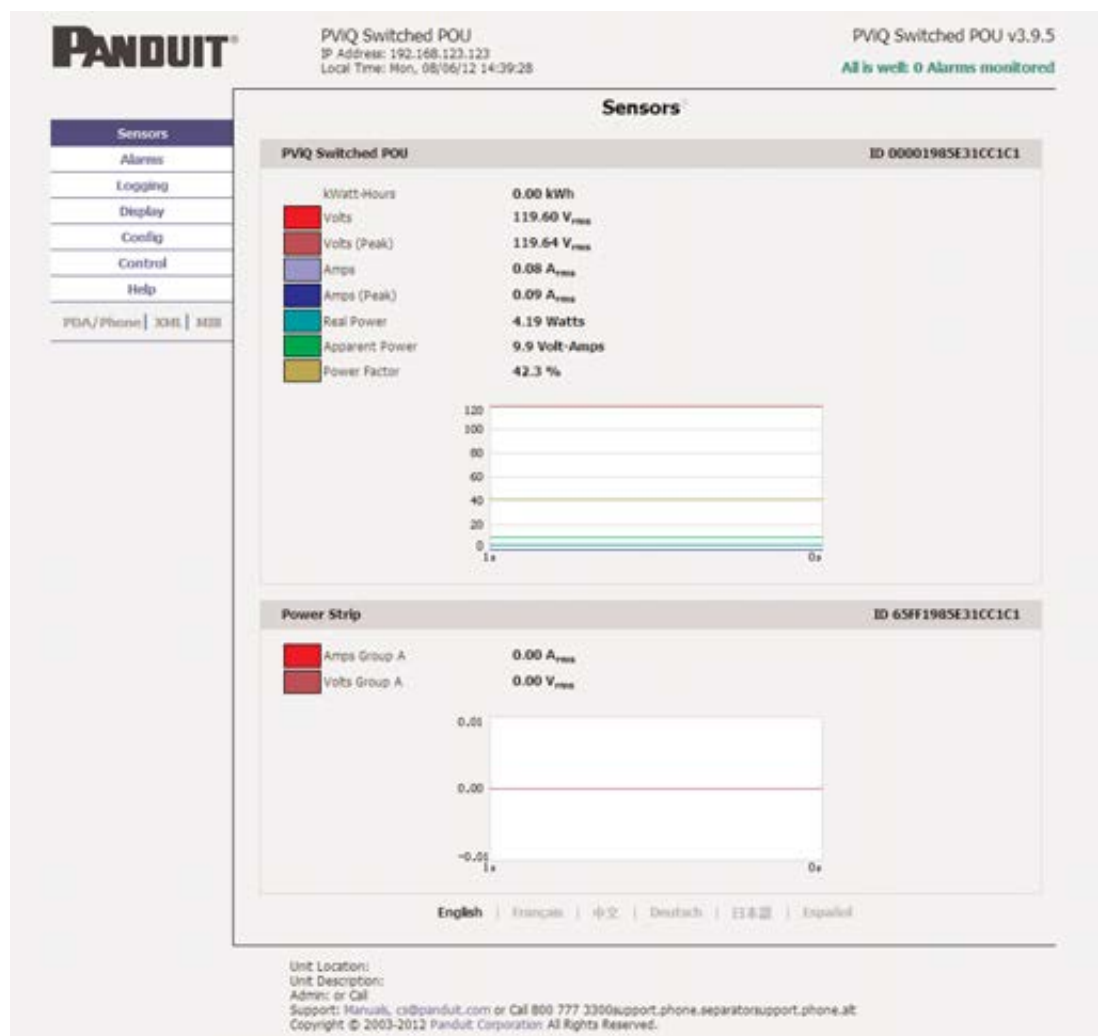
### Power Cord C13 – C14 End

<b>1.5 foot:</b>	PC14C13BL1.5
<b>2 foot:</b>	PC14C13BL2
<b>3 foot:</b>	PC14C13BL3

# 30, 50, and 60 Amp PanView iQ™ (PViQ™) Switched and Environmental Power Outlet Units



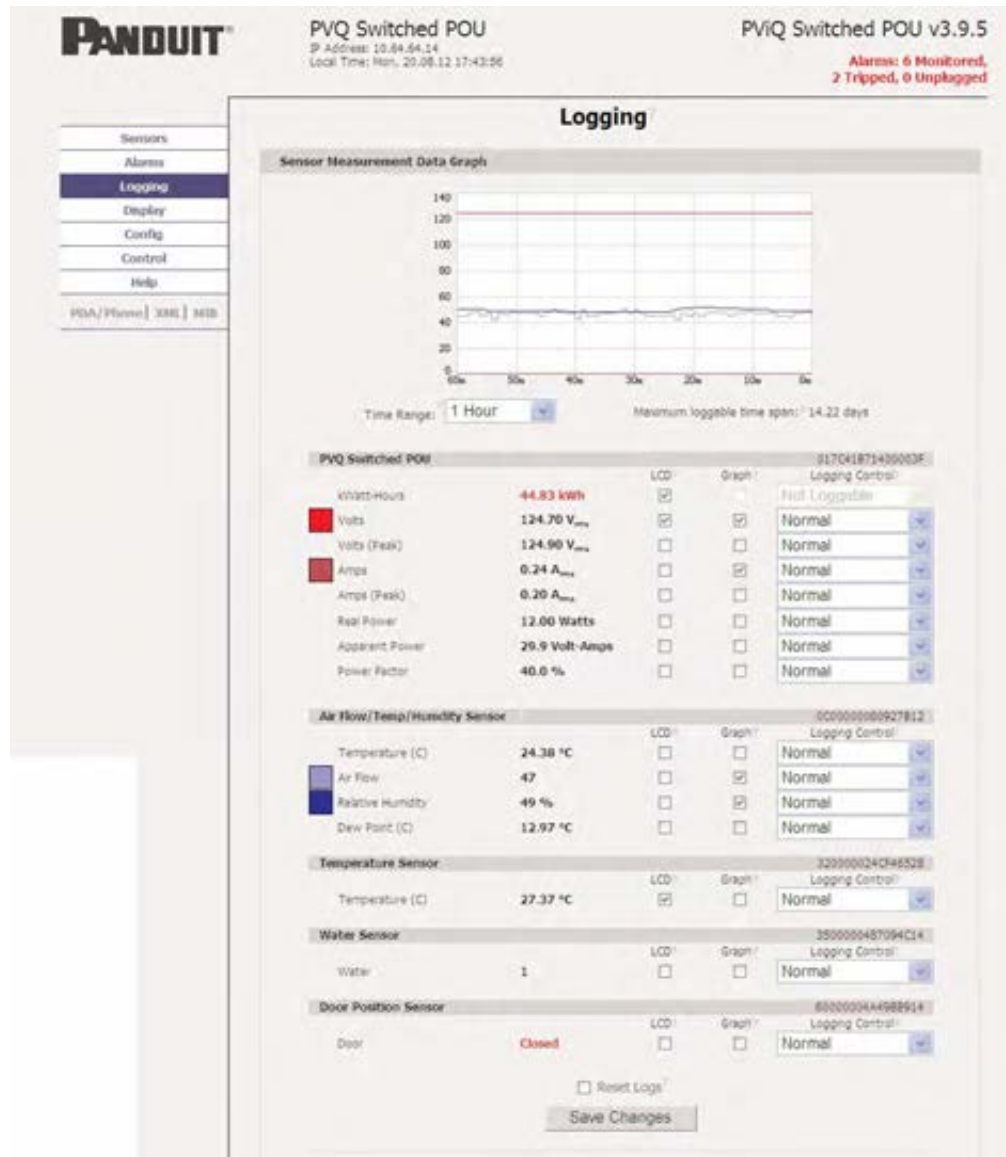
# 30, 50, and 60 Amp PanView iQ™ (PViQ™) Switched and Environmental Power Outlet Units



## Sensors

- Provides real time current power information via a standard web browser
- Real time readings provide power and sensor data graphed
- Alternate formats for data can be downloaded in PDA, XML and SNMP

# 30, 50, and 60 Amp PanView iQ™ (PViQ™) Switched and Environmental Power Outlet Units



## Logging

- Check boxes under the LCD or graph heading allow the user to select which readings are to be on the local meter
- Logging Control allows the user to select between different modes of logging data, data logged once per minute, high value logged each minute or low value logged each minute Check boxes under the LCD or graph heading allow the user to select which readings are to be on the local meter
- Logging Control allows the user to select between different modes of logging data, data logged once per minute, high value logged each minute or low value logged each minute
- 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

# 30, 50, and 60 Amp PanView iQ™ (PViQ™) Switched and Environmental Power Outlet Units

**PANOUT**

PVQ Switched POU  
IP Address: 10.64.64.14  
Local Time: Mon, 20.08.12 16:28:09

PViQ Switched POU v3.9.5  
Alarms: 6 Monitored,  
2 Tripped, 0 Unplugged

Sensors

**Alarms**

Logging

Display

Config

Control

Help

PDA/Phone | 30A | 888

**Alarms**

Q50A1C08A24C1

ID 017C41B71400003F

kWh-Hours [Total]

trip if Above

threshold: 16.0

Alarm must remain tripped for

3 (min) before notification

Repeat every: 10 min

f-mail

☒ (f-mail 1)

Tripped

kWh-Hours

trip if Below

threshold: -999.0

Alarm must remain tripped for

0 (min) before notification

Repeat every: No Repeat

f-mail

☐ (f-mail 1)

Untripped

Save Changes

Add New Alarm

**Air Flow/Temp/Humidity Sensor**

ID 0C00000080927812

Temperature (C)

trip if Below

threshold: -999.0

Alarm must remain tripped for

0 (min) before notification

Repeat every: No Repeat

f-mail

☐ (f-mail 1)

Untripped

Save Changes

Add New Alarm

**Temperature Sensor**

ID 320000024CF4652B

Temperature (F)

trip if Above

threshold: 110.0

Alarm must remain tripped for

3 (min) before notification

Repeat every: No Repeat

f-mail

☒ (f-mail 1)

Untripped

Save Changes

Add New Alarm

**Water Sensor**

ID 3500000487094C14

Water

trip if Below

threshold: -999.0

Alarm must remain tripped for

0 (min) before notification

Repeat every: No Repeat

f-mail

☐ (f-mail 1)

Untripped

Save Changes

Add New Alarm

**Door Position Sensor**

ID 60000004A4988914

Door

trip if Below

threshold: 50.0

Alarm must remain tripped for

0 (min) before notification

Repeat every: 30 min

f-mail

☐ (f-mail 1)

Tripped

Save Changes

Add New Alarm

**Alarm Behavior**

Unplugged Alerts: Enabled

Save Changes

English | Français | 中文 | Deutsch | 日本語 | Español

Unit Location:  
Unit Description:  
Admin: or Call  
Support: Manual, cs@panout.com or Call 800 777 3300support.phone.separatorsupport.phone.it  
Copyright © 2003-2012 Panduit Corporation All Rights Reserved.

## 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



# 30, 50, and 60 Amp PanView iQ™ (PViQ™) Switched and Environmental Power Outlet Units

**PANDUIT®**

PVQ Switched POU  
IP Address: 10.64.64.14  
Local Time: Mon, 20.08.12 17:10:24

PViQ Switched POU v3.9.5  
Alarms: 6 Monitored,  
2 Tripped, 0 Unplugged

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

### Control™

PViQ Switched POU Control

<input type="checkbox"/>	Outlet	Name	Status	URL
<input type="checkbox"/>	1	POU 14 - 1	Off	
<input type="checkbox"/>	2	POU 14 - 2	On	
<input type="checkbox"/>	3	POU 14 - 3	On	
<input type="checkbox"/>	4	POU 14 - 4	On	
<input type="checkbox"/>	5	POU 14 - 5	On	
<input type="checkbox"/>	6	POU 14 - 6	On	
<input type="checkbox"/>	7	POU 14 - 7	On	
<input type="checkbox"/>	8	POU 14 - 8	On	
<input type="checkbox"/>	9	POU 14 - 9	On	
<input type="checkbox"/>	10	POU 14 - 10	On	
<input type="checkbox"/>	11	POU 14 - 11	On	
<input type="checkbox"/>	12	POU 14 - 12	On	
<input type="checkbox"/>	13	POU 14 - 13	On	
<input type="checkbox"/>	14	POU 14 - 14	On	
<input type="checkbox"/>	15	POU 14 - 15	On	
<input type="checkbox"/>	16	POU 14 - 16	On	
<input type="checkbox"/>	17	POU 14 - 17	On	
<input type="checkbox"/>	18	POU 14 - 18	On	
<input type="checkbox"/>	19	POU 14 - 19	On	
<input type="checkbox"/>	20	POU 14 - 20	On	
<input type="checkbox"/>	21	POU 14 - 21	On	
<input type="checkbox"/>	22	POU 14 - 22	On	
<input type="checkbox"/>	23	POU 14 - 23	On	
<input type="checkbox"/>	24	POU 14 - 24	On	

Action: None ▼  
Execute

English | Français | 中文 | Deutsch | 日本語 | Español

Unit Location:  
Unit Description:  
Admin: or Call  
Support: Manuals, [cs@panduit.com](mailto:cs@panduit.com) or Call 800 777 3300support.phone.separatorsupport.phone.alt  
Copyright © 2003-2012 Panduit Corporation All Rights Reserved.

## 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

# 30, 50, and 60 Amp PanView iQ™ (PViQ™) Switched and Environmental Power Outlet Units

**PANDUIT®**

PVQ Switched POU  
IP Address: 10.64.64.14  
Local Time: Mon, 20.08.12 16:56:55

PViQ Switched POU v3.9.5  
Alarms: 6 Monitored,  
2 Tripped, 0 Unplugged

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

English | Français | 中文 | Deutsch | 日本語 | Español

Unit Location:  
Unit Description:  
Admin: or Call  
Support: Manuals, cs@panduit.com or Call 800 777 3300support.phone.separatorsupport.phone.alt  
Copyright © 2003-2012 Panduit Corporation All Rights Reserved.

## Configuration

- Simple network configuration for easy setup

# 30, 50, and 60 Amp PanView iQ™ (PViQ™) Switched and Environmental Power Outlet Units



**PVQ-EST-12 and PVQ-EST-18**

Temperature range: -40°F to 254°F  
Accuracy: +/- 1.8°F from 40°F to 122°F  
Monitor "hot spots" throughout your installation.  
Available in 12 and 18 foot lengths.



**PVQ-ESTAFHD-12 and PVQ-ESTAFHD-18**

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.  
Available in 12 and 18 foot lengths.



**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.



**PVQ-ESWK**

Environmental water sensor, 20' cord. Acts as a conductivity bridge to detect the presence of moisture or water in your facility.



**PVQ-ESDPK**

Door position sensor, 30' cord. Monitor cabinet door position open or closed. Set alarms to alert when a cabinet has been accessed.

## WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT CANADA  
Markham, Ontario  
cs-cdn@panduit.com  
Phone: 800.777.3300

PANDUIT EUROPE LTD.  
London, UK  
cs-emea@panduit.com  
Phone: 44.20.8601.7200

PANDUIT SINGAPORE PTE. LTD.  
Republic of Singapore  
cs-ap@panduit.com  
Phone: 65.6305.7575

PANDUIT JAPAN  
Tokyo, Japan  
cs-japan@panduit.com  
Phone: 81.3.6863.6000

PANDUIT LATIN AMERICA  
Guadalajara, Mexico  
cs-la@panduit.com  
Phone: 52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD.  
Victoria, Australia  
cs-aus@panduit.com  
Phone: 61.3.9794.9020

For a copy of Panduit product warranties, log on to [www.panduit.com/warranty](http://www.panduit.com/warranty)

For more information

Visit us at [www.panduit.com](http://www.panduit.com)

Contact Customer Service by email: [cs@panduit.com](mailto:cs@panduit.com)  
or by phone: 800.777.3300

**PANDUIT®**

©2013 Panduit Corp.  
ALL RIGHTS RESERVED.  
PVSP86--WW-ENG  
2/2013