

30 and 60 Amp PanView iQ™ (PViQ™) Networked 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 under-utilized power capacity and automate collection of real-time and accurate power information. The units shall have remote monitoring for power consumption and environmental capability to monitor temperature, airflow, humidity and 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 include 30 or 60 amp circuits, which shall have multiple outlet options with standard IEC or NEMA compliant receptacles. Power outlet units shall have a black power coated finish with a 10 foot cord utilizing NEMA style plugs. Installed units shall allow quick and easy firmware updates.



technical information

Dimensions:	QN1A1M2BM24E1: 66.3"H x 2.0"W x 2.0"D (1683mm x 51mm x 51mm) QN1B1L2BN24H1: 66.3"H x 2.0"W x 2.0"D (1683mm x 51mm x 51mm) QN1B1L2BN30P1: 66.3"H x 2.0"W x 2.0"D (1683mm x 51mm x 51mm) QN1A1P3BN24E1: 66.3"H x 2.0"W x 2.0"D (1683mm x 51mm x 51mm) *QN1B1P3BN30P1: 66.3"H x 2.0"W x 2.0"D (1683mm x 51mm x 51mm) QN1B2G6BN24R1: 66.3"H x 2.3"W x 3.4"D (1683mm x 58mm x 87mm) *For Delta option replace 1P with 1N
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 foot power cords, mounting brackets, screws and tool-less button mounting

key features and benefits

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	Measures 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
Integrated power monitoring and management	On unit display 2 line x 8 character LCD provides real-time power consumption at the power strip
Mounting buttons	Allows tool-less mounting of power strips for faster installations

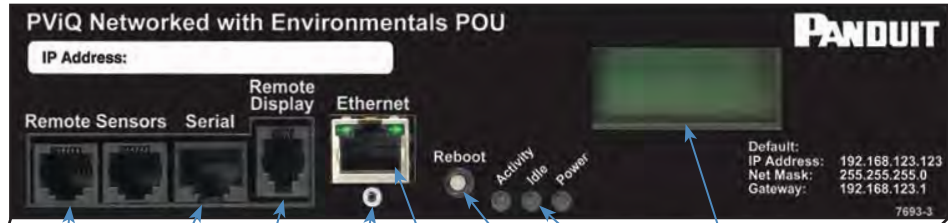
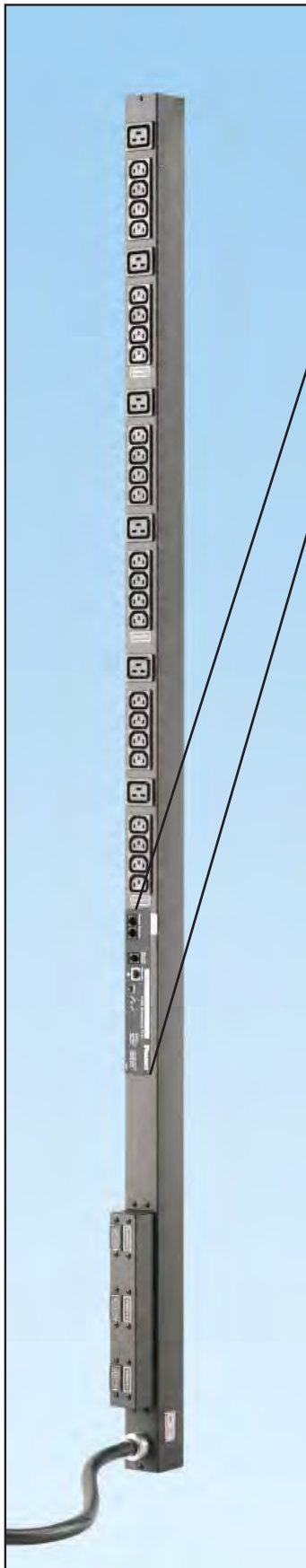
applications

Panduit's® PViQ™ Networked 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.

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 120V 30A, 24 NEMA 5-20 Outlets	
Circuit breaker monitoring:	QN1A1M2BM24E1
Vertical Single Phase, 208V, 30A, 24 NEMA 6-20 Outlets	
Circuit breaker monitoring:	QN1B1L2BN24H1
Vertical 3~208V, 30A, 12 IEC 13 and 6 IEC-19 Outlets	
Circuit breaker monitoring:	QN1B1L2BN30P1
Vertical 3~120V, 30A, 24 NEMA 5-20 Outlets	
Phase/breaker (X,Y,Z) monitoring:	QN1A1P3BN24E1
Vertical 3~208V, 30A, 24 IEC 13 & 6 IEC-19 Outlets	
Phase level monitoring (X, Y, Z):	QN1B1P3BN30P1
Vertical 3~208V, 60A, Delta 18 IEC 13 & 6 IEC-19 Outlets	
Phase level monitoring (X, Y, Z):	QN1B2G6BN24R1
PViQ™ Remote Display Monitor	
10' cord:	PVQ-RD
PViQ™ Environmental Sensors	
Temperature	
12' cord:	PVQ-EST-12
18' cord:	PVQ-EST-18
Temperature, humidity, airflow, dew point,	
12' cord:	PVQ-ESTAFHD-12
18' cord:	PVQ-ESTAFHD-18
Door position	
30' cord:	PVQ-ESDPK
Water sensor	
20' cord:	PVQ-ESWK
PViQ™ Environmental Splitter	
RJ12 5-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	
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

30 and 60 Amp PanView iQ™ (PViQ™) Networked and Environmental Power Outlet Units



1 Remote Sensors

- Two RJ12 connector ports to monitor the environmental conditions
- Receive SNMP-based or email alert notifications when environmental conditions exceed defined thresholds

2 Serial Port

- You can use a local computer that connects to the POU or other device through the (serial port) to access the command line interface

3 Remote Display 2 line x 8 character LCD (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 sounds when threshold limits have been reached

4 IP Reset

- Resets the IP address

5 Network Connection

- RJ45 connections for remote power monitoring

6 Reboot the POU

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

7 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

8 Local Display 2 line x 8 character LCD

- Based on checked sensor items selected on the Logging screen, the monitor will scroll through and display each measurement
- 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

30 and 60 Amp PanView iQ™ (PViQ™) Networked and Environmental Power Outlet Units

The screenshot displays the Panduit PViQ Network Environmental POU web interface. At the top left is the Panduit logo. The top center shows the unit name 'PViQ Network Environmental POU', IP address '192.168.123.123', and local time 'Mon, 08/06/12 14:59:05'. The top right shows the version 'PViQ Network Environmental POU v3.9.5' and a status message 'All is well: 0 Alarms monitored'. A left-hand navigation menu includes 'Sensors', 'Alarms', 'Logging', 'Display', 'Config', 'Help', and 'PDA/Phone | XML | MIB'. The main content area is titled 'Sensors' and shows data for 'PViQ Network Environmental POU' (ID 00001985E31CC1C1). A legend lists various power metrics with corresponding colored squares. The data table shows: kWatt-Hours (0.00 kWh), Volts (118.98 V_{rms}), Volts (Peak) (119.02 V_{rms}), Amps (0.00 A_{rms}), Amps (Peak) (0.01 A_{rms}), Real Power (0.00 Watts), Apparent Power (0.0 Volt-Amps), and Power Factor (100.0 %). Below the table is a line graph showing these metrics over a 18-minute period. The bottom section is titled 'Power Strip' (ID 65FF1985E31CC1C1) and contains a small icon. At the bottom, there are language options: English, Français, 中文, Deutsch, 日本語, and Español. A footer contains unit location, description, admin contact, support information, and copyright details.

PANDUIT® PViQ Network Environmental POU PViQ Network Environmental POU v3.9.5
IP Address: 192.168.123.123 Local Time: Mon, 08/06/12 14:59:05 All is well: 0 Alarms monitored

Sensors

PViQ Network Environmental POU ID 00001985E31CC1C1

kWatt-Hours	0.00 kWh
Volts	118.98 V _{rms}
Volts (Peak)	119.02 V _{rms}
Amps	0.00 A _{rms}
Amps (Peak)	0.01 A _{rms}
Real Power	0.00 Watts
Apparent Power	0.0 Volt-Amps
Power Factor	100.0 %

Power Strip ID 65FF1985E31CC1C1

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
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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
- Firmware supports multiple languages, English, French, German, Spanish and Mandarin

30 and 60 Amp PanView iQ™ (PVIQ™) Networked and Environmental Power Outlet Units

The screenshot shows the Panduit web interface for configuring alarms. The top navigation bar includes the Panduit logo, system information (PVIQ Network Environmental POU, IP Address: 192.168.123.123, Local Time: Mon, 08/06/12 14:59:46), and the version (PVIQ Network Environmental POU v3.9.5). A status indicator shows "All is well: 1 Alarms monitored".

The main content area is titled "Alarms" and contains three sections:

- PVIQ Network Environmental POU (ID 00001985E31CC1C1):** This section allows configuring an alarm for "Power Factor". The alarm trips if the value is "Below" a threshold of "70.0". The alarm must remain tripped for "0" minutes before notification. The repeat setting is "No Repeat". E-mail notifications are configured for "E-mail 1", "E-mail 2", and "E-mail 3". A green "Untripped" button is visible.
- Power Strip (ID 65FF1985E31CC1C1):** This section has an "Add New Alarm" button.
- Alarm Behavior:** This section has an "Unplugged Alerts" dropdown set to "Enabled" and a "Save Changes" button.

At the bottom, there are language options: English, Français, 中文, Deutsch, 日本語, and Español. A footer contains contact information: Unit Location, Unit Description, Admin: or Call, Support: Manuals, cs@panduit.com or Call 800 777 3300support.phone.separatorsupport.phone.alt, and 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
- Allows access to historical data
- Alarm conditions can be established with either high or low trip thresholds
- User defined temperature alarm traps to provide the desired level of data granularity
- Set type of alarms E-mail or SNAP

30 and 60 Amp PanView iQ™ (PViQ™) Networked and Environmental Power Outlet Units

PANDUIT PViQ Network Environmental POU v3.9.5
IP Address: 192.168.123.123
Local Time: Mon, 08/06/12 15:00:12
All is well: 1 Alarms monitored

Logging

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

Sensor Measurement Data Graph

Time Range: 1 Month Maximum loggable time span: 24.38 days

PViQ Network Environmental POU		00001985E31CC1C1		
kWatt-Hours	0.00 kWh	<input type="checkbox"/>	<input type="checkbox"/>	Logging Control
Volts	118.97 V _{rms}	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Normal
Volts (Peak)	119.01 V _{rms}	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Normal
Amps	0.00 A _{rms}	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Normal
Amps (Peak)	0.01 A _{rms}	<input type="checkbox"/>	<input type="checkbox"/>	Normal
Real Power	0.00 Watts	<input type="checkbox"/>	<input type="checkbox"/>	Normal
Apparent Power	0.0 Volt-Amps	<input type="checkbox"/>	<input type="checkbox"/>	Normal
Power Factor	100.0 %	<input type="checkbox"/>	<input type="checkbox"/>	Normal

Power Strip 65FF1985E31CC1C1

Reset Logs

[Click here to download CSV log data](#)

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
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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
- LCD buttons allow you to configure the units local display readings

30 and 60 Amp PanView iQ™ (PViQ™) Networked and Environmental Power Outlet Units

PANDUIT® PViQ Network Environmental POU v3.9.5
IP Address: 10.64.64.13 All is well: 1 Alarms monitored
Local Time: Mon, 09/17/12 16:24:59

Display

General

Default Language: English
Date Format: USA (MM/DD/YY)
Temperature Unit: Fahrenheit
Interface Type: Default
Scroll on LCD: Measurements

Save Changes

Devices

Unique Address	Device Type	Friendly Name
00001985E06B8CF8	ctr3ChIEC	PViQ Network Environment

Remove all unplugged devices

Save Changes

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

Display

- Allows the user to assign friendly names to attached sensors as well as change the default temperature unit of measure for external sensors
- By selecting the interface type button you can select between the default and classic web page layouts. The default interface displays a vertical menu bar to the left of the main window, while the classic interface displays a horizontal menu bar

30 and 60 Amp PanView iQ™ (PViQ™) Networked and Environmental Power Outlet Units

PANDUIT® PViQ Network Environmental POU v3.9.5
IP Address: 10.64.64.13
Local Time: Mon, 09/17/12 16:28:58 All is well: 1 Alarms monitored

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:

Web Server

Protocols:

HTTP Port:

HTTPS Port:

Telnet Service:

English | Francais | 中文 | Deutsch | 日本語 | Español

Configuration

- The network tab allows you to change the settings pertaining to the units network connections
- Simple network configuration for easy setup

30 and 60 Amp PanView iQ™ (PViQ™) Networked 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.

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For more information

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Contact Customer Service by email: cs@panduit.com
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