# 16 and 32 Amp PanView iQ™ (PViQ™) Switched 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 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 16 and 32 amp circuits, which have multiple outlet options with standard IEC compliant receptacles. Power outlet units shall have a black power coated finish and included a 10 foot cord utilizing IEC style plugs. Installed units shall allow quick and easy firmware updates.

## technical information

| | | |
|---|---|---|
| ***Dimensions:*** | QS1D2Q0BA2401: | 66.3"H x 2.5"W x 2.3"D (1683mm x 64mm x 57mm) |
| | QS1D2A0BA2401: | 66.3"H x 2.5"W x 2.3"D (1683mm x 64mm x 57mm) |
| | QS1D2P3BN2491: | 72.0"H x 2.5"W x 2.3"D (1829mm x 64mm x 57mm) |
| | QS1D2B2BN24AA1: | 70.0"H x 2.5"W x 2.3"D (1778mm x 64mm x 58mm) |
| | QS1D2P3BN2401: | 72.0"H x 2.5"W x 2.3"D (1829mm 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 three meter 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 |
| ***Time delay sequencing*** | Avoids circuit overload due to high in-rush 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 |
| ***Locking IEC receptacles*** | Support and retain any standard IEC power cords preventing unintentional power loss |
| ***Certification/agency approvals*** | Complies with IEC 60950-1, EN 55022, EN 55024 and CE Marked |
| ***Integrated power*** | On board display has 2 line x 8 character LED providing real-time power consumption at the power strip |
| ***Outlet status*** | Each outlet has a green LED for indication if the outlet is on or off for easy visual identification |

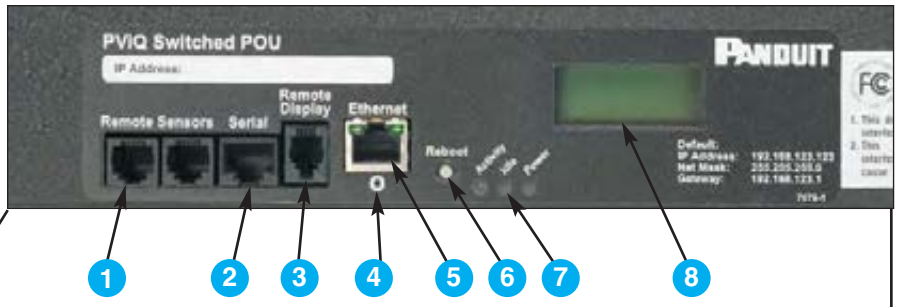
## applications

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™ POUs provide continuous real-time power and environmental monitoring via the network for enhanced system management and reliability.

The PViQ™ POUs 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 3~ WYE, 230/400V, 16A, 21 IEC-13 and 3 IEC-19 Locking Receptacles*** | |
| ***Phase monitoring (X,Y,Z):*** | QS1D2Q0BA2401 |
| ***Vertical 230V, 16A, 21 IEC-13 and 3 IEC-19 Locking Receptacles*** | |
| ***Aggregate monitoring:*** | QS1D2A0BA2401 |
| ***Vertical 3~ WYE 230/400V, 32A, 18 IEC-13 and 6 IEC-19 Outlets*** | |
| ***Phase monitoring (X,Y,Z):*** | QS1D2P3BN2491 |
| ***Vertical 230V, 32A, 20 IEC-13 and 4 IEC-19 Locking Receptacles*** | |
| ***Breaker monitoring:*** | QS1D2B2BN24AA1 |
| ***Vertical 3~ WYE 230/400V, 32A, 18 IEC-13 and 6 IEC-19 Outlets*** | |
| ***Breaker monitoring:*** | QS1D2P3BN2401 |
| ***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 |




**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

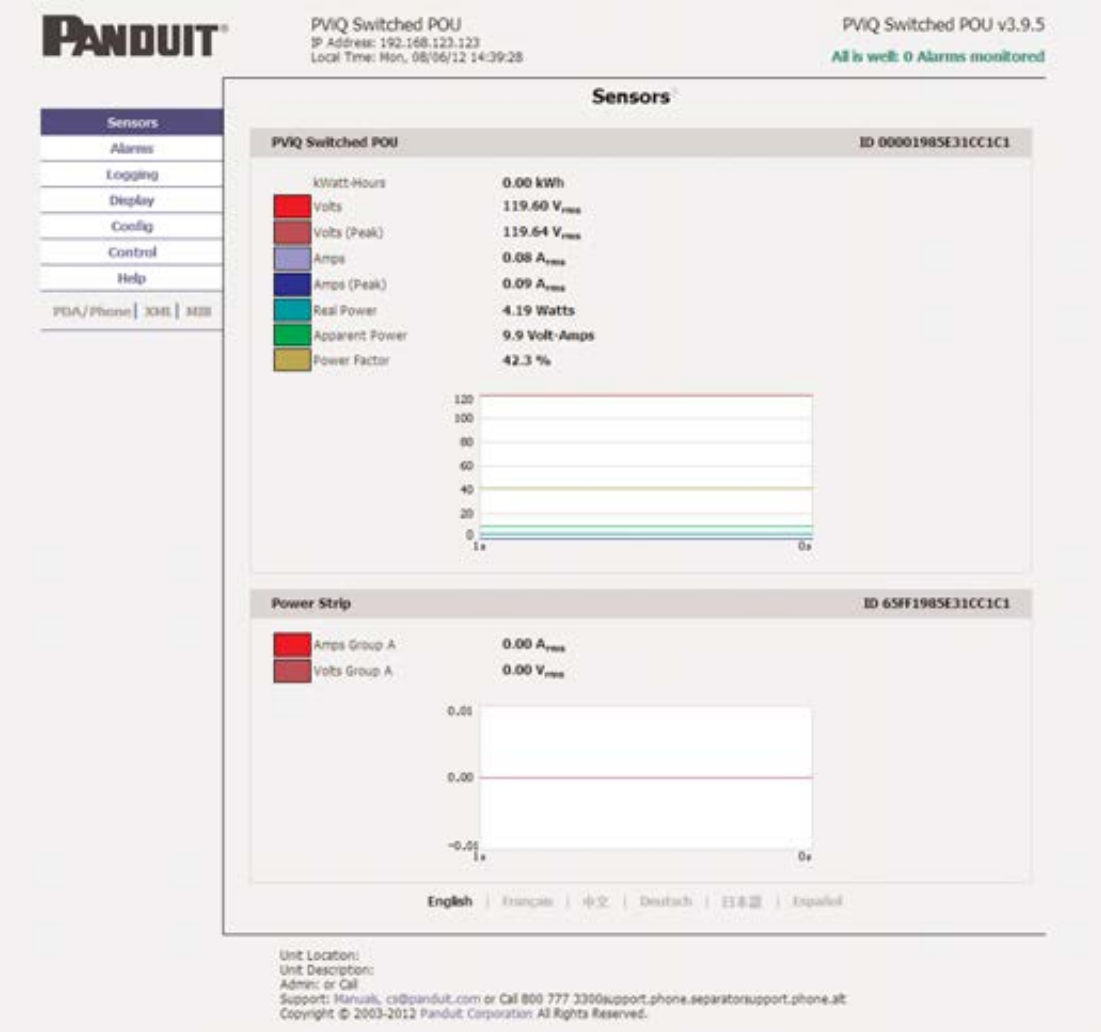
**4 IP Reset**
- Resets the IP address

**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

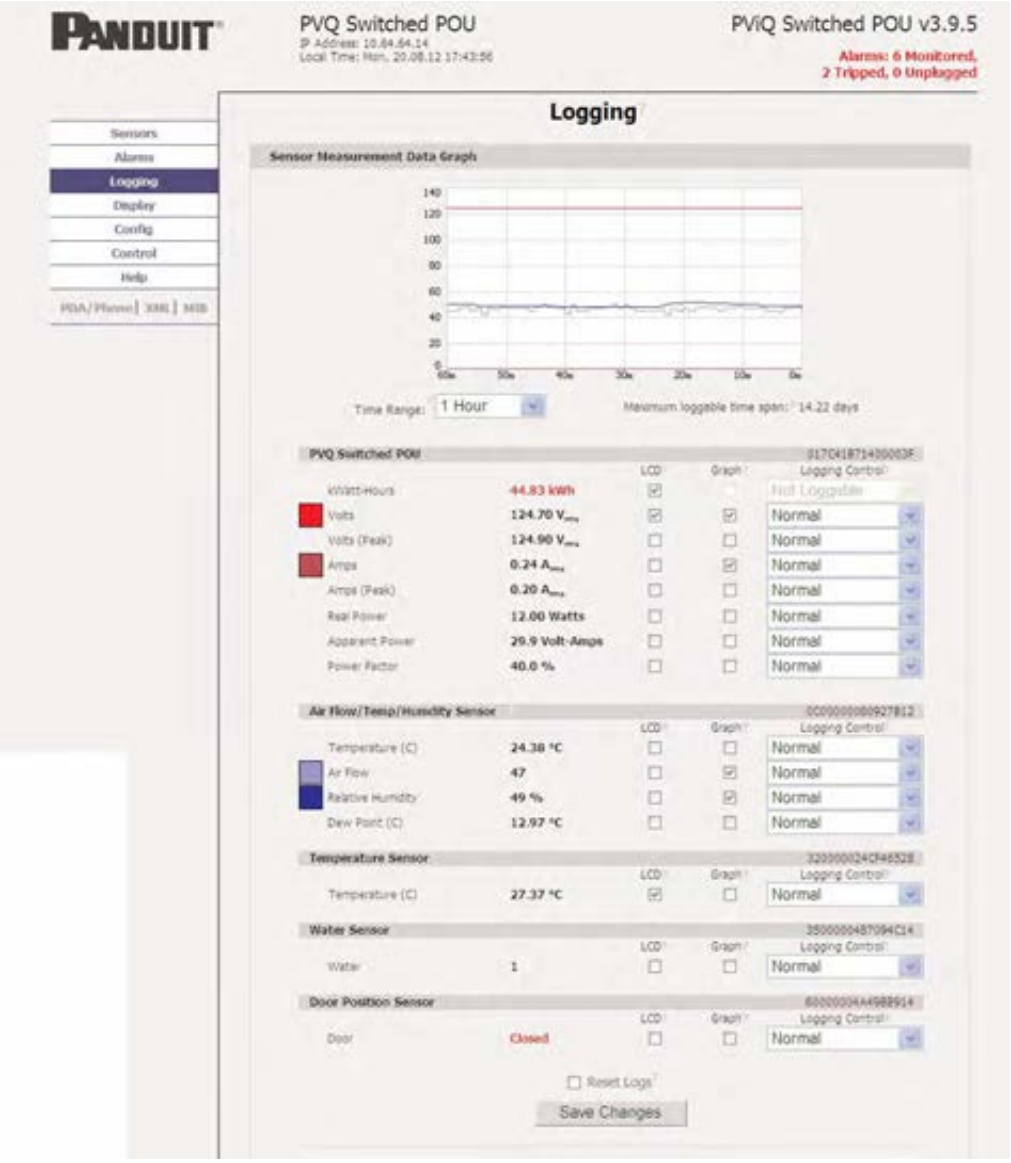
**7 POU Lights**
- Activity and idle lights will light up when the reset button is used to restore the default IP address; power light indicates unit is on

**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




**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

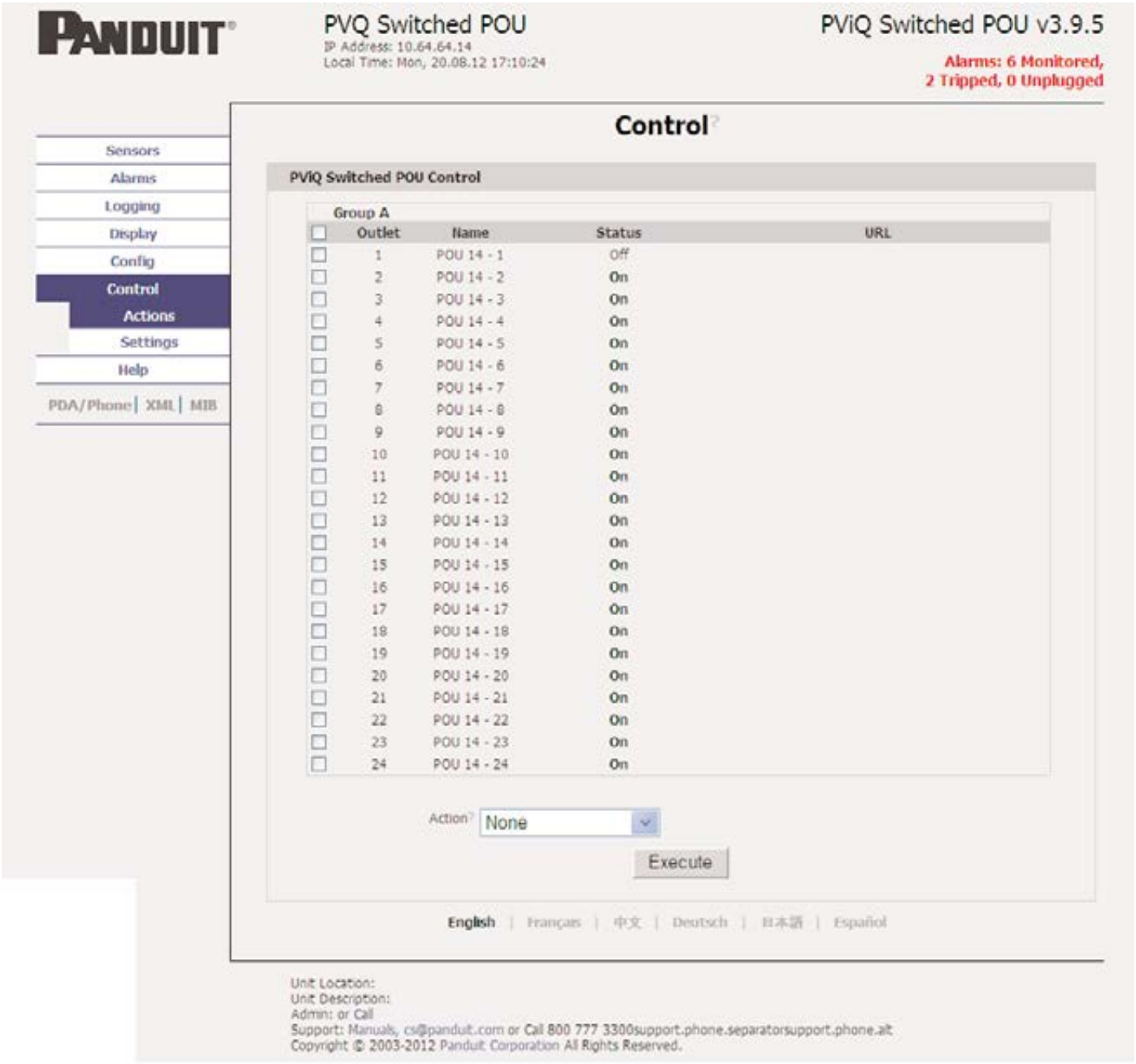



**Logging**

- 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
- 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) filed

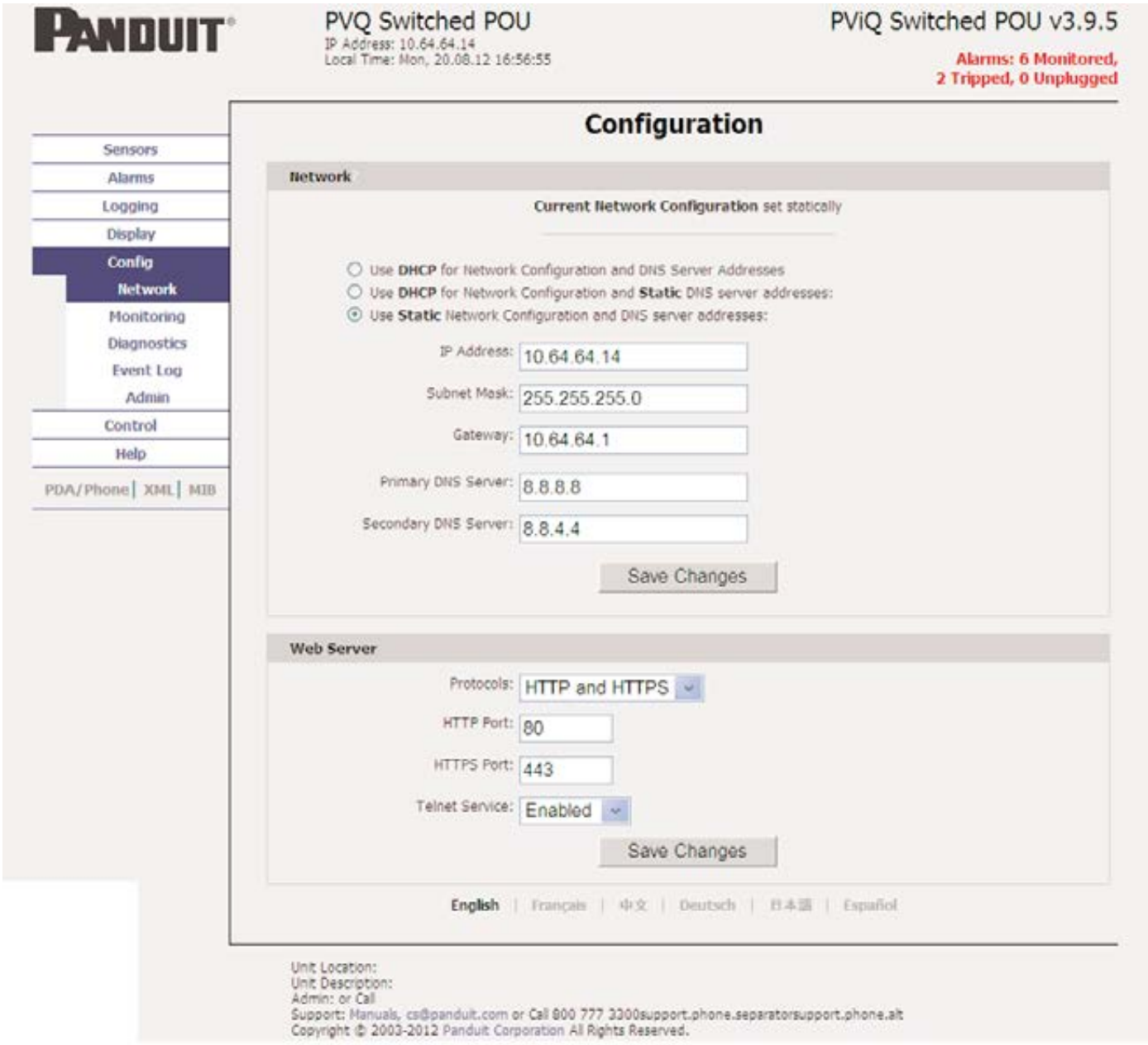
**Alarms**

- 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




**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




**Configuration**

- Simple network configuration for easy setup

### PVQ-EST-12 and PVQ-EST-18

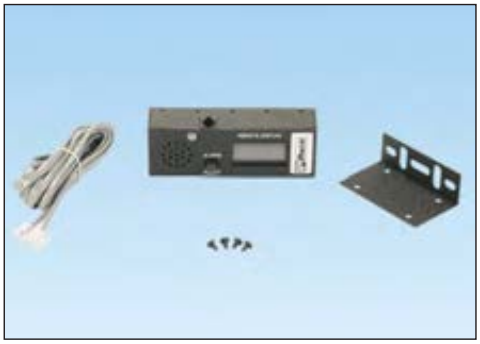
Temperature range: -40°F to 254°F
Accuracy: +/- 1.8°F from 40°F to 122°F
Monitor “hot spots” throughout your installation.
Available in 12 and 18 foot lengths.

### 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

**For more information**

**Visit us at www.panduit.com**

**Contact Customer Service by email: cs@panduit.com**
**or by phone: 800.777.3300**

©2013 Panduit Corp.
ALL RIGHTS RESERVED.
**PVSP85--WW-ENG**
2/2013