

Eaton Power Xpert Gateway Series 2000 Card



Delivers real-time, Web-enabled monitoring of Eaton® Uninterruptible Power Supplies

Features/benefits

- **Web-enabled monitoring of power quality data** - Data can be viewed from any location with a Web browser
- **Data, event and system logging with time stamp** - Accurate logging for power quality analysis, log files can be exported in a CSV format to Excel to help generate reports
- **Modbus TCP/IP and SNMP v3 Support** - Open communication protocol facilitates integration with standard building management systems and network management systems
- **Intelligent email communications** - Two options for alarm and event email notification, individual emails or collective notification, providing the same information with a drastically reduced number of emails
- **Easy integration into existing Ethernet infrastructure** - Minimize installation cost
- **Netwatch client compatibility** - configure Netwatch directly in the PXGX card UI, set up UPS shutdown schedules, as well as UPS test and control.
- **Seamless integration of Eaton® UPSs into Power Xpert® Software** - Web-enable and monitor all of your equipment, Eaton or other manufacturers, with the Power Xpert Architecture

Product snapshot

- Real-time power monitoring presented how you need it – via standard on-board Web pages, Power Xpert Software or 3rd party network or building management systems
- Independent, redundant Ethernet ports support high reliability systems
- Supports the Eaton Environmental Monitoring Probe

Power monitoring in a networked world

Effective monitoring of the power system is critical to responding to events, preventing downtime and optimizing performance, which translates to greater reliability and cost efficiencies down the road.

The Power Xpert Gateway Series 2000 Card (PXGX 2000) provides Web-enabled, real-time monitoring of Eaton uninterruptible power supplies (UPSs) through standard on-board Web pages, Power Xpert software or third-party software. An integral part of the Power Xpert Architecture, which provides end-to-end power chain management, the PXGX 2000 provides a central point to connect UPSs to an Ethernet network.

Develop baseline energy usage

Data history, event, and system logs can be viewed via Web browser, downloaded for review in MS Excel or emailed to others for further analysis.

Securely view critical power data how and when you choose

Eaton provides the information needed to make critical power management decisions to keep the organization running effectively and efficiently.

You can rest assured that your information is secure when employing the PXGX 2000. It provides password authentication to keep access to configuration separate from general use. For those seeking additional security, the PXGX 2000 supports secure, Web-based communication via SSL.

Information is presented in organized, user-friendly Web pages. Device detail pages include real-time data such as:

- UPS Identification such as name, serial number, type
- UPS status
- UPS input current
- Input, inverter and output voltage
- Input and output frequency
- % full load
- Battery status
- Load segment status
- Output power
- Alarm status



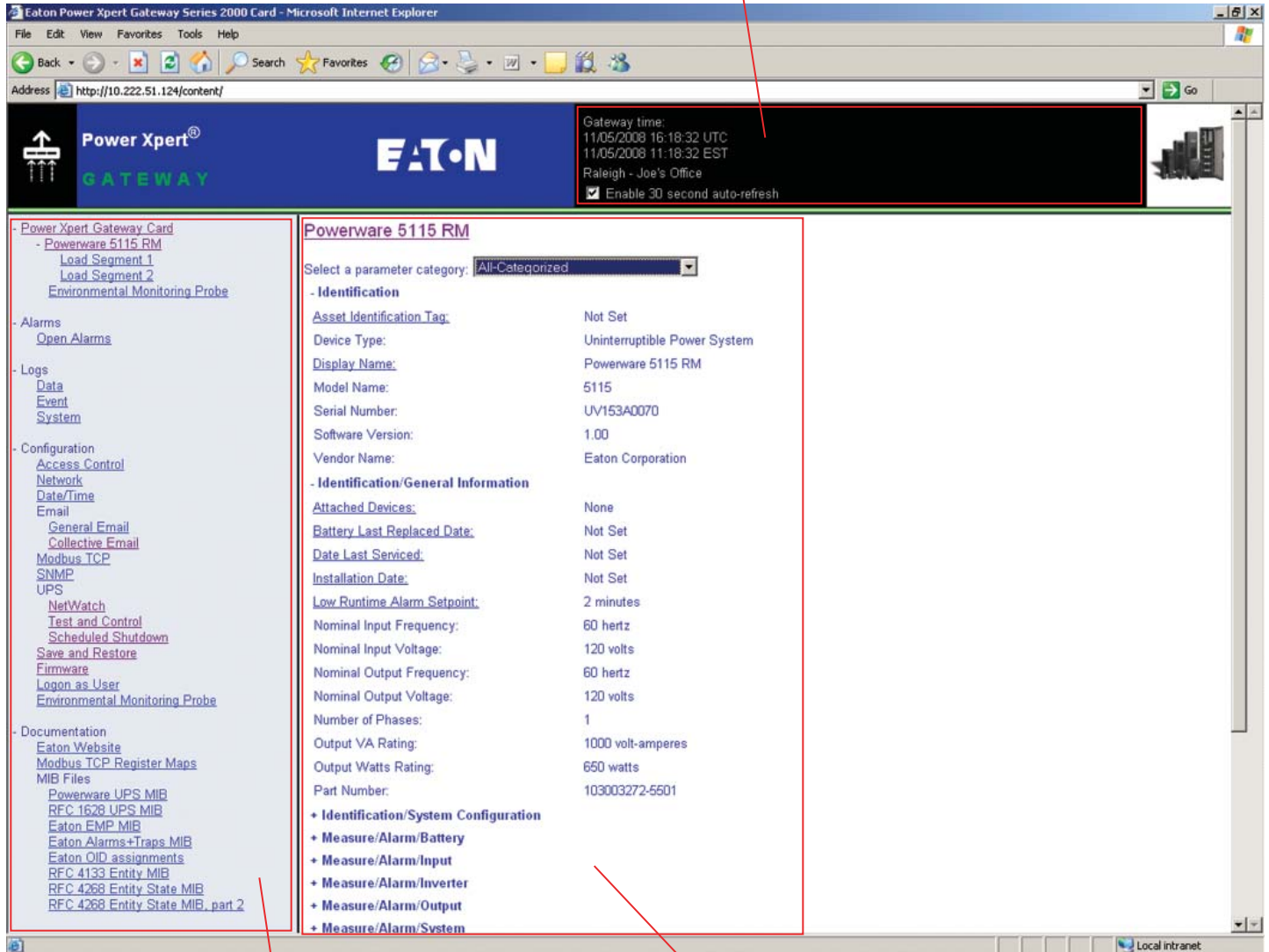
Powering Business Worldwide

On-board Web pages for easy access and control

UPS home page

Intuitive, on-board Web pages provide users with comprehensive Eaton UPS system information and configuration capability.

View the time, local and UTC, current alarms in the header bar on every Web page.



Users can easily navigate between the UPS information, Alarm Summary, Log files and Documentation. Administrators can access the configuration pages for Access Control, Network settings, Date/Time settings, Email setup, NetWatch, UPS Test and Control, Scheduled Shutdown, Save/Restore, Firmware Updates and EMP settings.

The UPS data is presented and can be sorted by category that the user wishes to display.

Numerous fields can be entered by the user such as UPS Display Name, Attached Devices, UPS Install and Last Service Date, Battery Replacement Date and Low Runtime Setpoint.

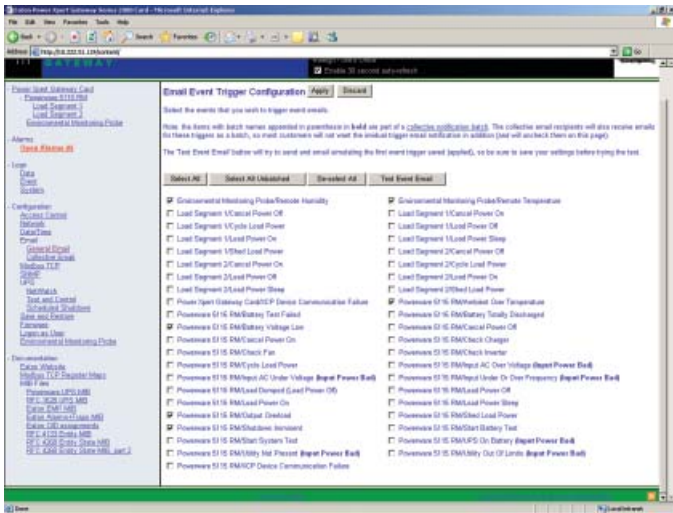
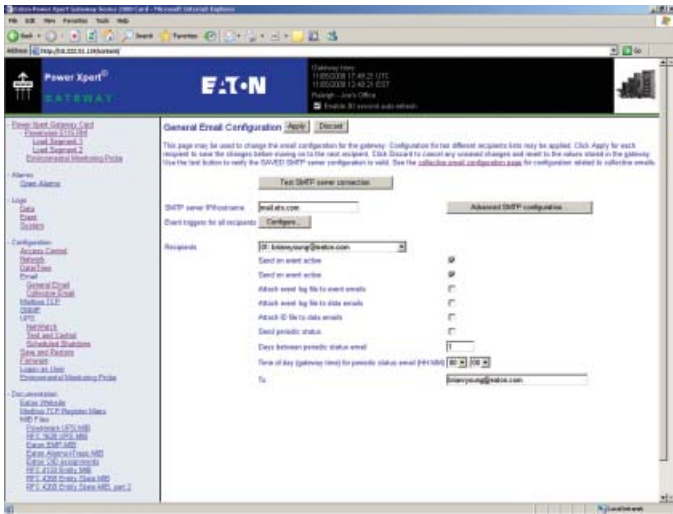
Intelligent email communication

Know what your equipment is experiencing with two options for email communications:

- General email notification from individual PXGX cards
- Collective Notification email for one or more PXGX cards in a system

General email configuration

Send an email, up to 10 users, for active or cleared events, attach data or event logs or send a "periodic heartbeat." The user selects the event triggers for emails they wish to receive. Each setup can be customized, depending on the user's role in the organization.

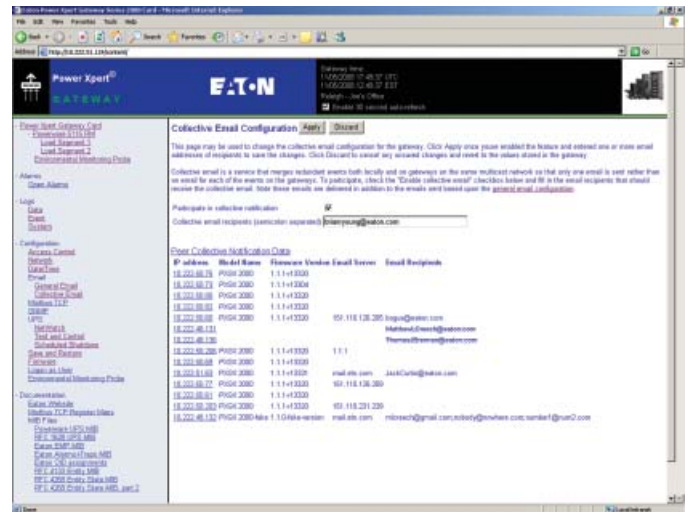


Collective Notification

The PXGX 2000 card can automatically sense the presence of other PXGX 2000 cards on the network. When an input power-related event (e.g. Utility Not Present) affects one or more monitored UPS, event data is shared in real time between cards and intelligently consolidated.

When a card is configured to deliver collective emails to specific email addresses, it sends a single email detailing the list of input power-related events present and the list of UPS being affected by those at that time. Essentially, this provides a filter that does its job before multiple emails are sent. Imagine if a system has 50 – 100 UPS...that adds up to a lot of emails.

Collective Notification allows the user to configure just one card to send collective emails, providing a consolidated message detailing what just happened and who was affected.



Do more with less

Eaton recognizes that today companies are striving to reduce energy consumption; increase reliability; maximize capital investments, Go Green; and generally do more with less. The PXGX2000 helps you accomplish these goals. In addition to viewing critical UPS input/output data and alarm information, you have the ability to load shed, shutdown UPSs, test UPSs, test batteries and manage shutdown/restarting UPS.



An Eaton Green Product

NetWatch Software Support

NetWatch client software supports remote UPS monitoring and automatic shutdown of UPS-protected computer systems. Using Netwatch through the PXGX2000, you can manage the duration of delay, interval and restart upon AC input failure.

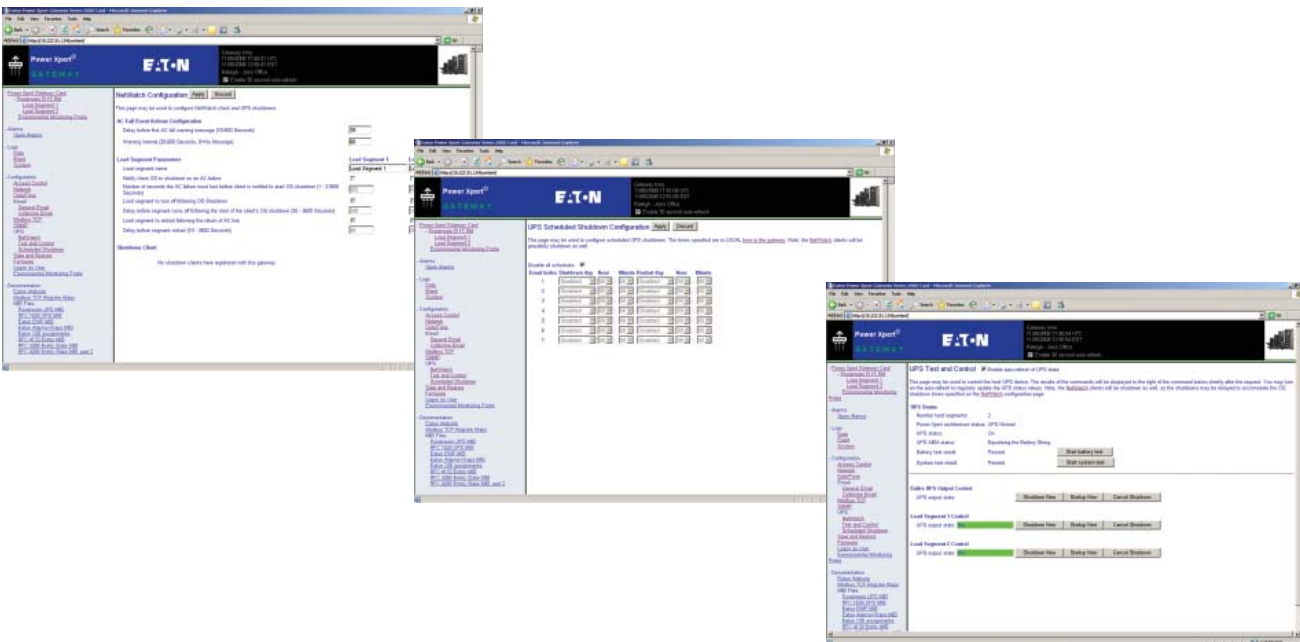
Clients are available for many operating systems, including: Microsoft Windows; Novell NetWare; Linux®; UNIX; Mac OS X

Each NetWatch client uses its IP address to register with a specified PXGX Series 2000 Card via the network. Once a client has registered, any change in UPS status is communicated to NetWatch. Depending on the operating system, NetWatch typically alerts the user(s) whenever the UPS begins supplying AC power (for example, the AC line fails). If the AC line power does not return and the remaining battery time is low, NetWatch takes over and completes a controlled shutdown prior to the UPS running out of battery power.

UPS Power Management

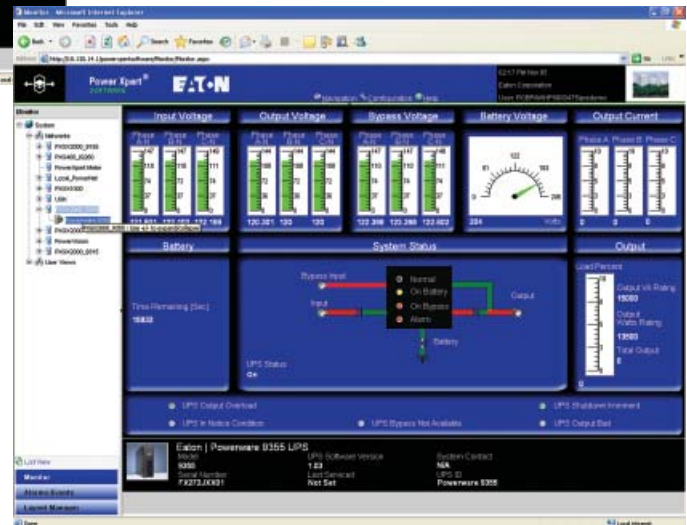
- Testing the battery
- Testing the UPS system (for UPSs that support a self-test)
- Turning UPS Load Segments On/Off
- Scheduling a UPS Shutdown

All of these features are supported by the PXGX2000 card to ensure the highest reliability and reduce power consumption to meet your business demands.



Power Xpert Software – maximize your investment

Since the PXGX 2000 is part of the Power Xpert architecture, it was designed to seamlessly integrate with Power Xpert Software to provide a more comprehensive system view of all of your Eaton electrical equipment. UPSs that are supported by the PXGX 2000 have pre-designed templates in Power Xpert Software, no need for customer software. All that is required is for the IP address of the PXGX card to be entered into the Power Xpert Software, and it automatically recognizes and understands the PXGX2000 and the UPS.



Technical specifications

The Power Xpert Gateway Series 2000 Card kit includes the following:

Power Xpert Gateway Series 2000 Card

Ethernet Cable

Local Configuration Cable

Quick Start Guide

Ordering information

Catalog number PXGX 2000

Style number 103005868-5591

Description Power Xpert Gateway Series 2000 Card for use with Eaton UPSs

Devices supported

Eaton uninterruptible power supplies with X-Slot® compatibility; these include the Eaton 5115 RM, 5125, 9125, 9140, 9155, 9315, 9355, 9330, 9390, 9395, BladeUPS®

Communication ports

Ethernet ports Two independent RJ45 ports: supports 10/100BaseT for redundant network configurations

Serial ports One RJ45 console port: supports local configuration and optional connection to an Environmental Monitoring Probe (EMP)

Communication protocols supported

Web server Supports data access from Web browsers (HTTP and HTTPS)

Modbus TCP/IP Supports data access from Modbus TCP clients

SNMP v3 Supports common network management tools

SMTP Supports email notification

NTP Supports time synchronization via an NTP server for card and UPS synchronization

DHCP Supports automatic IP address assignments, if enabled

Supported MIBs

Eaton Power MIB

RFC 1628 UPS MIB

Eaton EMP MIB

Eaton alarms and traps MIB

RFC 4133 Entity MIB

RFC 4268 Entity State MIB; RFC 4268 Entity State MIB Part 2

RFC 1213 MIB II

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Toll free: 1.800.461.9166

LATIN AMERICA
Argentina: 54.11.4124.4000
Brazil: 55.11.3616.8500
México: 52.55.9000.5252

Web browsers supported

IE

Mozilla Firefox

Physical characteristics

Dimensions 12 cm x 11.4 cm x 3.9 cm (4.7" x 4.5" x 1.5")

Weight 200 grams (7.0 oz)

Environmental specifications

Ambient operating 0 to +40 ° C (32 to 104° F)

Relative humidity 10 to 80%, non-condensing

Altitude 10,000 ft

Enclosure rating Indoor use only

Mounting configuration

X-Slot form factor fits directly into UPS chassis

Power supply

Nominal input voltage 12 VDC, unregulated (provided by UPS)

Input voltage range 8 – 25 VDC, unregulated

Power consumption

2.0 Watts

Regulatory/standards compliance

FCC Part 15, Class A

CISPR 22, Class A

ROHS compliant

Telecom Conducted via EU Standard EN 55022:1988+A1:2000+A2:2003, Class A/EN55022:1988+A1:2000+A2:2003

Note: Features and specifications listed in this document are subject to change without notice and represent the maximum capabilities of the software and products with all options installed. This is not a complete feature list. Features and functionality may vary depending on selected options.



PowerChain
Management®

EUROPE/MIDDLE EAST/AFRICA

Denmark: 45.3686.7910
Finland: 358.94.52.661
France: 33.1.6012.7400
Germany: 49.0.7841.604.0
Italy: 39.02.66.04.05.40
Norway: 47.23.03.65.50
Portugal: 55.11.3616.8500
Sweden: 46.8.598.940.00
United Kingdom: 44.1753.608.700

ASIA PACIFIC

Australia: 61.2.9693.9366
New Zealand: 64.0.3.343.3314
China: 86.21.6361.5599
HK/Korea/Taiwan: 852.2745.6682
India: 91.11.2649.9414 to 18
Singapore/SEA: 65.6825.1668

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Printed in USA
PX03FXA
January 2009