

Power Xpert Dashboard Lite Processor (PXDBLP)

Product snapshot

The Power Xpert™ Dashboard Lite Processor (PXDBLP) has been designed to be installed in low-voltage panelboards and switchboards, which is the engine that produces the Power Xpert Dashboard Lite user interface. The user interface allows visualization and interaction with Eaton trip units and meters.

Product overview

- Communicates to Eaton's Modbus® RTU enabled devices
- Upstream Modbus TCP and BACnet/IP support facilitates integration with third-party monitoring solutions
- View the Power Xpert Dashboard screens locally through 7-inch HMI mounted in the switchboard or near the panelboard/switchboard in a wall-mount enclosure. Using a standard web browser, view the Power Xpert Dashboard Lite password protected web interface remotely

Additional reference information

- Quick Start Guide IB13001EN—an overview of the Power Xpert Dashboard user interface
- Installation Guide MN150009EN—information on mounting and connecting the Power Xpert Dashboard Processor

Features and benefits

Rugged, industrial design

- Designed specifically for industrial environments, the PXDBLP has a compact design that only requires convection cooling
- Stringent EMI design requirements ensure that the PXDBLP will function in the most difficult EMI situations to deliver high reliability
- Mounting options are provided for panel mounting or DIN rail, allowing for installation flexibility

Smart configuration and user interface

- As an out-of-the-box, plug-and-play device, there is no additional software required to configure and view downstream devices
- All configuration menus are straightforward and easy to follow

Optional apps increase functionality

Optional apps can be installed at order entry or anytime via the web interface:

- ARMS App provides control of ARMS mode on trip units
- Setpoints App provides Power Defense™ PXR 20/25 and Digitrip™ 1150 set point viewing and programming with settings file management. Digitrip 520 settings may be viewed with the app
- Control App provides control of breaker trip units to allow open/close and Arcflash Reduction Maintenance Mode activation

Secure cyber communication

Controlling access to the PXDBLP is a vital component in any effort to secure it. Many regulatory agencies and standards organizations now recommend/require Role-Based Access Control (RBAC) password management and previous login notification as part of any access control effort. The PXDBLP has been tested and is in compliance with the UL® 2900-2-2 Cybersecurity standard. Some of the cyber security methods include:

• Password protection and management

RBAC is part of any access control effort. To support this, the PXDBLP has a robust set of tools you can use to create the set of users and role-based permissions as well as a comprehensive set of password management features you need to comply with security policies in effect at your site

• Secure web browsing

SSL Encryption option ensures that information and passwords exchanged with the PXDBLP's web server cannot be intercepted on the LAN

• Access control / trusted host list

Provides an additional method of security by limiting access to the communication ports by authorized trusted hosts' IP addresses

Time synchronization

The PXDBLP supports synchronization of clocks on devices that support the set time and date command. Additionally, the PXDBLP can be combined with a network time server for accurate time stamping via NTP.

Save and restore configuration settings

The PXDBLP provides the ability to save the PXDBLP device and network configuration settings to a configuration file. This file can be used to restore settings to any PXDBLP to facilitate configuration of similar systems.



Powering Business Worldwide

Technical specifications

Table 1. Power Xpert Dashboard part numbers

Description	Eaton catalog number
PX Dashboard Lite Processor with no apps	PXDBL-PROCESS-00000
To order factory installed apps, use this scheme: C = Control App S = Setpoints App A = ARMS App (Note: Control App includes ARMS App functionality)	PXDBL-PROCESS-CS00A
To order a PX Dashboard Lite Processor with ARMS App	PXDBL-PROCESS-0000A
Field installable apps:	
Control App	PXDB-APP-CONTROL
Setpoints App	PXDB-APP-SETPOINT
ARMS App (Note: Control App includes ARMS App functionality)	PXDB-APP-ARMS
HMI 7-inch	PXDB-HMI-7
Wall-mount enclosure 7-inch	PXDB-WALL-ENCL-7
Modbus Translator	MMINT
Power supply—24 Vdc	PSG60N24RP

Memory

- Flash: 8 GB
- RAM: 2 GB

Communication ports

- Network ports: Two 10/100BASE-T RJ-45 connectors
 - Network 1—Main network connection
 - Network 2—Dedicated display connection or additional main network connection
- Serial ports:
 - Two RS-485 ports for Modbus RTU devices
- Configuration port: One mini USB port (after loading the USB driver connect to IP address 192.168.200.101)

Network protocols supported

- Modbus TCP/IP: Supports data access from Modbus TCP clients
- Web server: Supports data access from web browsers (HTTP and HTTPS)
- DHCP: Supports automatic IP address assignments, if enabled
- NTP: Supports time synchronization via a network time server for PXDBLP synchronization
- BACnet/IP: Supports data access from BACnet clients

Serial protocols supported

- Modbus RTU

Web browsers recommended

- Google Chrome

Power input

- Input voltage, nominal: 24 Vdc; 0.3 A minimum
- Input voltage range: ±10% nominal

Power consumption

- 8 W maximum

Operating temperature

- +32 to +140 °F (0 to +60 °C)

Ambient storage temperature

- −40 to +185 °F (−40 to +85 °C)

Relative humidity

- 5 to 95% noncondensing at +122 °F (+50 °C)

Size (H x D x L) in inches

- 2.00 x 4.50 x 9.00

Weight

- 1.7 pounds

Supported devices

Table 2. Supported devices and protocols

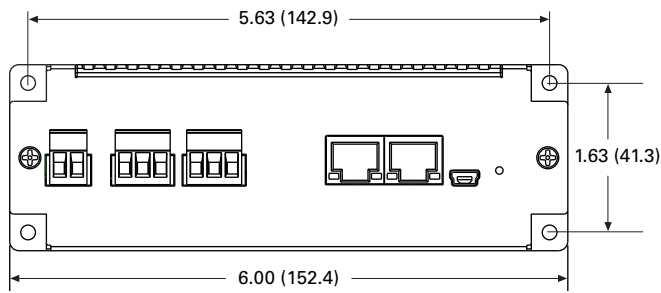
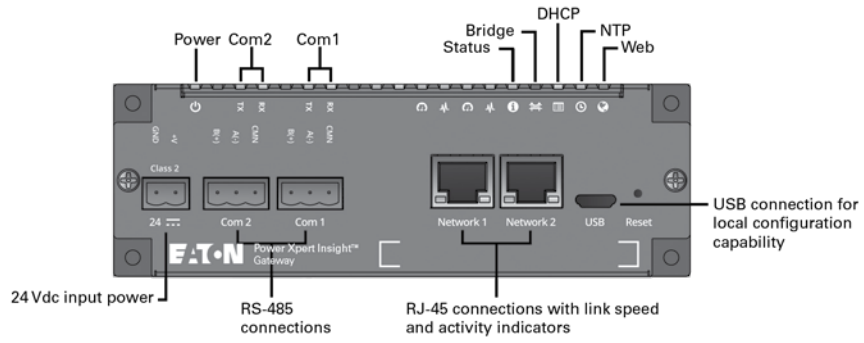
Family	Model
Modbus RTU	
Protection	Power Defense PXR 20/25
Protection	Magnum DS Digitrip 520MC (through MMINT)
Protection	Magnum DS Digitrip 1150 (through MMINT)
Protection	Series NRX PXR 20/25
Meter	IQ 130/140/150
Meter	IQ 250/260
Meter	PXM1000
Meter	PXM2250/60/70/80/90
Meter	PXM3000
Meter	PXM4000/6000/8000
Meter	PXMP
Meter	PXBCM

Regulatory and standards compliance

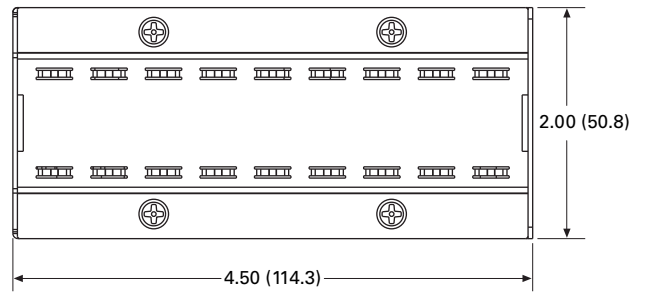
- UL 508, Standard for Programmable Controller Equipment
- UL 2900-2-2 Cybersecurity assurance program certificate
- FCC, Class A, Part 15, Subpart B, Sections 15.107b and 15.109b
- EN55022:2010/A1:2011 Class A and EN55024:2010 Information Technology Equipment
- EN 61326-1:2006 and EN 61326-2-2:2006 Electromagnetic Compatibility (EMC) in Industrial Environments

Note: Features and specifications listed in this document are subject to change without notice and represent the maximum capabilities of the product with all options installed. Although every attempt has been made to ensure the accuracy of information contained within, Eaton makes no representation about the completeness, correctness, or accuracy and assumes no responsibility for any errors or omissions. Features and functionality may vary depending on selected options.

Panel mounting



Front View



Side View

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