RELEASE NOTES for Power Distribution Monitoring & Control powered by PXG1000

Software Version PDMC_PXG1000_2025.6.1
Build Date: 07/31/2025

Software Version PDMC_PXG1000_2025.3.1
Build Date: 04/09/2025

Software Version PDMC_PXG1000_2024.12.1
Build Date: 12/10/2024

Software Version PDMC_PXG1000_2024.10.1
Build Date: 10/23/2024

Software Version PDMC_PXG1000_2024.5.1
Build Date: 05/22/2024

Software Version PXG1K_PDMC_2023.10.2
Build Date: 12/14/2023

Software Version PXG1K_PDMC_2023.10.1
Build Date: 10/23/2023

These release notes are provided as a guide to Power Distribution Monitoring & Control Powered by PXG1000.
This document is not intended to be all-inclusive.

Table of Contents

1.0 Product Description

The Power Distribution Monitoring & Control PXG1000 is the user portal to Eaton’s Switchgear, small switchboards and panelboards.
The PDMC PXG1000 provides the user with a touch screen interface showing the switchgear elevation and one-line diagram views of the switchgear line-up.
The factory configured PDMC-PXG1000 will arrive at the customer site with all communicating switchgear devices connected and communicating.
A local touchscreen HMI mounted on the wall or in a kiosk with line of sight

visibility of the switchgear line-up will enable the end user to monitor, diagnose, and control switchgear devices from a safe location outside the arc flash boundary.

The Power Distribution Monitoring & Control PXG1000 provides following features:

- Software provides three modes of operation i.e. Monitoring, Control, and Configuration modes

  Monitoring:
  - Elevation view to monitor the complete Motor Control Center or switchgear line-up, showing the status of all circuit breakers (opened, closed, tripped), contactors, motors, and the bus status (energized or de-energized).
  - Dynamic One-Line Diagram Views for LVA and MVA switchgear and Low Voltage Motor Control Centers
  - Auto-synchronize Views(Elevation and Oneline)
  - Card View to show communicating switchgear devices connected.
  - Compartment view details for all the devices in an MCC bucket.
  - Timeline View that displays the sequence of events for the MCC or switchgear line-up. Events include alarms, device status changes and service or maintenance items.
  - Device Details View that displays the Status, Maintenance, Timeline, Trends of top 4 parameters, Documentation for the selected device
  - Alarm Details screen that displays the alarm information for the selected device
  - Monitor communication health for each individual smart component & alert on communication failure
  - Export Timelines, Trends, etc. to .csv file(s)

  Control Mode:
  - Access to authorized users only.
  - Enter control mode from Elevation, One-Line, Devices, or Transfer screens.
  - Request confirmation, including PPE acknowledgement.
  - Control operations supported - Open/Close breaker, Enable/Disable ARMs mode

  Configuration Mode:
  - Access to authorized users only.
  - Import switchgear configuration data from a file generated by Bidman/Design Automation systems at the assembly plants.
  - Wizards for ease of configuration of motor starter and drive buckets
  - Create or edit screens like elevation view, one-line diagram view etc.
  - Provision to configure the alarm/warnings settings
  - Manage user accounts
  - Allow customers to enter procedures and PPE requirements.
  - Provision to set parameter values into the communicating devices

- Access to Switchgear and device documents from the Docs tab on the Navigation menu

- A help document explaining the usage of the Power Xpert Dashboard Processor
- Remote Connectivity on the HMI by accessing the IP address of the PXDBP remotely.

- Transfer Scheme

• Standard implementation of MTM and MM transfer schemes that uses the ELC PLC as the logic controller and the HMI for configuring, monitoring and manual transfer initiation.
• Supports both Open and Closed Transition types.
• Support for both Automatic and Manual transfer and re-transfer modes.
• Select to Trip which is a manually initiated closed transition transfer.
• Allows selection of the preferred source of power if both sources are available.
• Ability to configure the Transfer Scheme system level settings and the PLC parameter settings.

2.0 System Requirements

In order to use this software pre-requisites are:
• PDMC PXG1000 Processor.
• Optional windows based 21'' and 15'' HMI with chrome installed (To access application on 21'' and 15'' HMI)
• Optional ESA Android based 7" HMI v 1.0.62 with Webview and chrome installed (To access application on 7" HMI)
• Adobe® Acrobat Reader (version 5 or higher)
• Ethernet cable to communicate over Internet.

2.1 Supported Browsers

The PDMC PXG1000 Processor is viewable using any HTML5 compliant browser with local or network access

Chrome is recommended for the best user experience.

3.0 Compatible Devices

The PDMC PXG1000 Processor will focus on LVA and MVA switchgear and LV Motor Control Centers with Eaton Protection and Metering products

---
4.0 New Features and Fixes

VERSION PDMC_PXG1000_2025.6.1 (July 2025)
New Feature Addition:
• Added minimal dataset support for PXR 20/25 MCCB and PXR ACB on Magnum Protection devices for faster polling.
• Oneline device data, including alarms, is now stored to the cloud when a change event is triggered and on every login.

Improvements & Bug fixes:
• Recovery Mode Enhancement: Recovery mode now uses a fixed 60-second timer instead

of ping-based triggers, ensuring consistent access even under restricted network conditions.
• On session timeout, elevated users are automatically logged out, and Access Point-enabled users are re-logged in.
• Open Breaker Control Command failure for MCCB PD2.
• Devices Card View: missing control toggle on application refresh.
• Setpoints: Highload 1 and Highload 2 dependencies for PXR ACB-Magnum & PXR35 devices are not getting triggered.
• Oneline Widgets: Abbreviated names not displayed.
• Docs:
    • Overlapping text in Add Doc (Manuals) for LVMCC.
    • Unable to upload documents for non-communicating devices.
• LVMCC Elevation: Unsaved changes pop-up appears multiple times.
• Add Existing Device modal: Sort By device type does not work.
• Users can configure screens as default activity which are not available in the navigation menu.
• Selected Unit conversion is not getting applied on Settings alarms screen.
• Modbus TCP Communication: Communication with Gateway fails even when valid trusted hosts are listed and "Trusted Only" is enabled.
• Descriptions are missing in the All Channels stack for Static Channels.

Features Affected
• Device Card view
• Device Setpoints
• Device Tree
• Oneline
• Elevation
• Control Command Operations
• All Channels Screen
• Docs

VERSION PDMC_PXG1000_2025.3.1 (April 2025)
New Feature Addition:
• BLR CM and PXQ device support added for Modbus RTU.

Improvements & Bug fixes:
• Made improvements to HRG alarm.
• Added Exertherm device alarm support.
• Fixed non communication issue for AQD EDS devices connected on the same port as AQD.
• Fixed issue where Digitrip device addresses were displayed in decimal format instead of hexadecimal when editing in the Add Device modal

Features Affected
• Device Card view
• Device Tree
• Oneline
• Elevation
• Timeline

VERSION PDMC_PXG1000_2024.12.1 (December 2024)
New Feature Addition:
• Added PXE1 & PXE2 device support.
• Added Exertherm Transformer Data card & Exertherm Bus Duct Data card support.
• Implemented Infrasensing Alarm Algorithm.
• Added USB INCOM support.
• Added PXR35 Device 6 Digit Password support.

Improvements & Bug fixes:
• Updated to PX Red Toolkit platform 4.10.
• INCOM devices Setpoints Trip Curves optimized.
• Updated EULA with External Libraries.
• Issued fixes for 10" inch HMI.
• Highchart export image issue.
• INCOM Device addition issue to disable addition of more than 50 devices.
• Issue with Disable ARMS Modal not displayed on control toggle.

Features Affected
• Trend Viewer
• Setpoints stack
• Waveform list
• Device Card view
• Oneline
• Elevation

VERSION PDMC_PXG1000_2024.10.1 (October 2024)
New Feature Addition:
• Added LV-HRG device support
• Added InfraSensing sensors support
• Added PXR35 device support with setpoint feature

Improvements & Bug fixes:
• Added 10 seconds delay before Open/Close/Remote Racking commands execution for operator to step away from the assembly
• Error message was getting displayed instead of success message while performing open,close breaker commands for elevated user on 21" HMI
• Incorrect power factor value display for PXR 2.0 above & Magnum device
• Transfer Scheme bug fixes for elevated user
• Transfer tab visibility for auto login of viewer user
• Few channel values of downstream assembly not getting displayed on oneline sidebar
• Virtual keyboard not working on some screens on HMI

Features Affected
• Oneline
• Elevation
• Transfer Scheme

VERSION PDMC_PXG1000_2024.5.1 (May 2024)
Initial release based on combined code of PDMC Enhanced, PDMC Basic and PXG900

New Feature Addition:
• Licenses for Enhanced graphic and External device support
• SNMP
• Certificate Management

VERSION PXG1K_PDMC_2023.10.2 (December 2023)
• Improved Bootloader to speed up network connectivity after a reboot

VERSION PXG1K_PDMC_2023.10.1 (October 2023)
Initial release based on PDMC_2023.9.2 from September 2023

These features differ from the PDMC_2023.9.2 version:
• Unique default password based on S/N
• Hardware Version changed from PXDBL to PXG1000
• New factory reset functionality - refer to Quick Start Guide

---
5.0 Recommendations

• After a firmware update, a user having Change Settings permission should login first.
• If You are updating from version of Chrome older than 104.X.X, you should update the Firmware and reinstall the CA certificate.

6.0 Known Issues

• While Enabling/Disabling ARMS on a breaker which does not have feeder wire connected to it, the compartment name is not displayed in the dropdown.
  Workaround: Do not select any option from the 'Enable ARMS On' dropdown & just click the Enable/Disable button to enable/disable ARMS.

• PXM1300 IO module details are not getting displayed for COM and Network port.
  Workaround : User need to refresh application to get IO module details.

• For EDR3000/5000 devices, IO channel description is not getting displayed on all channel stack.
  Workaround : User needs to remove and re-add the device to get the description on all channel stack for EDR3000/5000 devices.

• On Settings Device Tree screen, when user clicks on a device and navigates to the

Device Element stack, PDMC Virtual device details are displayed.
  Workaround: User needs to remove and re-add the device to obtain valid device configuration details.

• Executing the Reset Trip command from Oneline sidebar pocket might not update the breaker status on Transfer screen.
  Workaround: User needs to reset the trip manually on the breaker.

Updated 07/31/2025