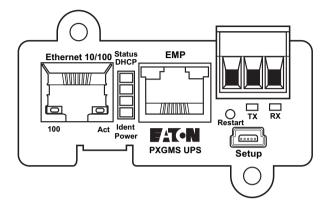
# Quick Start Instructions



#### **Package Contents**

- Power Xpert Gateway Minislot (PXGMS) UPS Card
- USB Cable
- Quick Start Instructions



### **Help Desk Numbers**

All Other Countries Call your local service	1-800-461-9166 ext 260 Call your local service representative www.eaton.com/pxgms
Canada 1-800-461-9166 ext 26	1-800-461-9166 ext 260
United States 1-800-356-5737 or 1-8	1-800-356-5737 or 1-800-843-9433

**NOTE:** On the Web site opening page, click **Support** and select the Customer Service link for more information.

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### TABLE OF CONTENTS

### Section 1 Installation Checklist

- 1. Verify that the following items are available:
  - Power Xpert Gateway Minislot (PXGMS) UPS Card package contents (card, cable, Quick Start Instructions)
  - □ Phillips<sup>®</sup> screwdriver
  - □ Available USB port on a computer running Microsoft<sup>®</sup> Windows<sup>®</sup>
  - ❑ Web browser (Microsoft Internet Explorer<sup>®</sup> version 11.0 and higher, Mozilla<sup>®</sup> Firefox<sup>®</sup>, or Google Chrome<sup>™</sup> are recommended)
- If you are going to use Dynamic Host Configuration Protocol (DHCP), provide your local network administrator with the card's MAC address. The MAC address is located on either the shipping box label or the label on this card.

MAC Address

3. If you are not going to use DHCP to provide any of the settings listed below, contact your local network administrator for the settings.

In the table below, check the **DHCP** check box or enter the values for manual configuration. This data is referenced later in the procedure.

ltem	DHCP*	Manual Configuration	
IPv4		Card IP Address: Netmask: Gateway:	
DNS – Name Servers		Name Server #1: Name Server #2: Name Server #3:	
DNS – Domain		Domain:	

\* The network administrator normally sets up the DHCP server to provide a static IP address each time the card makes a DHCP request.

- If you need e-mail functionality, obtain the SMTP mail server's IP address or host name. If using the SMTP host name, verify that you also have the Name Server IP address (see Step 3).
  - SMTP (mail server) IP Address or Host Name

# Section 2 Install the Card

- **NOTE 1** The hot-swappable PXGMS card can be installed without turning off the UPS or disconnecting the load.
- **NOTE 2** If your UPS is a 93PM, there may be a metal strip that prevents you from installing the PXGMS card. If so, locate the metal strip bolted to the top of the UPS. Remove the three bolts that attach the metal strip. Then, follow the procedure to install the PXGMS card.

To install the PXGMS card:

1. On the PXGMS card, verify that all six DIP switches are in the OFF position (see Figure 1).

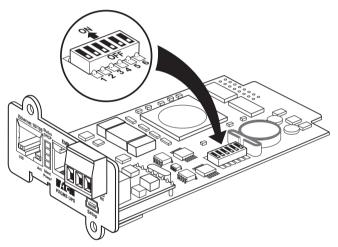


Figure 1. Verify DIP Switches are OFF

- 2. If not already done, record the MAC address from either the shipping box label or the label on this card for future reference (see the "Installation Checklist" on page 2).
- 3. Remove the minislot cover from the UPS. Retain the screws.
- **NOTE** If another card is already installed with an attached communication cable, disconnect the cable and then remove the card.
- 4. To prevent electrostatic discharge (ESD), place one hand on a metal surface, such as the UPS rear panel.

5. Slide the card into the open slot and secure it with the screws removed in Step 2 (see Figure 2).

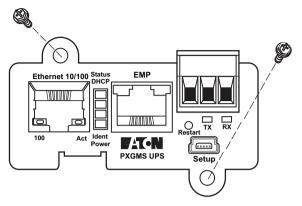


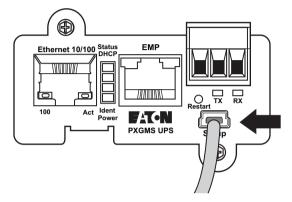
Figure 2. Secure the PXGMS Card

- 6. From your laptop, go to www.eaton.com/pxgms.
- On the Resources tab, click the Software, Firmware, and Applications link to download the Power Xpert Gateway USB Signed Windows Device Driver.
- Save the driver configuration file (eaton-pxgms-firmware.zip) to the C: drive using the default location or a folder you select. Note the path of the downloaded file on your computer. (Never download the file to your desktop.)

# Section 3 Connect the Card to the Computer

To connect the card to the computer:

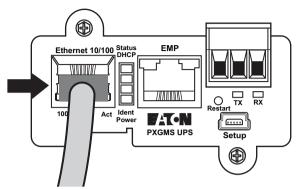
1. Plug the small connector at the end of the supplied USB configuration cable into the setup port on the card (see Figure 3).



#### Figure 3. Install the USB Cable

- 2. Plug the other end of the USB cable into the USB port on the computer. The Windows operating system detects new hardware.
- **NOTE 1** If a message indicates that the device driver software was not successfully installed, click **Ignore**.
- **NOTE 2** You may see a pop-up message window that shows "Found new hardware." This indicates that the hardware installed successfully.

3. Connect an active Ethernet cable (not supplied) to the Ethernet 10/100 connector on the PXGMS card (see Figure 4).



#### Figure 4. Install the Ethernet Cable

- 4. Wait for the power light and status light on the installed card to illuminate. This takes about two minutes.
- Open a Web browser and type the default IP address (https://169.254.0.101 for firmware 2.6.0 or later, http://192.168.200.101 for earlier firmware versions).
- 6. Did the Power Xpert Gateway software open to the PXGMS page?
  - If yes, the driver has already been installed automatically. Either verify the IP address assigned through DHCP or manually enter a static (fixed) IP address for the card's network connection:
    - a.To verify the DHCP-assigned IP address, go to page 13.
    - b.To manually enter a fixed IP address, go to page 16.
  - If no, the driver has not been installed. Go to the next section, "Install the USB Driver Software" on page 7 in order to confirm that you have the most current USB Driver software. If not, you need to install or update the USB Driver software.

### Section 4 Install the USB Driver Software

The steps you use to install the driver software depend on your operating system (OS). This procedure provides instructions for installing driver software on a Windows 7 OS.

- **NOTE 1** Windows 8 steps are basically the same as Windows 7, although the dialog displays may differ somewhat.
- NOTE 2 The PXGMS and PXGX UPS cards use the same driver.
- **NOTE 3** You can use either the Device Manager path or the Devices and Printers path to browse for the driver software and install it. This procedure uses the Device Manager.

To install the driver from the **Device Manager**:

- 1. Click **Start** in the Start bar. Type Device in the search box.
- 2. Select **Device Manager** from the list above the search box. The Device Manager opens.
- 3. Locate **RNDIS/Ethernet Gadget** under either **Other Devices** or **Network Adapters** (see Figure 5).
  - If you do not see RNDIS/Ethernet Gadget in either list, you do not have a cable connected to the card. Connect the computer to the card. Go back to Step 1.
  - If RNDIS/Ethernet Gadget is listed under Other Devices, the driver is not installed. Go to Step 4.
  - If RNDIS/Ethernet Gadget is listed under Network Adapters, a driver is installed already, but you it may not be the most up to date driver. Go to Step 4.

🚔 Device Manager		-
Eile Action ⊻iew Help		
(+ +) 🖬 🗐 🚺 🖬	10 👔 🙀 15	
BEL PC     BEL PC     BEL PC     BEL PC     BEL PC     Diply Adaptes     Diply	s trollers	
	Scan for hardware changes	
	Properties	

Figure 5. Device Manager Window

- 4. Right-click RNDIS/Ethernet Gadget to display the menu and select **Update Driver Software**.
  - If a pop-up message displays, "The best driver is already installed," click **Close** and go to Step 10.
  - Otherwise, go to Step 5.
- 5. Select **Browse my computer for driver software** (see Figure 6). Click **Next**. The next page displays.

(j) I	Update Driver Software - RNDIS/Ethernet Gadget	×
Но	w do you want to search for driver software?	
•	Search automatically for updated driver software Windows will search your computer and the Internet for the latest driver software for your device, unless you've disabled this feature in your device installation settings.	
•	Browse my computer for driver software Locate and install driver software manually.	
		Cancel

Figure 6. Update Driver Software Window – Search Method

- Click Browse. The "Browse for Folder" dialog displays. Select the folder that contains drivers for your hardware. Click OK. The "Browse for driver software on your computer" page displays.
- 7. The path to the powerxpert.inf file displays in the **Search for driver software in this location** box. Click **Browse** and navigate to the powerxpert.inf file you already downloaded. Select the file and click **Next** (see Figure 7).
  - If a pop-up message displays, "The best driver is already installed," click **Close** and go to Step 10.

		×
0	Update Driver Software - RNDIS/Ethernet Gadget	
	Browse for driver software on your computer	
	Search for driver software in this location:	
	Browse	
	☑ Include subfolders	
	Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all driver software in the same category as the device.	
	Next Cano	:el

• Otherwise, the software begins to install.

Figure 7. Update Driver Software Window – Browse for Driver Software

8. When the driver software is updated successfully, the message "Windows has successfully updated your driver software" displays (see Figure 8).

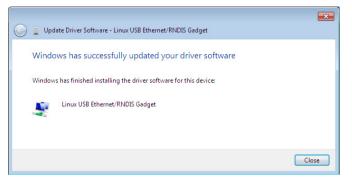


Figure 8. Update Driver Software Window – Update Successful

- 9. Click Close.
- Either obtain the DHCP-assigned IP address or manually enter a fixed IP address:
  - To obtain the IP address assigned through DHCP, continue to "Obtain a DHCP-Assigned IP Address" on page 11.
  - To manually enter a static (fixed) IP address for the card's network connection, continue to "Assign an IP Address Manually" on page 15.
- **NOTE** By default, the PXGMS card requests an IP address through DHCP when connected to a network.

## Section 5 Obtain a DHCP-Assigned IP Address

To obtain the IP address through DHCP:

- 1. Ensure the PXGMS card is still connected to the computer over the USB cable. Also ensure that the network cable is connected from the PXGMS card Ethernet port to the network connection.
- 2. If your Web browser already open to the default IP address, go to Step 3. Otherwise, perform the following:
  - Open your Web browser.
  - Enter: https://169.254.0.101 for firmware 2.6.0 or later, http://192.168.200.101 for earlier firmware versions.
  - Log on as administrator. The default username and default password are "admin." The PXGMS card Web page displays.
- **NOTE** If the system is unresponsive and you cannot make any selections, the browser may not be running in compatibility mode. To enable compatibility mode, go to "Enable Browser Compatibility Mode" on page 18.
- 3. Select **Network** from the Configuration menu. The **Network** page displays (see Figure 9).

Power Xpert®	05/13/2015 15:54: 05/13/2015 11:54: 05/13/2015 11:54: CEC 93PM, RPO
Menu	Overview
Device Data –	-  Network
Power Xpert Mini-Slot card     REATON 93PM     UPM 1     UPM 2     Environmental Monitoring Probe	System Information System location: Your location System contact: Your name
	Network
	MAC: XX:XX:XX:XX:XX
	■ IPv4
Open Alarms (17) 📃	Automatic Configuration: DHCP Enabled:
(1) Open Alarms	Manual Configuration
	IP Address:
	Netmask:
	Gateway:
	- IPv6
Logs 🔫	
Configuration 📃	-  Name Service
Sessential Configuration Tasks	Ping Test: Tes
Connections	HTTP get test: http://
	Reboot Now
@ Date/Time	
	Apply Discard

Figure 9. PXGMS Card Network Page

- 4. Under IPv4, the **Automatic Configuration: DHCP Enabled** setting checkbox should be enabled by default. Make sure the checkbox is checked (enabled) before continuing.
- Scroll down to Name Service and expand the selection to update the next two DHCP settings (see Figure 10):
  - Check the checkbox (enable) for Use DHCP (when enabled) to get name services.
  - Check the checkbox (enable) for Use DHCP (when enabled) to get domain name.

#### 6. Click Apply.

Power Xpert®	l l	07/30/2015 18:14:42 UTC 07/30/2015 14:14:42 EDT CEC 93PM, RPO	
Menu	~	Overview	
Device Data	Prob	MAC: UU:20:85:F1:00:FB Marcal Configuration: DHCP Enabled: Manual Configuration IP Address: Netmask: Gateway: Netmask: Gateway: Netmask: Gateway: Netmask: Gateway: Netmask: Gateway: Use DHCP (when enabled) to get name servers: Name Server #1: Name Server #2: Name Server #3: Use DHCP (when enabled) to get domain name: Domain: Hostname:	
		Actions	
Open Alarms (1)	+	Ping Test:	t
Logs	+	HTTP get test: http://	t
Configuration	+	Reboot Now	
Documentation	+		

Figure 10. Name Services Settings

- 7. Select Yes for the message, "Do you want to save the Network Configuration?"
- 8. Wait for approximately two minutes for the card to reboot. Initially, all lights are lit. You will know the card has finished rebooting when only the top light (Status) and the bottom light (Power) remain lit.

- Open a browser and enter the default IP address (https://169.254.0.101 for firmware 2.6.0 or later, http://192.168.200.101 for earlier firmware versions).
- 10. When prompted, log on as administrator. The default username and default password are "admin." The PXGMS card Web page displays.
- 11. Click Network in the menu list.
- 12. Does the DHCP-assigned IP address display?
  - If yes, uncheck (disable) the DHCP Enabled box and select Apply.
- **NOTE** At this point, the DHCP address is saved as a static IP address.
  - If no, go to "Assign an IP Address Manually" on page 15 to manually obtain a static IP address for the PXGMS card.
- **NOTE** For detailed information, refer to the user's guide for the *Eaton Power Xpert Gateway Minislot (PXGMS) User's Guide*, which is available through a link on the Documentation tab on the PXGMS product Web page.

# Section 6 Assign an IP Address Manually

To manually enter a static (fixed) IP address for the card:

- 1. Ensure the PXGMS card is still connected over the USB cable and the network cable is connected from the PXGMS card Ethernet port to the network connection.
- 2. If your Web browser already open, go to Step 3. Otherwise, perform the following:
  - Open your Web browser.
  - Enter: https://169.254.0.101 for firmware 2.6.0 or later, http://192.168.200.101 for earlier firmware versions.
  - Log on as administrator. The default username and default password are "admin." The PXGMS card Web page displays.
  - Go to Step 3.
- **NOTE** If the system is unresponsive and you cannot make any selections, the browser may not be running in compatibility mode. To enable compatibility mode, go to "Enable Browser Compatibility Mode" on page 18.
- 3. Select **Network** from the Configuration menu. The Network page displays.

Power Xpert®	F:T•N	05/13/2015 15:34:58 UTC 05/13/2015 11:34:58 EDT CEC 93PM, RPO
Menu	Overview	
Device Data	- • Network	
Power Xpert Mini-Slot card     EATON 99PM     UPM 1     UPM 2     Environmental Monitoring Prob      Open Alarms (17)     Open Alarms	System Information System Information System contact: Your name Network MAC: Network MAC: Netmatic Configuration IP Address: Netmask: 255.255.255.0 Gateway: IPv6 IPv6	
Logs 💽	→ Name Service	
Configuration –	Actions	
Sessential Configuration Tasks	Ping Test:	Test
Access Control	HTTP get test: http://	Test
- Network	Reboot Now	
Connections		
OpenVPN  Oten/Time	Apply Discard	

#### Figure 11. Disable DHCP Setting

- 4. Uncheck the **DHCP Enabled** checkbox to disable DHCP and allow you to manually configure the IP address (see Figure 11).
- Refer to the "Installation Checklist" on page 2 in this book. Enter the IP address, Netmask, and Gateway addresses in the IPv4 > Manual Configuration section.
- 6. Click **Apply**, then click **OK** to confirm.
- 7. **Optional.** If you are using a host name, or host names, for controlling access to the card:
  - Type the server IP address in the **Name Server** box. (Up to three IP addresses can be entered.)
  - Click Apply. Click OK to confirm.

- 8. Open a browser and enter the fixed (static) IP address.
- 9. Log on as administrator. The default username and default password are "admin." When the PXGMS card Web page displays, you know the fixed IP Address is working.
- **NOTE** For detailed information, refer to the user's guide for the *Eaton Power Xpert Gateway Minislot (PXGMS) User's Guide*, which is available through a link on the Documentation tab on the PXGMS product Web page.

### Section 7 Enable Browser Compatibility Mode

Browser compatibility allows Web pages designed for older versions to display properly. If data does not display properly on your PXGMS card Web page, the browser compatibility mode should be enabled.

To enable the compatibility mode:

- 1. Open your Web browser.
- In the Menu bar select Tools > Compatibility View Settings. The Compatibility View Settings window opens (see Figure 12).

Compatibility View Settings	×
Change Compatibility View Settings	
Add this website:	
http://192.168.200.101/	Add
Websites you've added to Compatibility View:	
	Remove
Diselau internat sites in Compatibility Maur	
Display intranet sites in Compatibility View	
Learn more by reading the Internet Explorer p	rivacy statement
commone by reading the <u>internet explorer</u> p	invery searcement

#### Figure 12. Compatibility View Settings Window

- Under "Add this website:" type the IP address of the PXGMS card and click Add.
- **NOTE** Close and re-open your browser so that the changes take effect.

### Section 8 Register a PredictPulse Subscription

Predict*Pulse*<sup>™</sup> is a remote monitoring and management subscription service that collects and analyzes data from connected power infrastructure devices, providing Eaton with the insight needed to make recommendations and take action on your behalf. This service has limited availability outside of the United States. For more information go to **www.eaton.com/predictpulse**.

**NOTE** Contact your Eaton service representative for availability of Predict*Pulse* in your region.

Use either the universal Predict*Pulse* Subscription Wizard or the PXGMS Predict*Pulse* setup feature to configure your profile and register the Eaton UPS devices monitored by Predict*Pulse*.

The universal Predict*Pulse* Wizard can be downloaded from the Predict*Pulse* web site to begin your subscription registration. Using this method, you can register devices individually or as a group.

However, the latest firmware for the PXGMS and PXGX UPS cards contain a Predict*Pulse* activation set-up feature. As long as these cards are on your network, you can quickly activate subscriptions without the wizard and save time.

To begin registering with the set-up feature, follow this procedure. An e-mail with additional instructions to finish registering and configuring your card is automatically sent to the provided e-mail address.

To register an installed PXGMS card for PredictPulse:

- 1. Locate the Predict*Pulse* selection under the Configuration menu on the Power Xpert Gateway window.
- NOTE 1 If there isn't a PredictPulse selection, either update your firmware or download the universal PredictPulse Wizard from www.eaton.com/predictpulse and follow the instructions in the Wizard and subsequent e-mail messages.
- **NOTE 2** Refer to the *Eaton Power Xpert Gateway Minislot (PXGMS) User's Guide* for more information.

 On the Power Xpert Gateway window, select Configuration > PredictPulse (see Figure 13).

Power Xpert®	FAT•N	04/27/2015 20: 04/27/2015 16: CEC 93PM, RF
Menu	Overview	
Device Data –	PredictPulse	
Power Xpert Mini-Slot card     EATON 93PM     UPM 1	Eaton's PredictPulse is a monitoring and management subscription service that recommendations and take action on your behalf. Contact Eaton in US at 800/	
UPM 2	PredictPulse	
Environmental Monitoring Prob	Enable PredictPulse:	
	Contact Email:	johnsmith@yourcompany.co
пп	Confirm Email:	johnsmith@yourcompany.co
Open Alarms (15)	Contact Name:	John Smith
Logs 主	Country:	United States
Configuration	Apply Discard	
Connections		
OpenVPN		
- Pate/Time		
PredictPulse		
Environmental Monitoring Prob		

#### Figure 13. Registering a Predict Pulse Subscription

- 3. Confirm that the checkbox for "Enable PredictPulse" is checked (enabled).
- 4. Complete the following fields:
  - Contact Name: First and last name of the contact person.
  - Contact Email: E-mail address of the contact person for event data.
  - **Confirm Email**: E-mail address again for confirmation.
  - **Country**: Country where the main contact resides.
- 5. Click **Apply** to save.
- 6. Click **OK** in response to the message, "Are you sure you want to apply settings and send registration email?"

7. A progress message box informs you that registration is in progress. When the first step in registration completes successfully, the contact person identified on the Predict*Pulse* settings page receives an e-mail with additional instructions (see Figure 14). Registration should be completed on the Eaton portal by this contact person.



Figure 14. Confirmation Message



P-164000208 3