

Introduction

This document provides instructions for connecting a NetComm Wireless NTC-140W series wireless router to one of the following Eaton connectivity cards:

- Power Xpert Gateway UPS (PXGX-UPS)
- PXGMS Power Xpert Gateway Minislot UPS (PXGMS)
- Network-MS

Prerequisites

- Eaton UPS with a PXGX-UPS, PXGMS, or Network-MS card
- PuTTY or HyperTerminal software
- USB-to-USB (Type B) cable for PXGX-UPS
- USB-to-USB (MiniTypeB) for PXGMS
- RJ-45 to 9-pin female serial (D shell) for Network-MS
- Serial COM port or USB-to-serial 9-pin male adapter

NTC-140W Series Router Installation Guidelines

Refer to the *Quick Start Guide* provided with the NetComm Wireless NTC-140W Series Router for instructions on mounting the router and connecting power.

Note: The router must be powered by a 120V outlet powered by the UPS. This ensures that the router is protected during a power outage.

Connecting the Router to a PXGX-UPS or PXGMS Card

Connect the NTC-140W Series router and Eaton network card. Use the included Ethernet cable or equivalent.

For a PXGX-UPS card:

- Connect the Ethernet cable from the **LAN** port on the NTC-140W Series router to the **Upstream** port on the card (Figure 1)

For a PXGMS card:

- Connect the Ethernet cable from the **Ethernet** port on the card (Figure 2) to the **LAN** part on the NTC-140W Series router

Route the Ethernet cable into the UPS via the appropriate conduit holes.

Once connected, the LEDs on the active Ethernet port, as well as the green **Power** LED, should light.

Figure 1. Power Xpert Gateway UPS (PXGX-UPS) Card

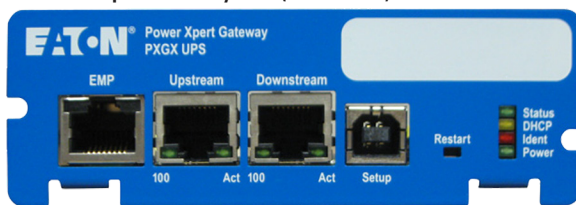
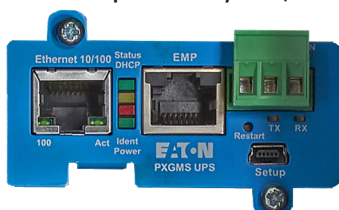


Figure 2. Power Xpert Gateway UPS (PXGX-UPS) Card



Configuring a PXGX-UPS or PXGMS Card

To troubleshoot or set up the PXGX-UPS or PXGMS card, refer to Sections 3–5 of the card's *Quick Start Guide* for instructions on connecting a Windows-based computer to the card's **Setup** port using a USB cable.

For a new installation, the PXGX-UPS or PXGMS card will use default configuration settings. The only steps necessary are to add the SMTP relay information (*mail.eaton.com*) and to verify that the e-mail recipient (*monitor@v2.monitor.com*) is properly configured as described below. The router does not require any additional setup steps.

If installing on an existing PXGX-UPS or PXGMS card, reset the card to factory default settings as follows:

- Locate the onboard DIP switch and set switch 6 to ON
- Reboot the card to restore the factory defaults
- Return switch 6 to OFF and reboot the card

For more information on restoring the factory default settings, refer to the *User's Guide* provided with the card.

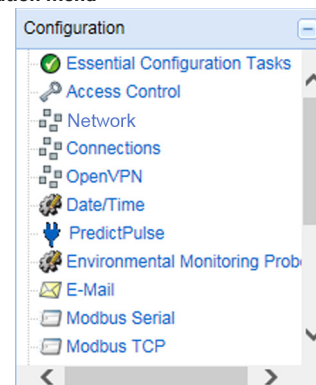
To configure the PXGX-UPS or PXGMS card, connect to the card's **Setup** port using a USB cable. Once connected, open an internet browser and navigate to <http://192.168.200.101>.

Log in using the default credentials:

Username: admin
Password: admin

From the **Configuration** menu (Figure 3), select **E-mail** to display the **E-mail** tab (Figure 4).

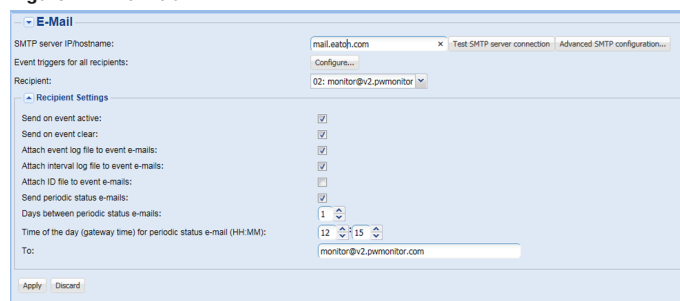
Figure 3. Configuration Menu



Ensure that the SMTP server/IP hostname is *mail.eaton.com* and that an e-mail recipient is set up for *monitor@v2.pwmonitor.com*.

Proceed to the section titled, *Run the PredictPulse Wizard*.

Figure 4. E-Mail Tab



Connecting a NetCommWireless NTC-140W Series Router to an Eaton® Network Card

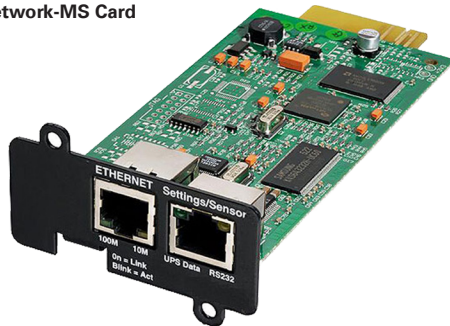
Connecting the Router to a Network-MS Card

To connect the NTC-140W Series router to a Network-MS card:

- Connect an Ethernet cable from the **ETHERNET** port on the Network-MS card (Figure 5) to the **LAN** port on the NTC-140W Series router. Use the included Ethernet cable or equivalent.
- If the Network-MS is located inside the UPS chassis, route the cable out of the chassis via a conduit hole that is protected by a rubber grommet

Once connected, the LEDs on the Network-MS card's **ETHERNET** port should light and the green LED at the top left of the **Settings/Sensor** port should blink.

Figure 5. Network-MS Card



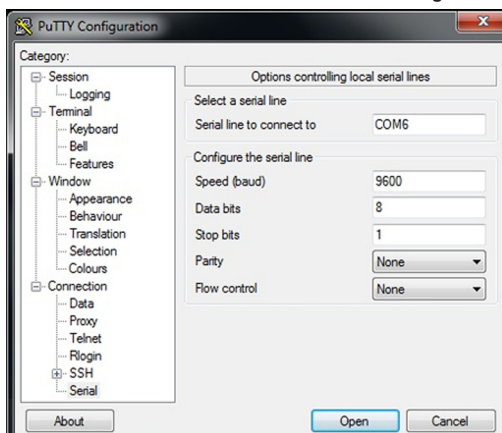
Configuring a Network-MS Card

To troubleshoot or set up the Network-MS card, refer to Sections 3–5 of the card's *Quick Start Instructions* for information on connecting a computer running a terminal emulation program (such as PuTTY or HyperTerminal) to the card's **Settings/Sensor** port using the supplied serial-to-RJ-45 cable.

The Network-MS default configuration includes a DHCP network configuration. For a new installation, no changes are necessary on the Network-MS card. The only steps necessary are to add the SMTP relay information (*mail.eaton.com*) and verify that the e-mail recipient (*monitor@v2.monitor.com*) is properly configured. The router does not require any additional setup steps.

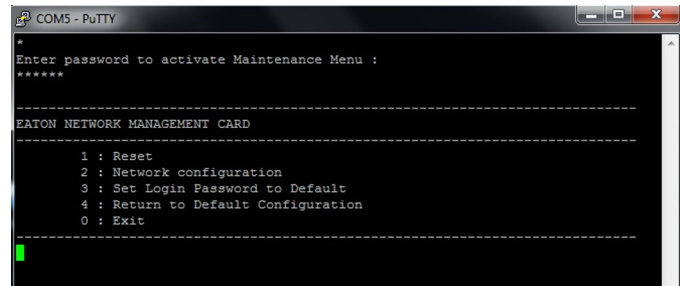
To configure the Network-MS card, connect to the **Settings/Sensor** port with the serial-to-RJ-45 cable and launch a terminal emulation session. Use the serial settings 9600 baud, 8 data bits, 1 stop bit, no parity, and no flow control (Figure 6).

Figure 6. Network-MS Card Serial Communications Settings



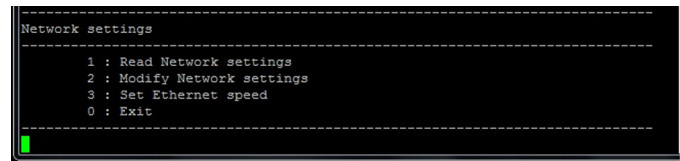
At the blinking screen, press **Enter**. You should be prompted to enter a password. Enter the password (default is admin) to display the Network-MS card main menu (Figure 7).

Figure 7. Network-MS Card Main Menu



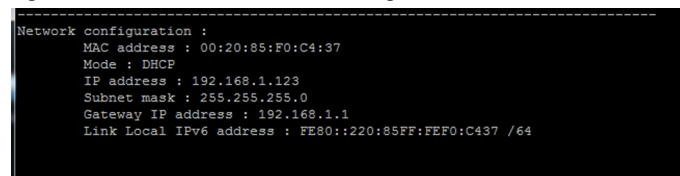
From the Network-MS card main menu, press **2** (Network configuration). The *Network settings* menu displays (Figure 8).

Figure 8. Network-MS Card Network Settings Menu



From The *Network settings* menu, press **1** (Read Network settings). The *Network configuration* displays (Figure 9).

Figure 9. Network-MS Card Network Configuration

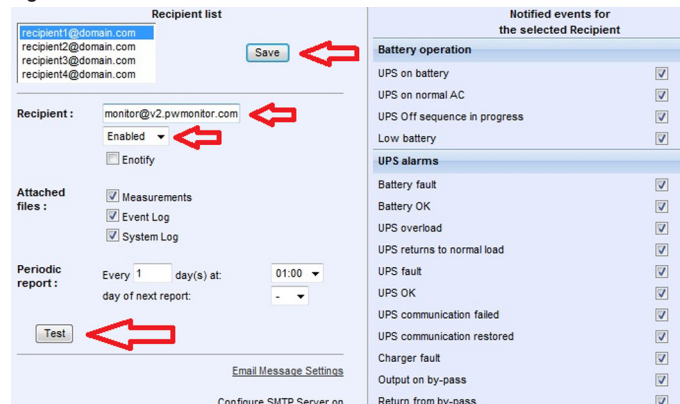


Record the IP address to access the Network-MS card's graphical user interface (GUI). Launch a web browser and navigate to the Network-MS card's IP address (Figure 10).

Ensure that *monitor@v2.pwmonitor.com* is listed in the *Recipient list*, that the address is *Enabled*, and that all of the checkboxes in the *Notified events list* are checked. Click **Test** to send an email to any recipient listed.

Proceed to the section titled, *Run the PredictPulse Wizard*.

Figure 10. Network-MS Card GUI



Connecting a NetCommWireless NTC-140W Series Router to an Eaton® Network Card

Run the PredictPulse Wizard

To run the PredictPulse Wizard (ActivatePredictPulse.exe), connect a laptop or personal computer as follows.

For a PXGX-UPS card:

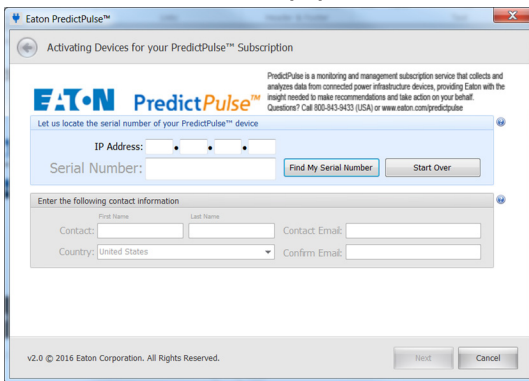
- Using an RJ-45 Ethernet cable, connect the laptop or personal computer to the card's **Downstream** port

For a PXGMS or Network-MS card:

- Using an RJ-45 Ethernet cable, connect the laptop or personal computer to the **LAN/WAN** port on the NTC-140W Series router

Run the PredictPulse Wizard (ActivatePredictPulse.exe). The Eaton PredictPulse window displays (Figure 11).

Figure 11. PredictPulse Wizard, Initial Display

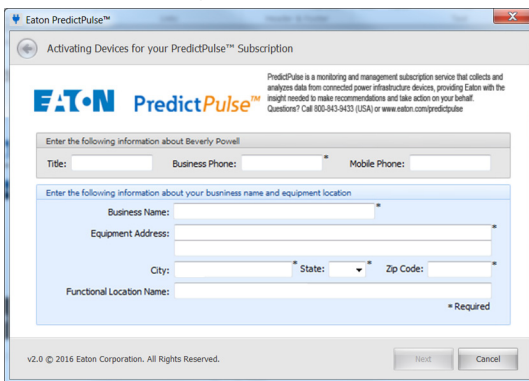


Enter the IP address assigned by DHCP to the network card.

Click **Find My Serial Number** to populate the *Serial Number* field.

Enter the contact information and click **Next**. The PredictPulse Wizard requests additional information for the contact (Figure 12).

Figure 12. PredictPulse Wizard, Additional Information



Enter the requested contact information and click **Next**.

A file named *unit.xml* is now saved on the computer in the folder *C:\Users\Administrator\Documents*.

Create a new e-mail message and copy and paste the following as the subject line:

PredictPulse Installation Information: S/N XXXXXXXXXX

Leave the body of the message blank.

Attach the *unit.xml* file to the e-mail message and send it to: *install@v2.pwmonitor.com*.

Troubleshooting

The biggest risk for the router is low signal quality. As an initial test, observe cell phone signal strength in the area of installation. If the cell phone signal is weak, an external antenna may be required.

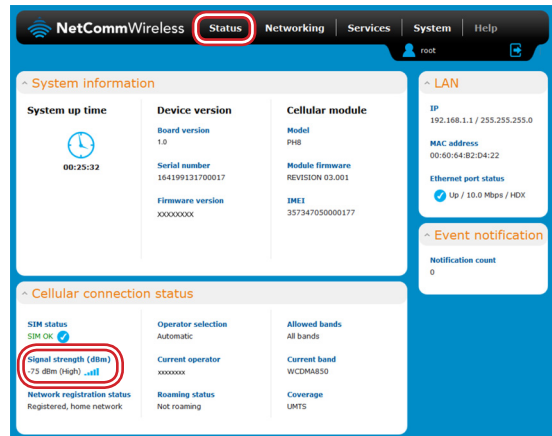
To quantify the signal, connect an Ethernet cable to the modem. Once connected, open an internet browser and navigate to *http://192.168.1.1*.

Log into the router's **Status** page (Figure 13) using the credentials:

Username: *admin*

Password: *admin*

Figure 13. NetComm Wireless Status Page

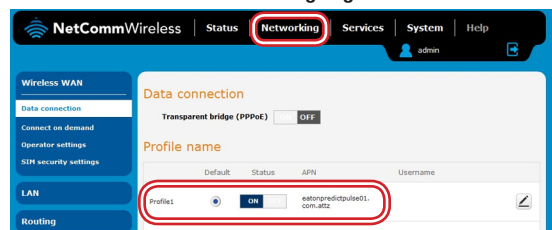


On the **Status** page, observe the *Signal strength (dBm)* and position the router to maximize the value.

If the signal is weak, an external antenna may be required. The external antenna replaces the 3G antennas provided with the router. Once connected, position the external antenna to maximize the signal strength.

The wireless router can only use the profile stored on the SIM. On the router's **Networking** page (Figure 14), verify that *Profile1* is selected and that the APN is *eatonpredictpulse01.com.att*, as shown.

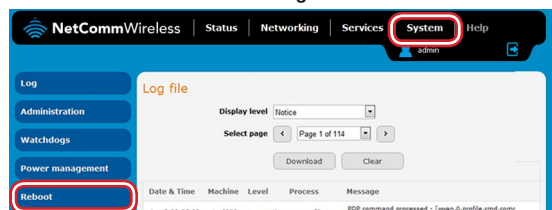
Figure 14. NetComm Wireless Networking Page



The wireless router can be rebooted from the router's **System** page (Figure 15). The connection will be interrupted momentarily while the SIM data is loaded. Removing and reapplying power or a reboot will affect loading the default configuration.

When troubleshooting, if a problem remains following a reboot, download and save the log file to submit to technical support.

Figure 15. NetComm Wireless Status Page



Connecting a NetCommWireless NTC-140W Series Router to an Eaton® Network Card

Additional Information and Support

For additional information about PredictPulse, visit Eaton.com/PredictPulse.

If you have specific questions, contact Eaton (in the US) by calling **800.843.9433** or sending an email to predictpulsesupport@eaton.com.