PXG limited features

The PXGX UPS and PXGMS cards were designed for use with three phase UPS devices. The cards function identically, the only difference is the format of the connectors, PXGX UPS has an X Slot connector and the PXGMS card has a mini slot connector.

Customers using these connector cards have expressed interest in making the use of the card for UPS management or configuration much more secure. This document outlines a procedure that uses a DIP switch on the card to be set manually to allow or disallow the configuration changes.

I. Description

Eaton has modified the existing PXGX UPS and PXGMS card firmware to take advantage of a DIP switch position to allow or disallow configuration changes. Without performing the steps outlined below, the card will behave as usual.

If no changes to the DIP switch are made to the factory built card (network settings, SNMP, Bacnet, Modbus, email recipients, etc.) the user can set the configuration parameters.

If the user wishes to disable the card configuration capabilities, the user can enable* DIP switch 4 before installing the card initially or can remove the card then enable DIP switch 4 if the card has already been installed. If a change to the DIP switch is made, the user needs to reboot the card. After startup (reboot), the card will run in "limited features mode". At this point the user will be able to use the card only for reading data from the UPS and will not be permitted to change the card configurations unless the user reverses (disables) DIP switch 4, as described below.

To disable the limited access feature, the user must remove the card from the UPS, disable** DIP switch 4, reinstall the connector card then reboot the card. The user will now be able to use all features of the card again —the configuration changes will not be restricted anymore.

It is important to note: to change the configuration of DIP switch 4, it is necessary to remove the PXGXUPS or PXGMS card from the UPS, change the DIP switch 4 position then plug it back in. It will then be running in the mode based on the DIP switch position.

- *Enabling DIP switch is placing it into the on position
- **Disabling DIP switch is placing it into the off position



II. User interface behavior when limited access enabled

Protocols restricted to read-only access:

- BacNET/WS
- BacNET/IP
- Modbus/TCP
- · Modbus/RTU (PXGMS card specific)
- SNMP

Web UI behavior:

In the limited access mode, the web interface will allow the user to log in as a 'admin' user, however you will have the same access level as read-only 'user'. It means, that all configuration fields will be disabled including Apply buttons. The user still will be able to read data from the UPS and the configuration. Note there is no message saying "limited access" written in UI.

Other features:

- · SSH access will be disabled
- FW upload will be disabled
- x.x.x.x/admin/tools.html page will not be available (allows user e.g. to enable/disable SSH, to delete internal databases). It normally requires 'admin' access to access this page and to trigger any actions.

