

Technical Note

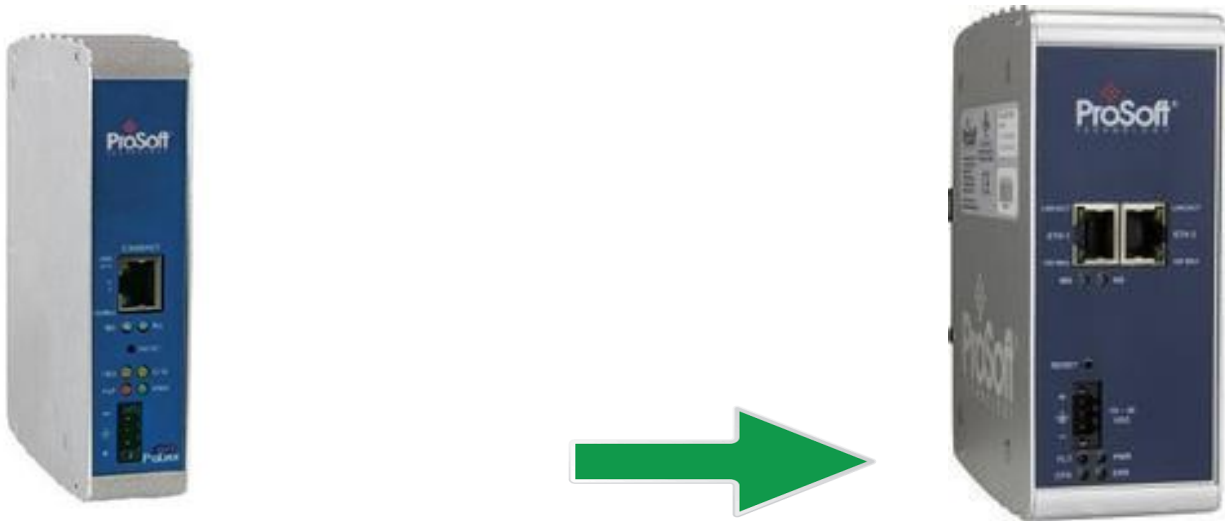


Migrating from PLX81-EIP-61850 to PLX82-EIP-61850 module

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IMPORTANT NOTE 1

The PLX81-EIP-61850 module was sold through March 2020. The differences between the PLX81-EIP-61850 module and the replacement PLX82-EIP-61850 module is listed below:

- PLX81-EIP-61850: Has a single Ethernet port and requires that both the IEC 61850 and the EtherNet/IP networks be on the same network subnet.
- PLX82-EIP-61850: Has dual Ethernet ports (can be used with one port or dual ports as of firmware version 2.01.023) and the width of the case is bigger than that of the PLX81 version.

With the PLX82-EIP-61850 module, there is a selection in the configuration software to utilize either a single Ethernet port for communications with both IEC 61850 and EtherNet/IP networks (PLX81-EIP-61850 functionality) or utilize IEC 61850 communications on one Ethernet port and EtherNet/IP communications on another port (PLX82-EIP-61850 functionality). The configuration software allows for easy conversion of existing PLX81-EIP-61850 configuration files to use in the PLX82-EIP-61850 module.

There is only one part number that can be ordered now, and this is the **PLX82-EIP-61850**. Effective March, 2020 only PLX82-EIP-61850 modules will be sold due to component obsolescence on hardware for the PLX81-EIP-61850 module.

IMPORTANT NOTE 2

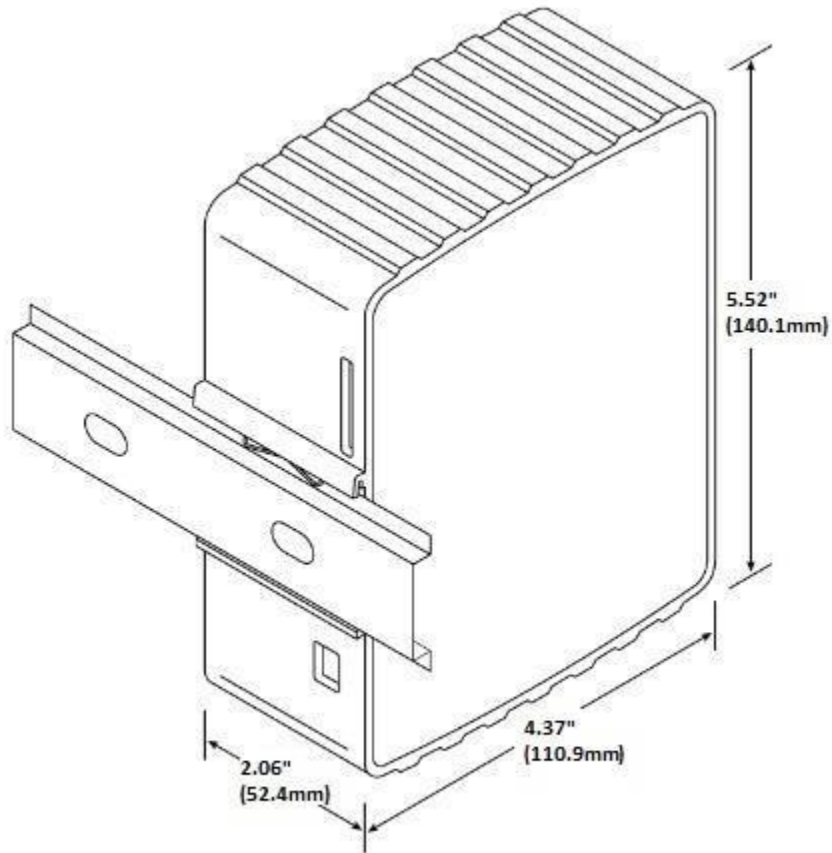
Use of the **ProSoft EIP-61850 Configuration Manager** Software Version 2.0.2.10 or greater is required with the PLX82-EIP-61850 modules to replace PLX81-EIP-61850 modules.

Differences between PLX81-EIP-61850 and PLX82-EIP-61850 modules

The differences between the modules are minor, but something to take note of when replacing a PLX81-EIP-61850 module with a PLX82-MNET-61850 module. Below is a list:

- 1) **Temperature Range** – The PLX82-EIP-61850 has a wider temperature range of 0°C to 70°C (32°F to 158°F). PLX81-EIP-61850 modules only had a temperature range of 0°C to 60°C (32°F to 140°F).
- 2) **Input Power** – The PLX82-EIP-61850 module supports input power of 10-36 VDC. The PLX81-EIP-61850 had an input power range of 10-32 VDC.
- 3) **Module Enclosure Size** – When replacing PLX81-EIP-61850 modules with PLX82-EIP-61850 units, the enclosure size is larger on the PLX82-EIP-61850 units, so if installing in an existing panel you will need to verify that there is sufficient room in the panel for the larger module enclosure.

Below are the dimensions for the PLX82-EIP-61850 module for reference:



Below is a chart of the various modules and the enclosure sizes:

| | PLX81-EIP-61850 | PLX82-EIP-61850 |
|----------------|-----------------|-----------------|
| Length (Depth) | 4.20" (106.7mm) | 4.37" (110.9mm) |
| Width | 1.25" (31.75mm) | 2.06" (52.4mm) |
| Height | 5.37" (136.4mm) | 5.52" (140.1mm) |

As shown above, when replacing the End-Of-Life PLX81-EIP-61850 module with a new **PLX82-EIP-61850** module, the enclosure size is slightly larger (about $\frac{3}{4}$ " Width increase).

Please take into account the larger size of the new **PLX82-EIP-61850** module.

ProSoft EIP-61850 Configuration Manager Software

Starting with version 2.0.2.10 of the **ProSoft EIP-61850 Configuration Manager** there is now another option under the module selection page as shown below:

ProSoft Gateway Configuration

Select Module:

- PLX81
- PLX82 - 2 Ports
- PLX82 - 1 Port

Project Name: Project 1

Notes:

Ethernet Port E1

IP Address: 192 . 168 . 0 . 250

Subnet Mask: 255 . 255 . 255 . 0

Default Gateway: 192 . 168 . 0 . 1

NTP Address: 192 . 168 . 0 . 1

NTP Update Time: 0

IEC 61850

Ethernet/IP

Ethernet Port E2

IP Address: 192 . 168 . 1 . 250

Subnet Mask: 255 . 255 . 255 . 0

Default Gateway: 192 . 168 . 1 . 1

IEC 61850

Ethernet/IP

OK Cancel

With the selection of the “PLX82 – 1 Port” you will notice that Ethernet Port E1 is used for both IEC 61850 Communications and EtherNet/IP communications and the settings for Ethernet Port E2 are grayed out. This option available in the PLX82-EIP-61850 modules is what will allow the module to operate on a single Ethernet subnet for both protocols and will allow for the replacement of PLX81-EIP-61850 modules.

Converting Configuration Files from PLX81 to PLX82-EIP-61850

When converting a configuration file from a PLX81-EIP-61850 module to the PLX82-EIP-61850 modules, you will need to load the configuration file into the latest version of the ProSoft EIP-61850 Configuration Manager software. It will load as a PLX81-EIP-61850 module.

Next change the selection type from “PLX81 – 1 Port” to “PLX82 – 1 Port”, and you will now be able to download the configuration file to the new module.

Additional questions

For any additional questions not covered within this document, please contact ProSoft Technical support.