Nexus® 1262/1272 Switchboard Meter Quickstart Guide

CAUTION! Installation of the Nexus® 1262/1272 meter must be performed only by qualified personnel who follow standard safety precautions during all procedures. Those personnel should have appropriate training and experience with high voltage devices. Appropriate safety gloves, safety glasses and protective clothing are recommended.

During normal operation of the Nexus® meter, dangerous voltages flow through many parts of the unit, including: Terminals and any connected CTs (Current Transformers) and PTs (Potential Transformers), all I/O Modules and their circuits. All Primary and Secondary circuits can, at times, produce lethal voltages and currents. Avoid contact with any current-carrying surfaces.

Do not use the meter or any I/O device for primary protection or in an energy-limiting capacity. The meter can only be used as secondary protection.

IMPORTANT! Refer to your meter's Installation and Operation Manual for additional safety warnings before performing installation, wiring, or maintenance of your meter. See the link to the manual, below.

NOTE: This Quickstart Guide gives basic installation, wiring, and programming instructions.For additional meter operation and programming information, refer to your meter's *Installation and Operation Manual* and the *Communicator PQA™, MeterManagerPQA™, and EnergyPQA.com™ Software User Manual* on EIG's website:

User Manual:
https://www.electroind.com/products/nexus-1272-auto-calibrating-revenue-energy-meter-with-power-quality/
From the webpage, click Technical Documents>User Manual.

Software Manual:

https://www.electroind.com/products/communicatorpqa-software-application-5/
From the webpage, click Technical Documents>User Manual.

CommunicatorPQA™ Setup Software:

https://www.electroind.com/products/communicatorpqa-software-application-5/
From the webpage, click Download ComPQA Pro. To get a Professional license for the software, email sales@elec-troind.com or call 516-334-0870.
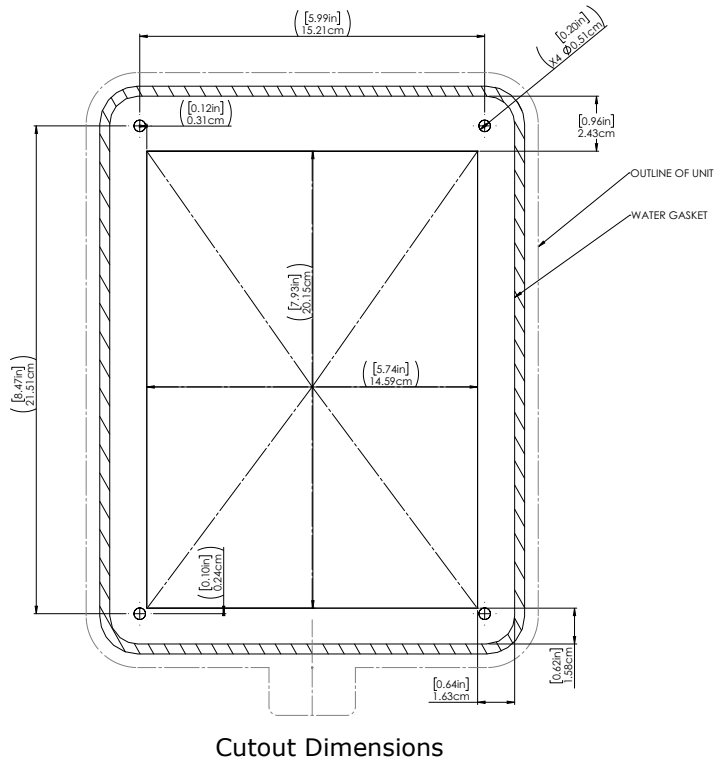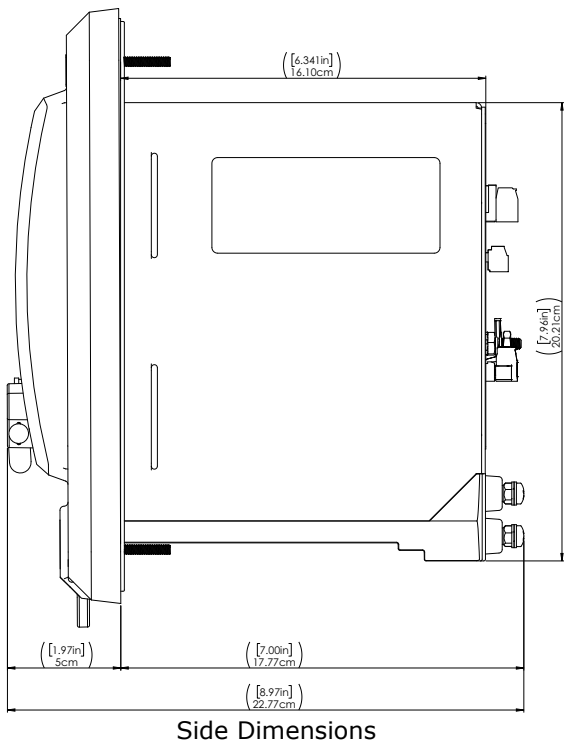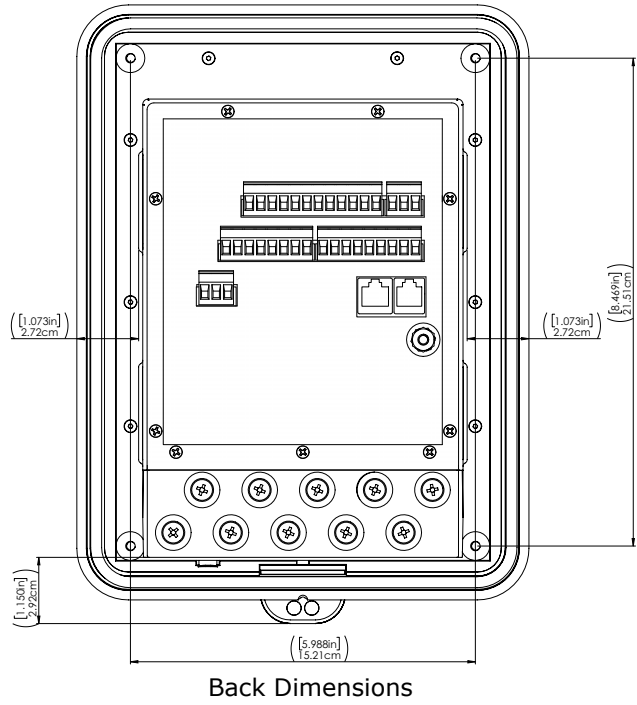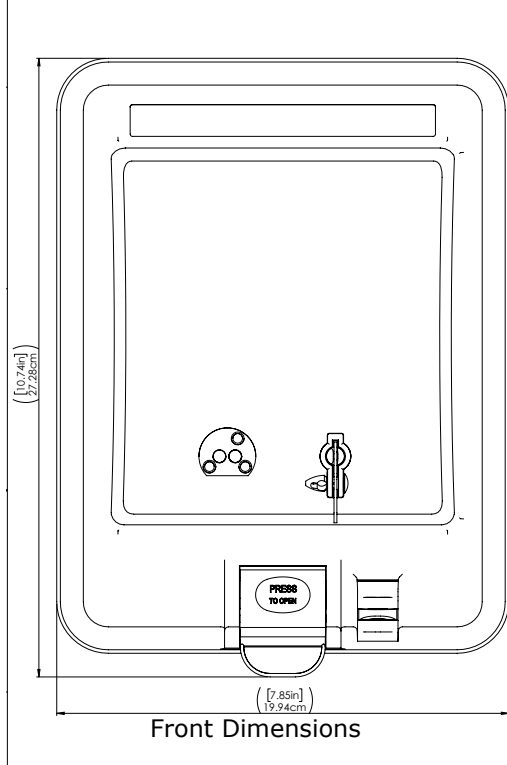
All EIG's metering and software products' literature can be accessed from:
https://www.electroind.com/all-products/

For software and metering integration, EIG's Technical Support Engineers are available on an hourly or daily basis to help with typical commissioning assistance, which includes:

• Verifying meter installation and wiring.

• Verifying proper system integration.

• Working with 3rd parties to ensure cross compatibility.

• Advising users on best practices for optimal implementation.

You can reach Technical Support from 8 a.m. to 8 p.m. EST, Monday-Friday, at 516-334-0870.

Hardware Installation:

Front Dimensions

Back Dimensions

Side Dimensions

Cutout Dimensions

OUTLINE OF UNIT

WATER GASKET

To install the meter:

The switchboard case meter fits into a standard panel cutout (see cut-out dimensions on previous page). The installation procedure you use depends on whether you are replacing an existing installation or performing a new installation. The hardware (mounting clips and screws; studs, washers, and nuts) are in plastic bags shipped with the meter.

For Retrofit to existing GE S1 case installations, follow the procedure, below.

For new installations, follow the procedure on the next page.
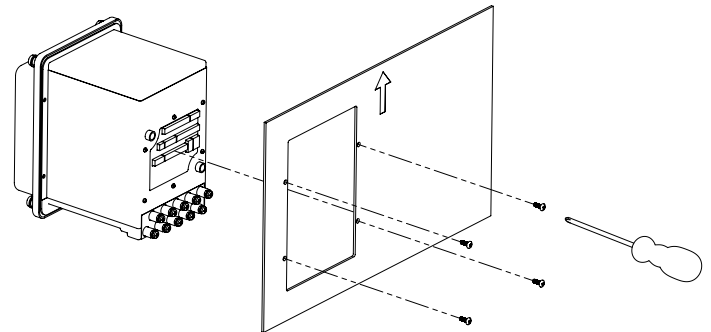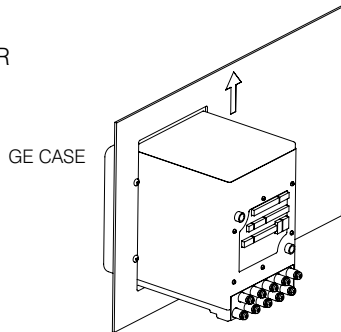
RETROFIT HARDWARE
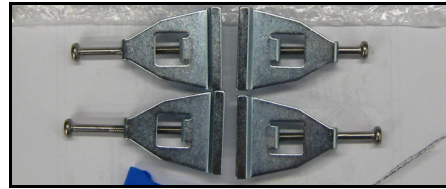
FOR EXISTING/RETROFIT INSTALLATIONS:

1. LOCATE UNIT TO BE CHANGED.

TOOLS NEEDED

#2 PHILIPS SCREWDRIVER

GE CASE

2. REMOVE 4 SCREWS HOLDING CASE TO PANEL.

3. INSERT AND INSTALL SHARK 270 SWB3 UNIT INTO PANEL CUT OUT USING INCLUDED MOUNTING CLIPS.

EIG CASE

REST METER ON CUTOUT WHILE MOUNTING.

4. INSERT MOUNTING CLIPS INTO SIDE SLOTS.
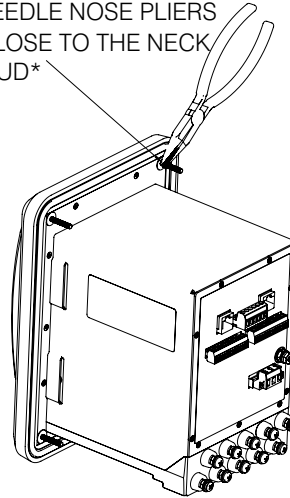
FOR NEW INSTALLATIONS:
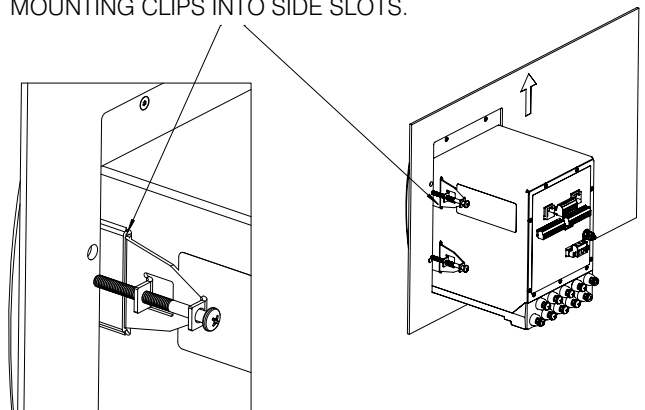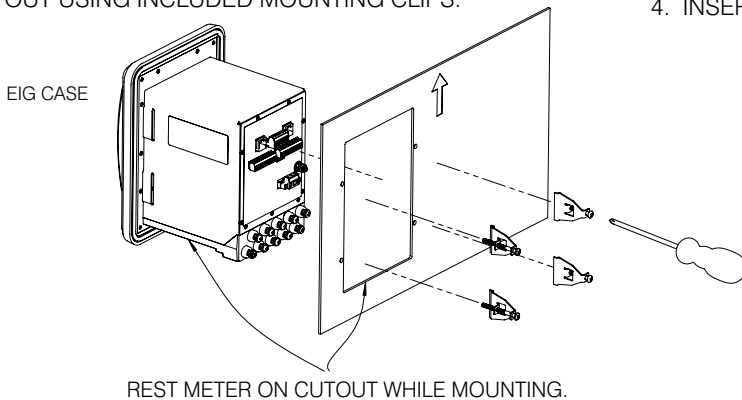
NEW INSTALLATION HARDWARE
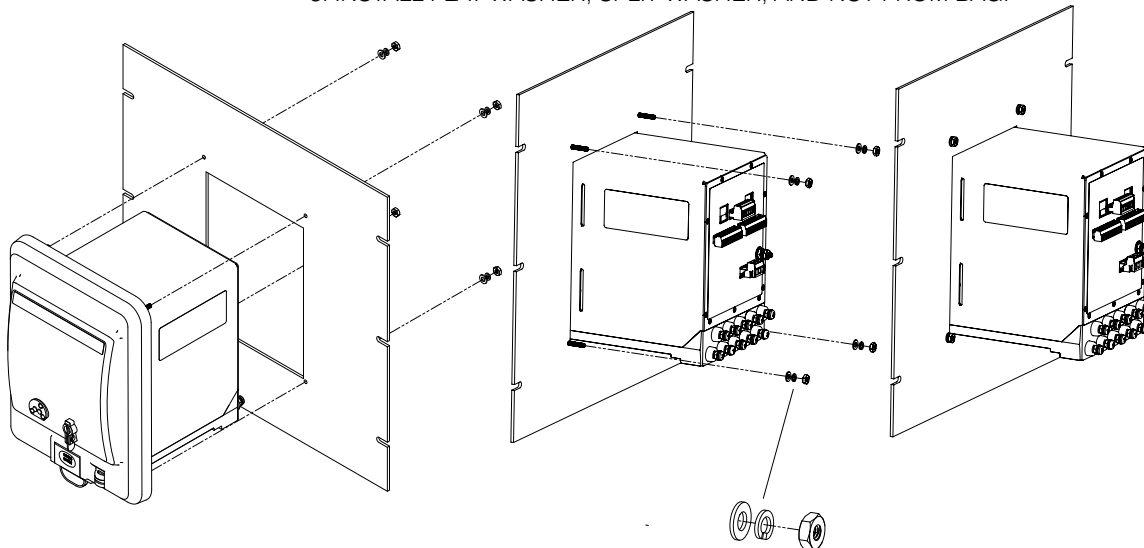
1. SCREW INCLUDED STUDS INTO ALL FOUR LOCATIONS.
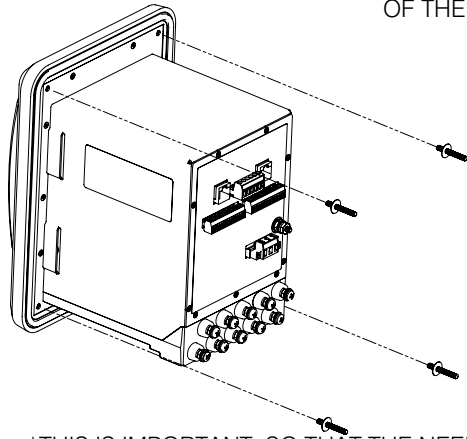
2. TIGHTEN THE STUD FINGER TIGHT OR USE NEEDLE NOSE PLIERS PLACED CLOSE TO THE NECK OF THE STUD*

*THIS IS IMPORTANT, SO THAT THE NEEDLE NOSE PLIERS WILL ONLY DEFORM THE ENDING THREADS, WHICH WILL BE IN THE PANEL, RATHER THAN THE THREADS NEEDED FOR THE LOCKING NUT.

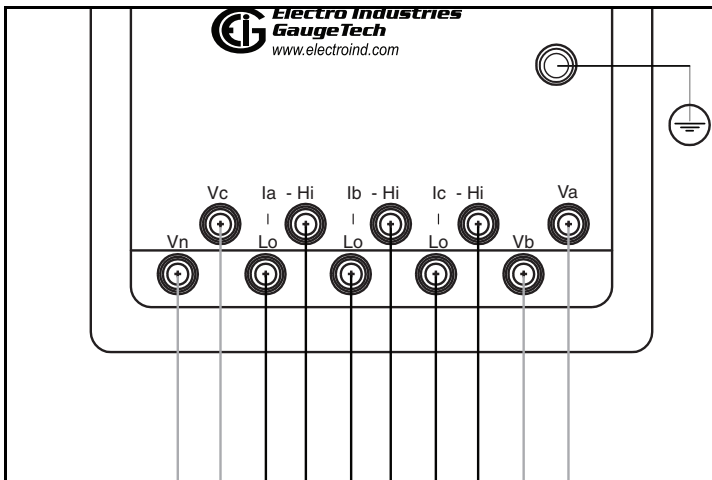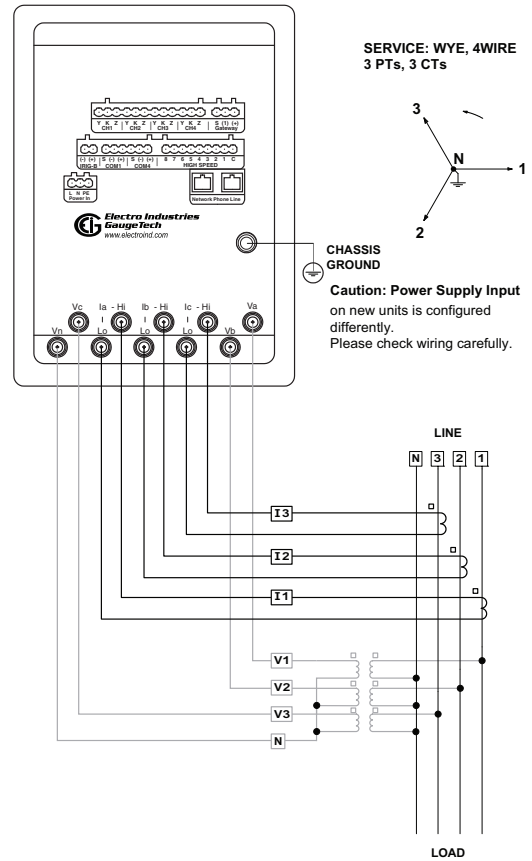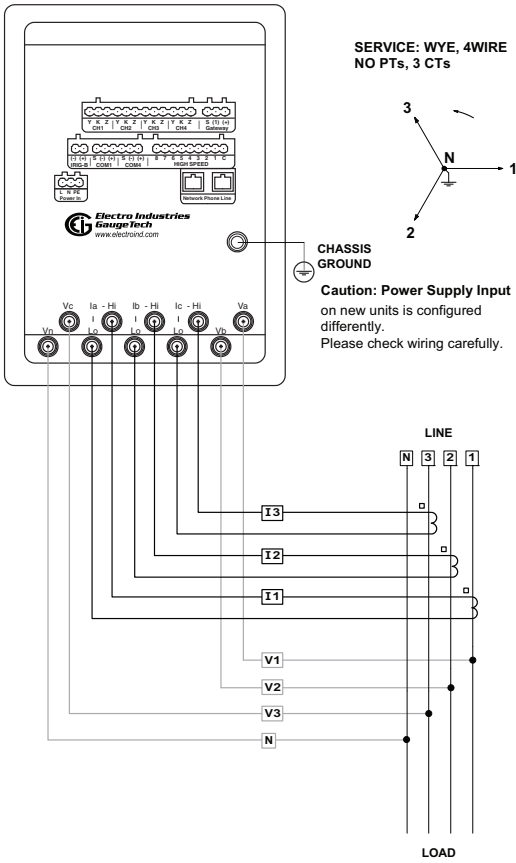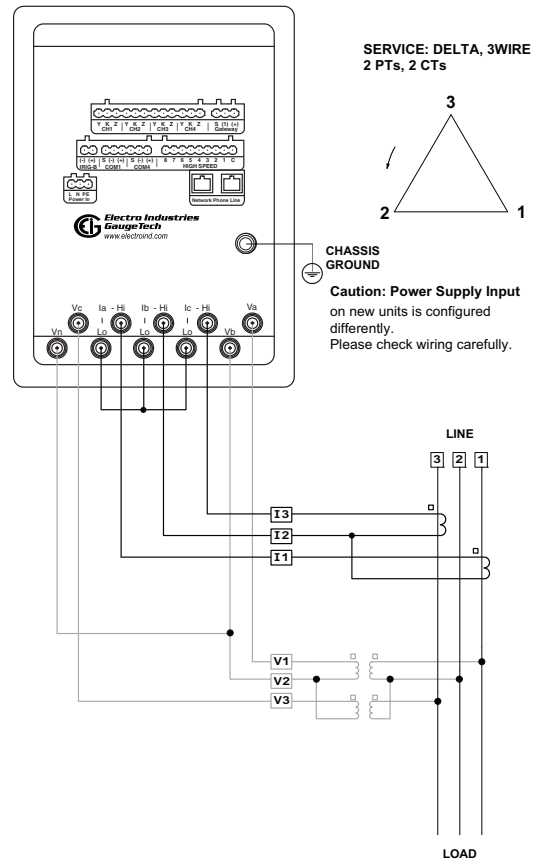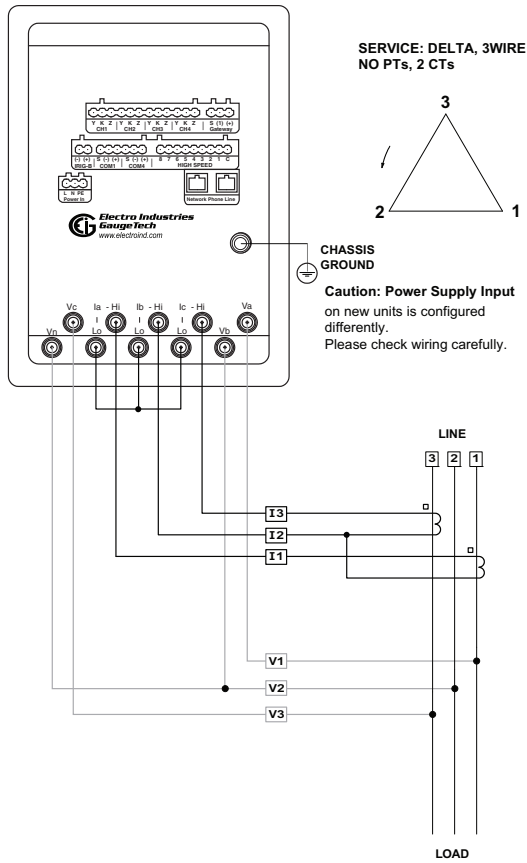3. INSTALL FLAT WASHER, SPLIT WASHER, AND NUT FROM BAG.

NOTE: Alternatively, you can use the mounting brackets for new installations.

Electrical Installation: Following are some of the possible wiring configurations. See the *Nexus® 1262/1272 Meter Installation and Operation Manual* for additional configurations (see page QS-1 for download instructions).

SERVICE: WYE, 4WIRE
NO PTs, 3 CTs

CHASSIS GROUND

Caution: Power Supply Input
on new units is configured
differently.
Please check wiring carefully.

SERVICE: WYE, 4WIRE
3 PTs, 3 CTs

CHASSIS GROUND

Caution: Power Supply Input
on new units is configured
differently.
Please check wiring carefully.

Closeup of Voltage and Current Inputs

SERVICE: DELTA, 3WIRE NO PTs, 2 CTs

CHASSIS GROUND

Caution: Power Supply Input on new units is configured differently. Please check wiring carefully.

LINE

LOAD

SERVICE: DELTA, 3WIRE 2 PTs, 2 CTs

CHASSIS GROUND

**Caution: Power Supply Input** on new units is configured differently. Please check wiring carefully.

LINE

LOAD

Meter Connection and Programming

1. Install CommunicatorPQA™ software on your PC or laptop (see page QS-1 for download link).

2. From the CommunicatorPQA™ Main screen, click the Connect icon in the Icon bar at the top of the screen.

3. You will see the Connect screen, shown on the right. The settings on the right are for a Serial connection using RS485. To connect using the Optical port: set the Baud Rate to 9600; connect the optical reader at one end to the meter's Optical Port; and at the other end connect to a PC's serial or USB port. For instructions on configuring a connection using the Network options, see the User Manual (see page QS-1).

4. Click Connect. The software will connect to the meter.

5. Click the Profile icon in the Icon bar at the top of the screen. The Device Profile screen opens.
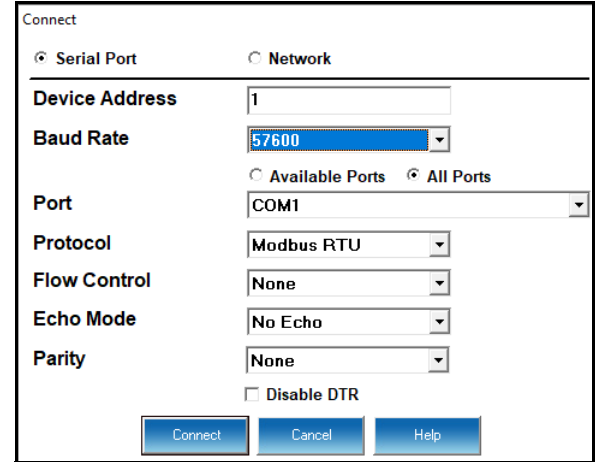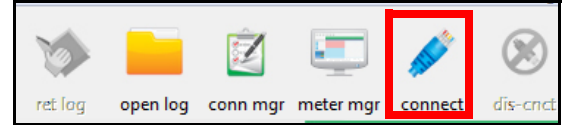
NOTES:
o Instructions for a few basic settings are given in this Quick Start Guide. Refer to the Software User Manual (see page QS-1) for additional programming instructions.
o Click Help>Contents from the Title Bar at the top of the screen to open the User Manual online.

6. The Device Status screen opens, displaying information about the meter. Click OK to close the Device Status screen, and then click the Profile icon in the Icon Bar.
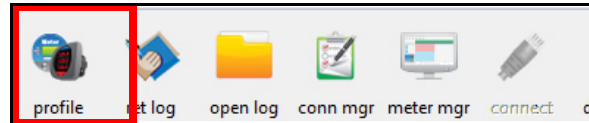
7. The meter's Device Profile screen opens, giving you access to the programmable settings for the meter.
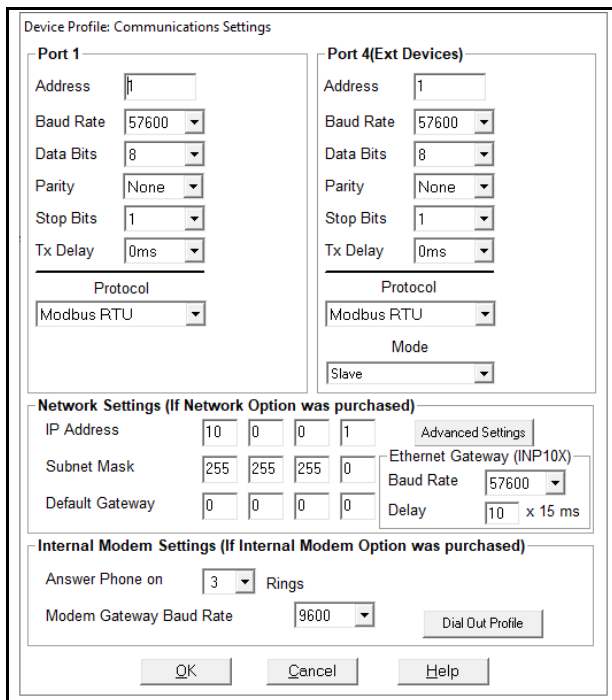
Program CT, PT Ratios

1. From the Device Profile screen, click General Settings>CT, PT Ratios and System Hookup, and then double-click on one of the lines underneath to open the settings screen.

2. The current settings are shown on the screen. You can enter CT and PT Ratios and select Hookup and Frequency from the pull-down menus in this screen.

3. Click OK to close the screen.
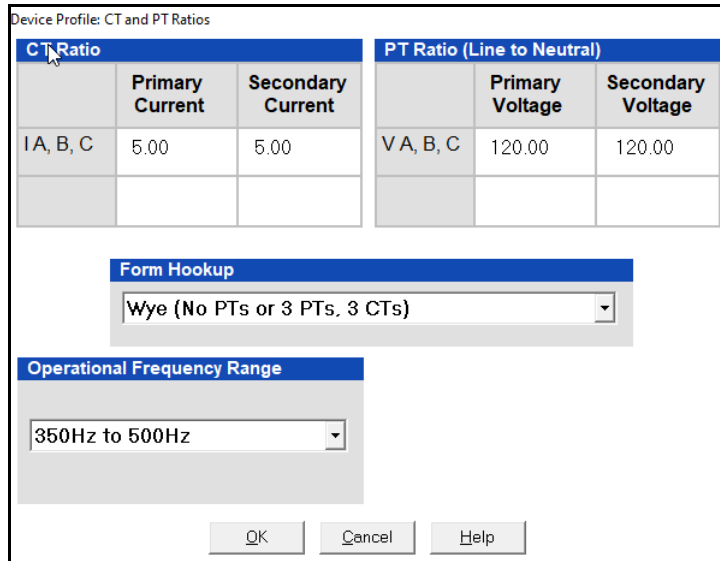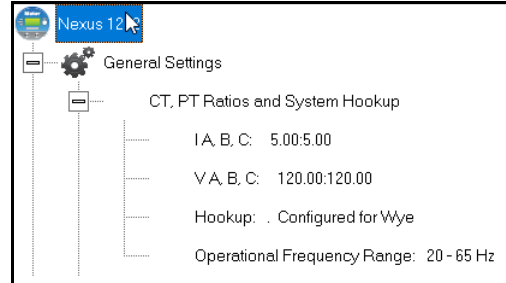
Program Communications Setting

1. Click General Settings>Communications from the Device Profile screen, and then double-click one of the lines underneath to open the settings screen.

2. The current settings for the meter's Ports are shown on the screen. You can configure settings for the meter's port and optional Network cards.

3. Click Help to view settings instructions.

4. Click OK to close the screen.

Program Meter Time

The meter is preset to United States Eastern time. To change the meter time:

1. From the Main screen's Title bar, Click Tools>Set Device Time.

2. You can either enter the time in the Time fields or click Use PC Time to match the meter time with the PC time.

3. Click Send.
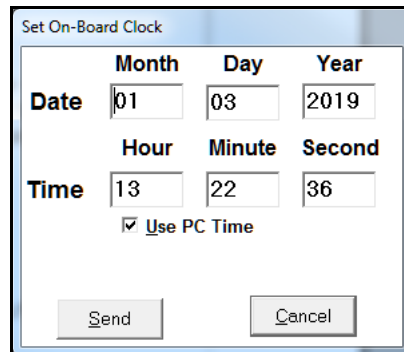
Program Meter Name

The meter's name is used in database files and report titles.To give the meter a unique name:

1. From the meter's Device Profile screen, click General Settings>Labels, and then double-click on one of the lines underneath to open the Labels screen.

2. Enter a name for the meter in the Meter Designation field.

3. Click OK.
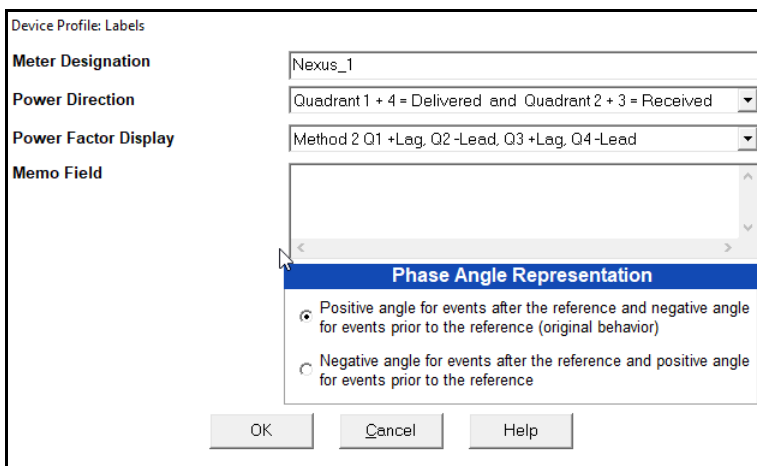
IMPORTANT! When you have made changes to the meter's Device Profile, click Update Device at the bottom of the Device Profile screen, to send the new settings to the meter. The meter will reboot and then you can reconnect to it.

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