Nexus® 1262/1272 Socket 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.

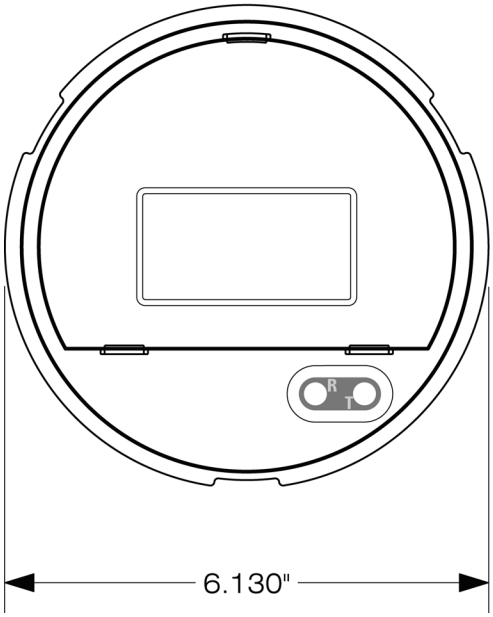
All EIG's metering and software products' literature can be accessed from:
https://www.electroind.com/all-products/

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:

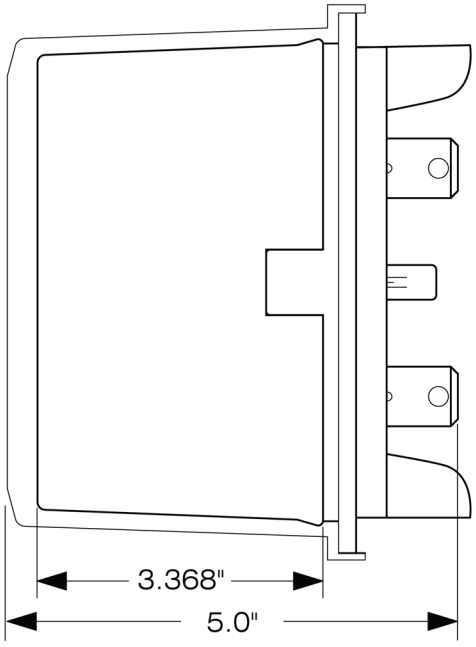
- Verifying meter installation and wiring.
- Verifying proper system integration.
- Working with 3rd parties to ensure cross compatibility.
- Advising users on best practices for optimal implementation.

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

Hardware Installation:
The Nexus® 1262/1272 Socket meter can be mounted outside or in an enclosed and protected environment, such as in a switchgear cabinet.



Front Dimensions

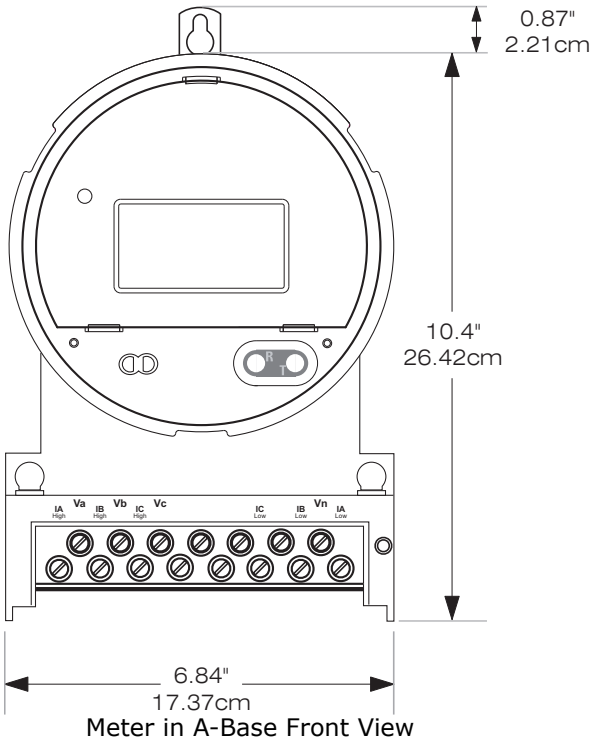


Side Dimensions

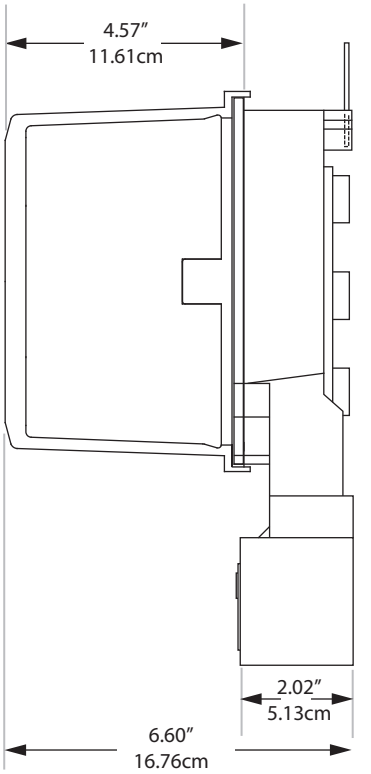
- Examine the labels to verify that the meter you are installing is, in fact, the correct form factor and service type. Make sure that the socket and meter current class ratings are compatible.
- Make sure that all communication and auxiliary power wiring is accessible in case disconnection is required for any reason.
- Before applying power to the meter, install batteries if not installed at the factory and check the connections if they are installed.
- POWER MUST BE OFF TO INSTALL THE INTERNAL BATTERY! To install the Internal Battery, remove the Internal Shroud and place the battery into the battery compartment with the + facing UP. Replace the Internal Shroud. To install the Modem Battery, with the Outer Shroud on the meter, locate the battery cable at the back of the meter and insert the cable connector into the cable. Use the velcro (peel and stick) to attach the battery somewhere outside of the meter.
- Make sure that any communications wiring from the back of the meter is fed through the appropriate openings in your socket to allow for clean connections with external devices.
- Insert the meter into the socket, making sure that the unit blades are firmly within the jaws of the socket.
- Connect external devices to the appropriate communications wiring, as shown below.
- Make sure the meter is functioning properly by running it through a test circuit.

NOTES:

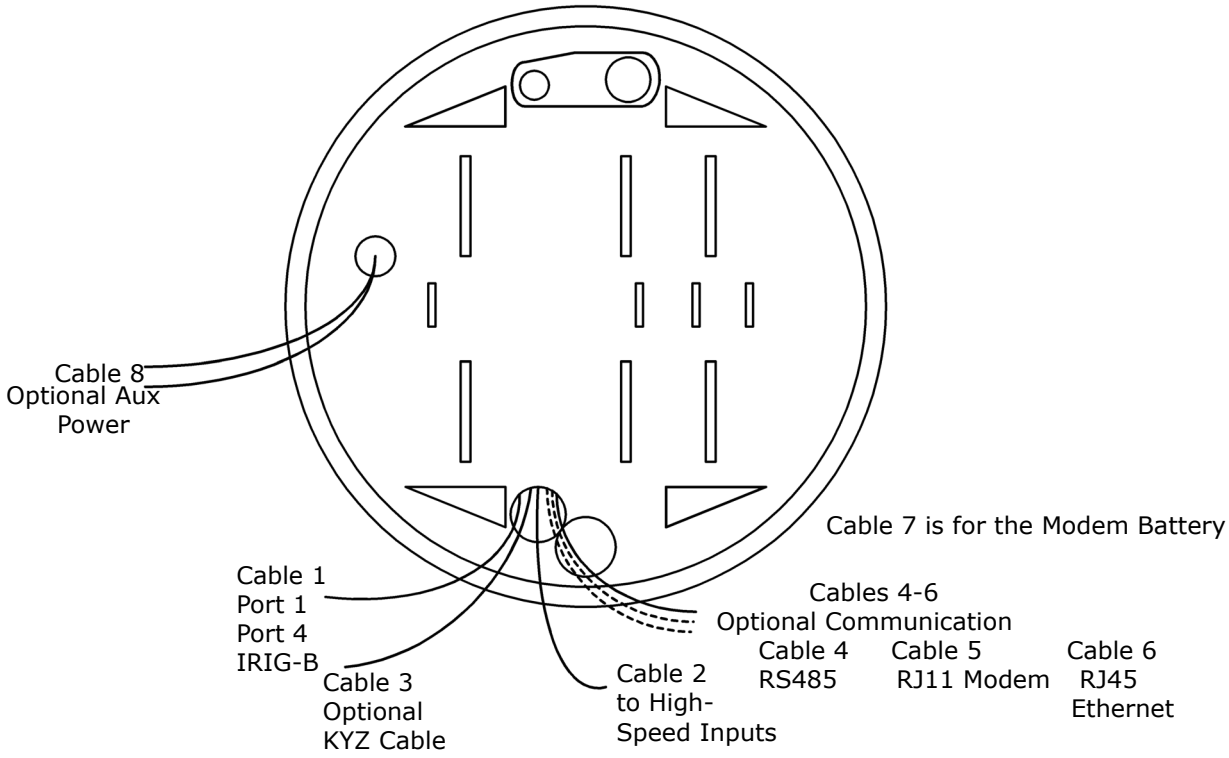
- The meter can also be installed in an A-Base. See the dimensions on the next page.
- Refer to the *Nexus® 1262/1272 Installation and Operation Manual* for information on Cable color, optional external displays, and optional external Output modules (see link on page QS-1).



Meter in A-Base Front View

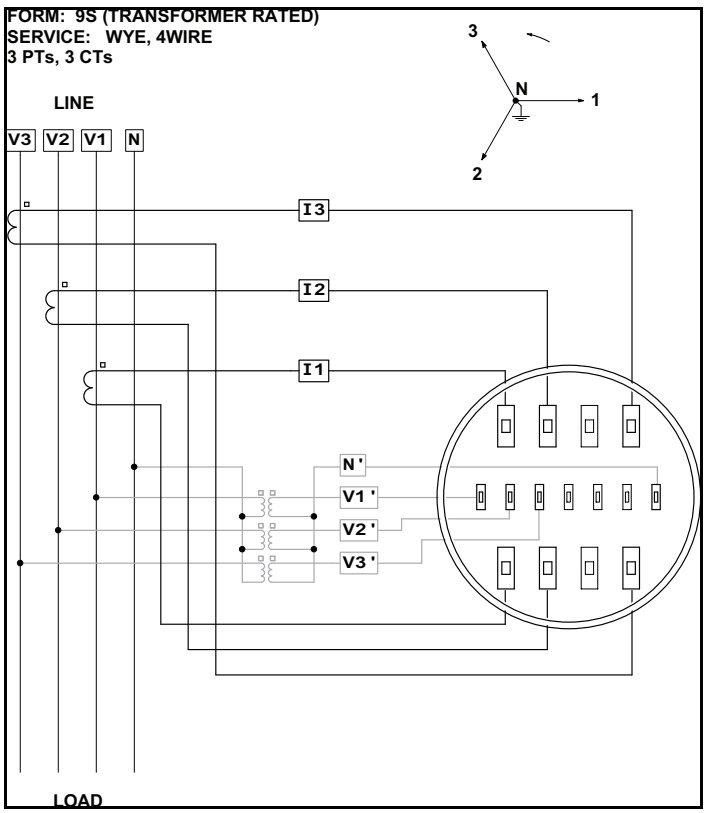


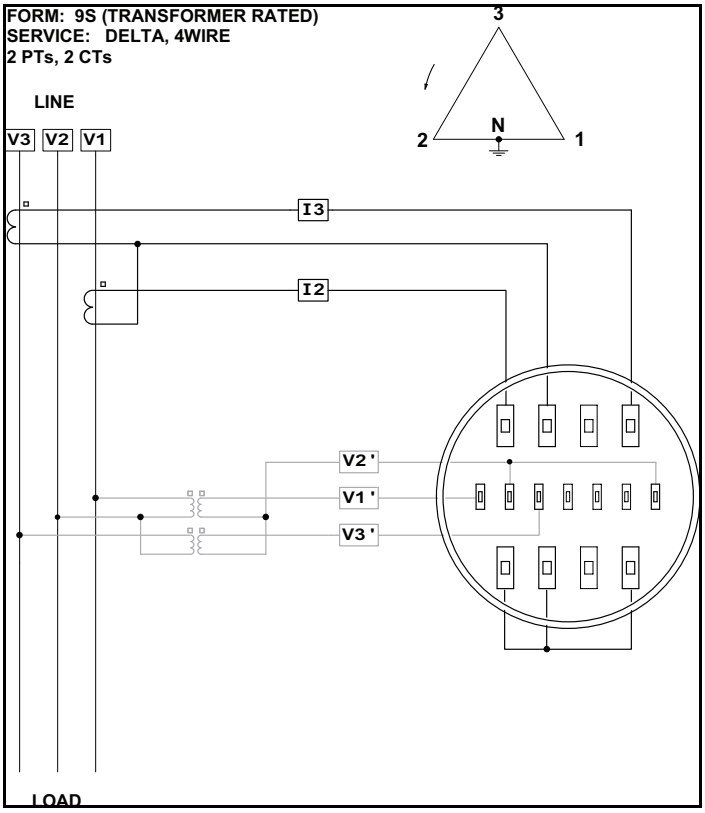
Meter in A-Base Side View

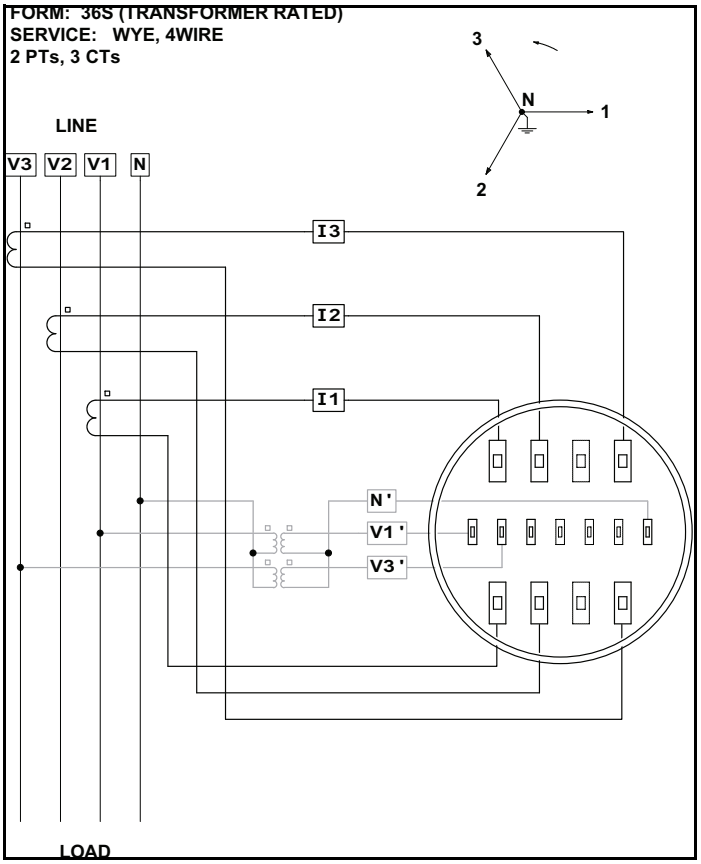


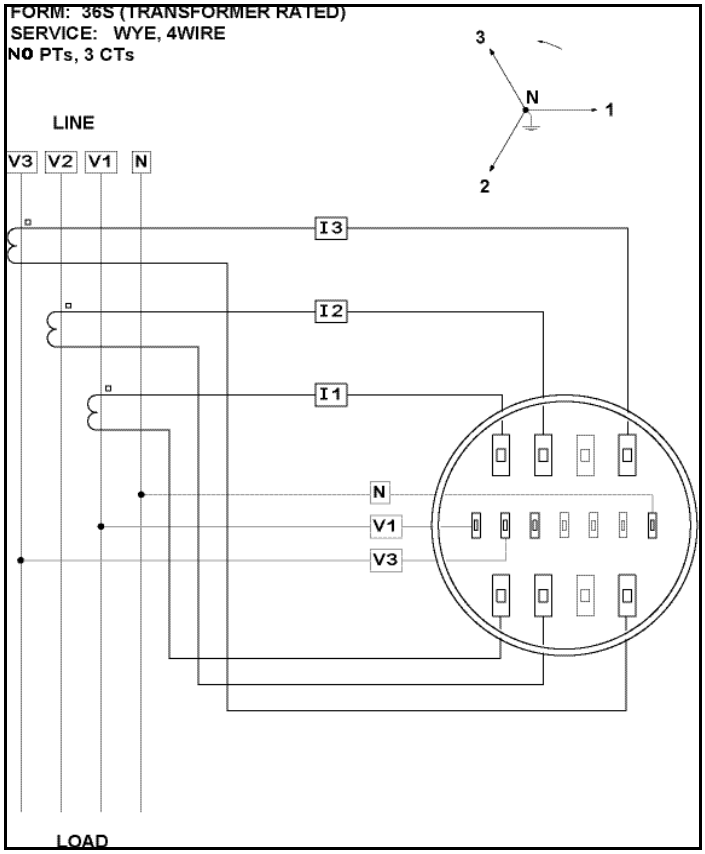
Back of Meter Showing Communication Cables

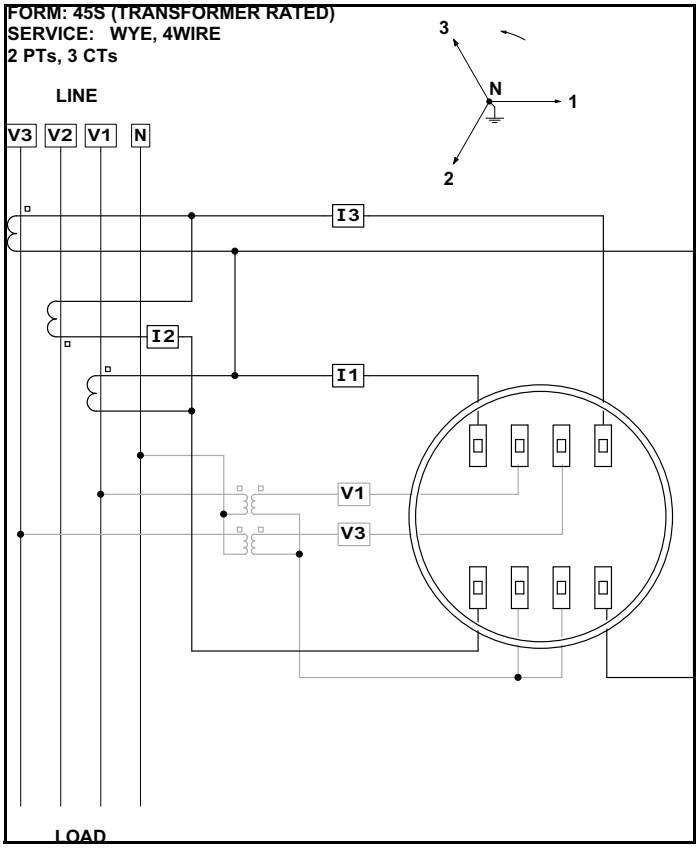
Electrical Installation: Following are some of the possible wiring configurations. See the *Nexus® 1262/1272 Meter Installation and Operation Manual* for additional configurations (see page QS-1 for download instructions).

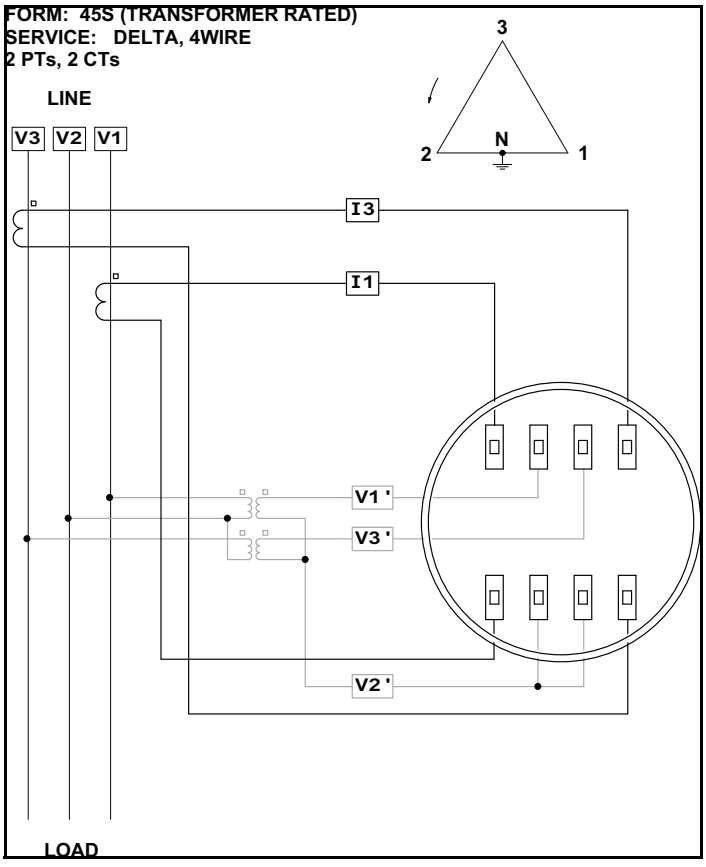




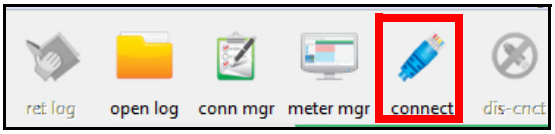





FORM: 45S (TRANSFORMER RATED)
SERVICE: WYE, 4WIRE
2 PTs, 3 CTs
LINE
V3
V2
V1
N
3
N
1
2
I3
I2
I1
V1
V3
LOAD


FORM: 45S (TRANSFORMER RATED)
SERVICE: DELTA, 4WIRE
2 PTs, 2 CTs
LINE
V3
V2
V1
3
2
N
1
I3
I1
V1 '
V3 '
V2 '
LOAD

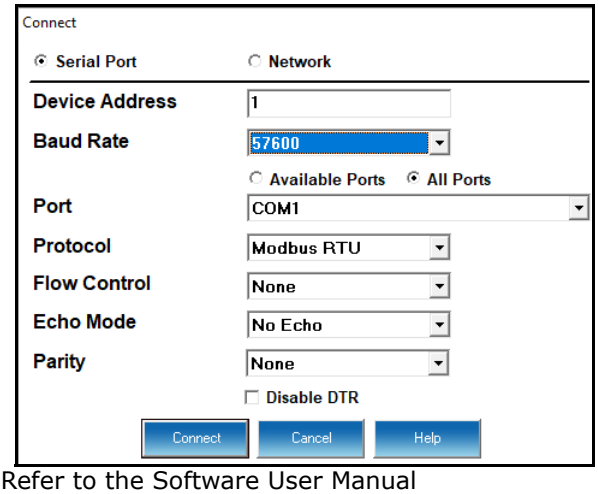
Meter Connection and Programming



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

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

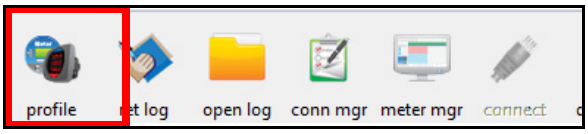
3. You will see the Connect screen, shown on the right. The settings on the right are for a Serial connection using RS485. To connect using the Optical port: set the Baud Rate to 9600; connect the optical reader at one end to the meter's Optical Port; and at the other end connect to a PC's serial or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



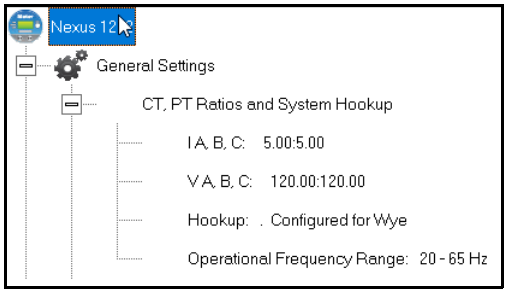
4. Click Connect. The software will connect to the meter.

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.



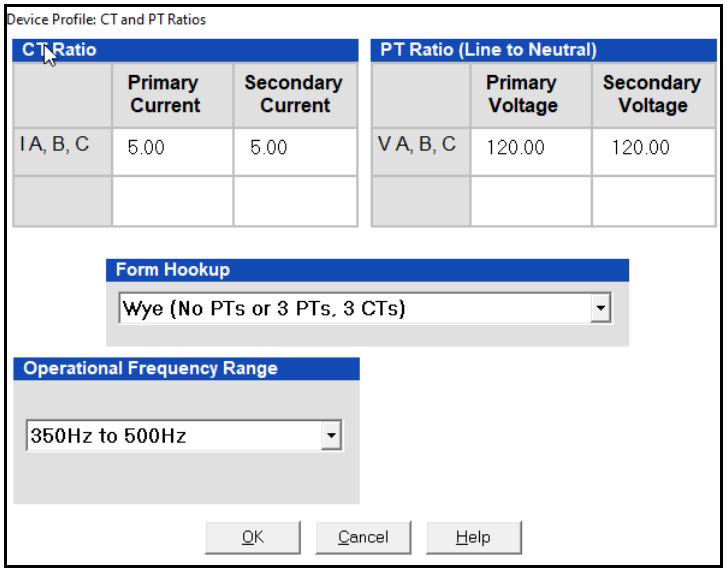
7. The meter's Device Profile screen opens, giving you access to the programmable settings for the meter.

Program CT, PT Ratios

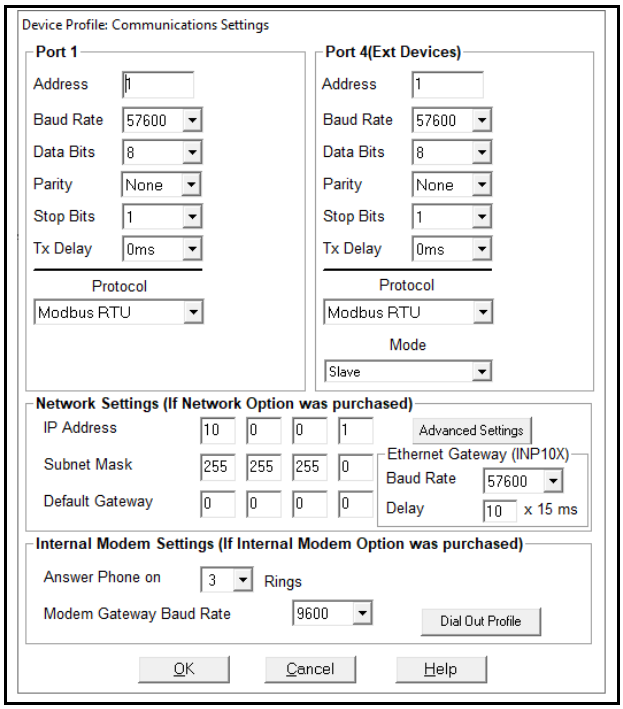
1. From the Device Profile screen, click General Settings>CT, PT Ratios and System Hookup, and then double-click on one of the lines underneath to open the settings screen.

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.

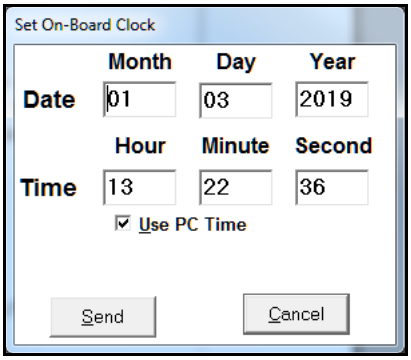


Program Communications Setting



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.

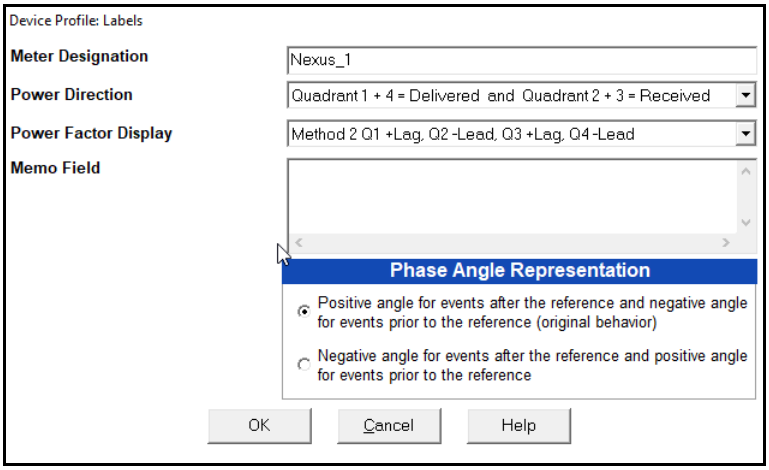
Program Meter Time



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.