Shark® 200T Quickstart Guide
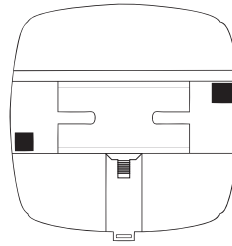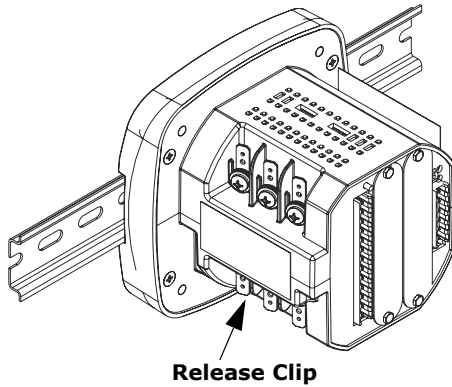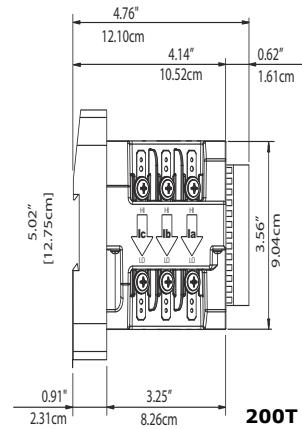
Mechanical Installation
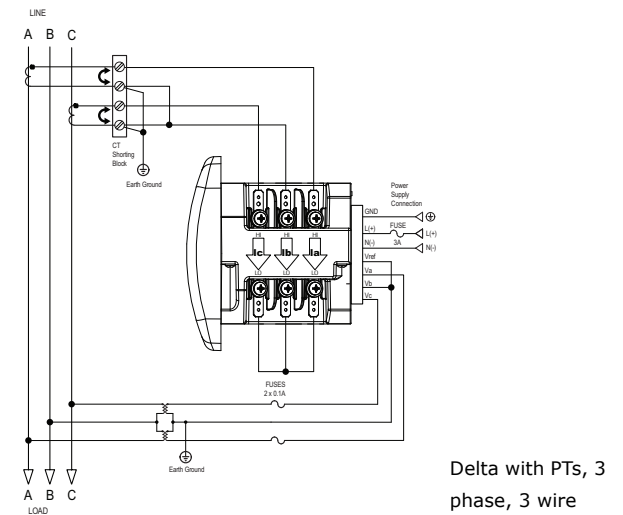

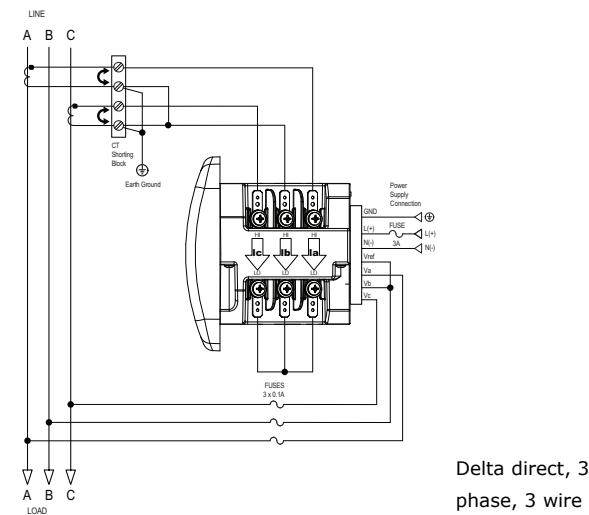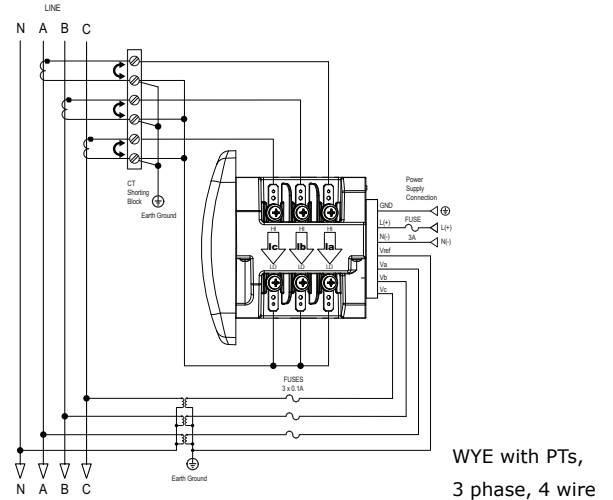**Release Clip**

DIN Rail with black rubber stoppers

4.76"
12.10cm

4.14"
10.52cm

0.62"
1.61cm

5.02"
[12.75cm]

3.56"
9.04cm

0.91"
2.31cm

3.25"
8.26cm

200T Dimensions

DIN Installation

Installation Steps: Slide top groove of meter onto DIN Rail. Press gently until the meter clicks into place. If mounting with DIN Rail provided, use Black Rubber Stoppers (also provided) shown above. To remove meter, pull down on Release clip. **Electrical Installation:** Select diagram for your application.

WYE direct, 3 phase, 4 wire

WYE with PTs, 3 phase, 4 wire

Delta direct, 3 phase, 3 wire

Delta with PTs, 3 phase, 3 wire
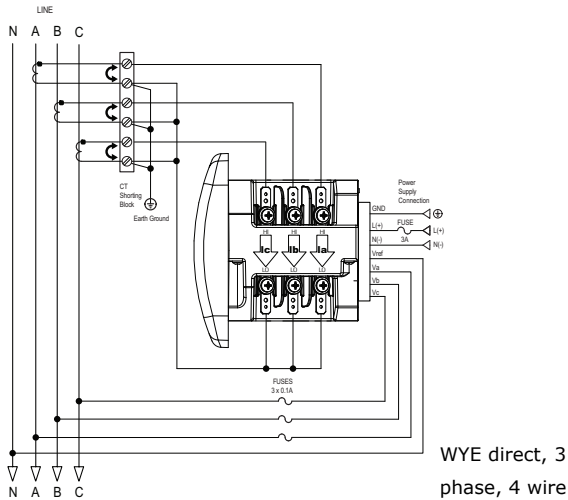
NOTE: Other wiring configurations are available. See the full Manual on the enclosed CD.

Communication Wiring: The Shark® 200T meter's RS485 port uses standard 2-wire, half duplex architecture.

Factory Initial Default Settings: When the Shark 200T is powered up, for 10 seconds you can connect to the meter using the Factory Default Settings (even if the Device Profile has been changed). After 10 seconds the Device Profile reverts to the actual Device Profile in use. This is one way you can always connect to the meter. The Factory Initial Default Settings are:

Device Address:1

Baud Rate:9600

Protocol:Modbus RTU

Connection Steps:

1. Open Communicator EXT software (download from product CD).

2. Click **Connect** on the tool bar. You will see the Connect screen, shown on the right. Make sure your settings match these (use pull-down windows).

3. Click **Connect**. The Device Status screen confirms the connection.

4. Click **OK**. Communicator EXT's Main screen opens.

Configuration Steps:

5. Click the **Profile** button on the tool bar. The Device Profile screen opens. The Tree menu on the left side of the screen lets you choose setting screens.

6. Click **Communications** and select settings based on your application (see instructions below).

7. Click **CT, PT Ratios and System Hookup** and select settings based on your application (see instructions on the next page).

Communications Settings:

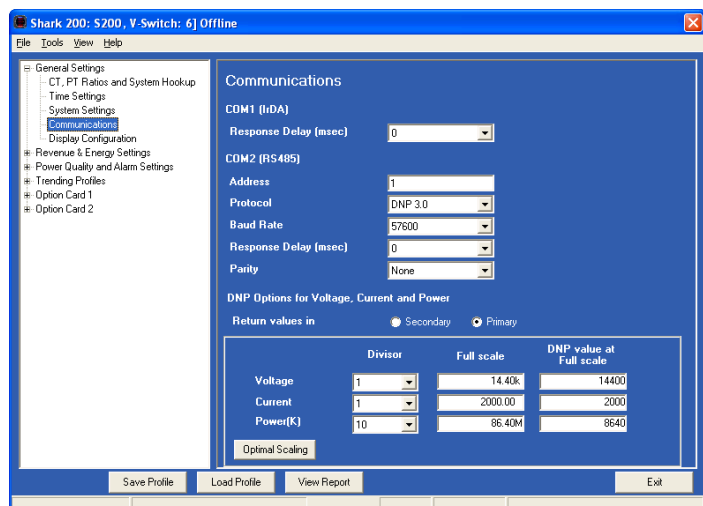**NOTE:** The IrDA settings do not apply to the 200T.
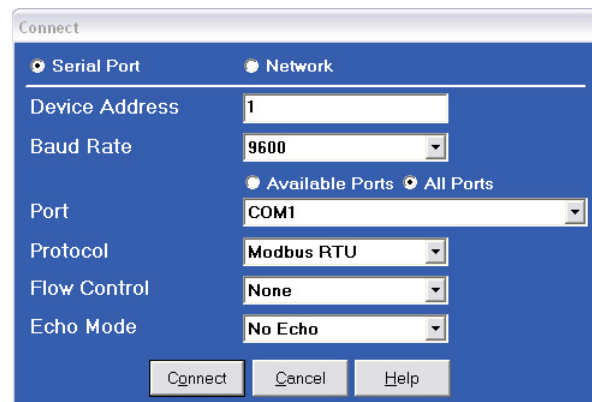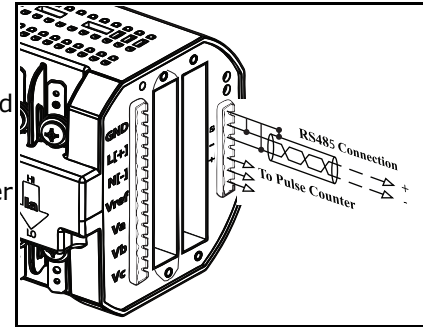
COM2 (RS485): Enter the following settings:

    Address (1-247)

    Protocol (Modbus RTU, ASCII or DNP)

    Baud Rate (9600 to 57600) [Runtime Firmware version EC and higher, 1200, 2400, and 4800 Baud rates are also available]

    Response Delay (0-750 msec)

Parity (Odd, Even, None) [Available with Runtime Firmware version EC and higher]

NOTE: The bottom of the screen has DNP Options for Voltage, Current, and Power - these fields allow you to choose Primary or Secondary Units for DNP, and to set custom scaling if you choose Primary. Click the Optimal Scaling button to have the software choose a divisor for voltage, current, and power, that will not result in an over/under-range. You must also set the DNP polling software to multiply by the divisor amount before showing the final value.

CT, PT Ratios and System Hookup

Settings: Enter the following settings:

CT Numerator (enter value you want), Denominator (display only), Multiplier (1, 10, or 100), CT Fullscale (Calculated automatically)

PT Numerator (enter value you want), Denominator (enter value you want), Multiplier (1, 10, 100, or 1000), PT Fullscale (Calculated automatically)

System Wiring: select from 3 Element Wye, 2.5 Element Wye, or 2 CT Delta.

NOTE: Voltage Full Scale = PT Numerator x PT Multiplier

Current Full Scale = CT Numerator x CT Multiplier

**IMPORTANT!** Specify Primary and Secondary Voltage in Full Scale (NOT Ratios).

NOTE: You can also enter the Ratios for CT/PT Numerator and Denominator and click the Update CT/ Update PT buttons to let the software calculate the Numerator, Denominator, and Multiplier for you. You can then empty the Ratio fields and click the Update Ratio buttons to confirm the calculated settings: you will see the same ratios you initially entered.

Example CT Settings:

200/5 Amps:	Set Ct-n value as 200, Ct-S value as 1.
800/5 Amps:	Set Ct-n value as 800, Ct-S value as 1.
2,000/5 Amps:	Set Ct-n value as 2000, Ct-S value as 1.
10,000/5 Amps:	Set Ct-n value as 1000, Ct-S value as 10.

Example PT Settings:

14,400/120 Volts:	Set Pt-n value as 1440, Pt-d value as 120, Pt-S value as 10.
138,000/69 Volts:	Set Pt-n value as 1380, Pt-d value as 69, Pt-S value as 100.
345,000/115 Volts:	Set Pt-n value as 3450, Pt-d value as 115, Pt-S value as 100.
345,000/69 Volts	Set Pt-n value as 345, Pt-d value as 69, Pt-S value as 1000.
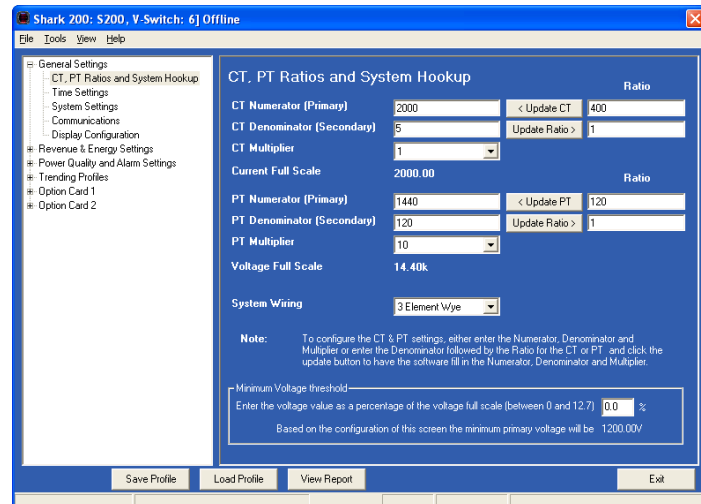
Update Device:

8.When changes are complete, click the **Update** button to send a new profile to the Shark 200T meter.

9.Click **Cancel** to Exit the profile (or) click other tabs to update other screens.

10.Use Communicator EXT to communicate with the device and perform required tasks.

NOTE: For further details and additional programming screens (Password, Limits, Energy and Display), refer to the Shark User's Manual & Communicator EXT 3.0 Software Manual on the enclosed CD.