

quick start guide

E2 Setup with GENERAC H-100 Panel MODBUS Device for 527-0405

This document will guide you through setting up and commissioning the H-100 Panel third-party MODBUS device in the E2 controller.

STEP 1: Upload the Description File to the E2.

1. Connect to your E2 using UltraSite (refer to *UltraSite32 User's Guide P/N 026-1002*).
2. Right-click the E2 icon and select **Description File Upload**.
3. Browse to the location of the description file and click **Upload**.
4. Once upload is complete, reboot the E2 controller.

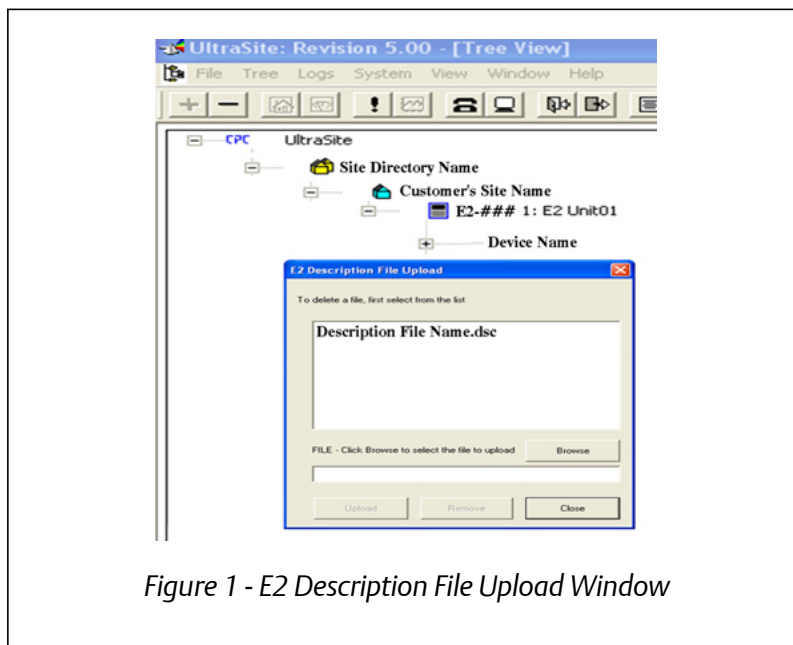


Figure 1 - E2 Description File Upload Window

STEP 2: Activate the License of the Device.

1. Log in to the E2 controller.
2. From the E2 front panel (or via Terminal Mode), press **Menu**, **7**, **9** (*Licensing*).
3. Press **F1** (*ADD FEATURE*) to add the license key.

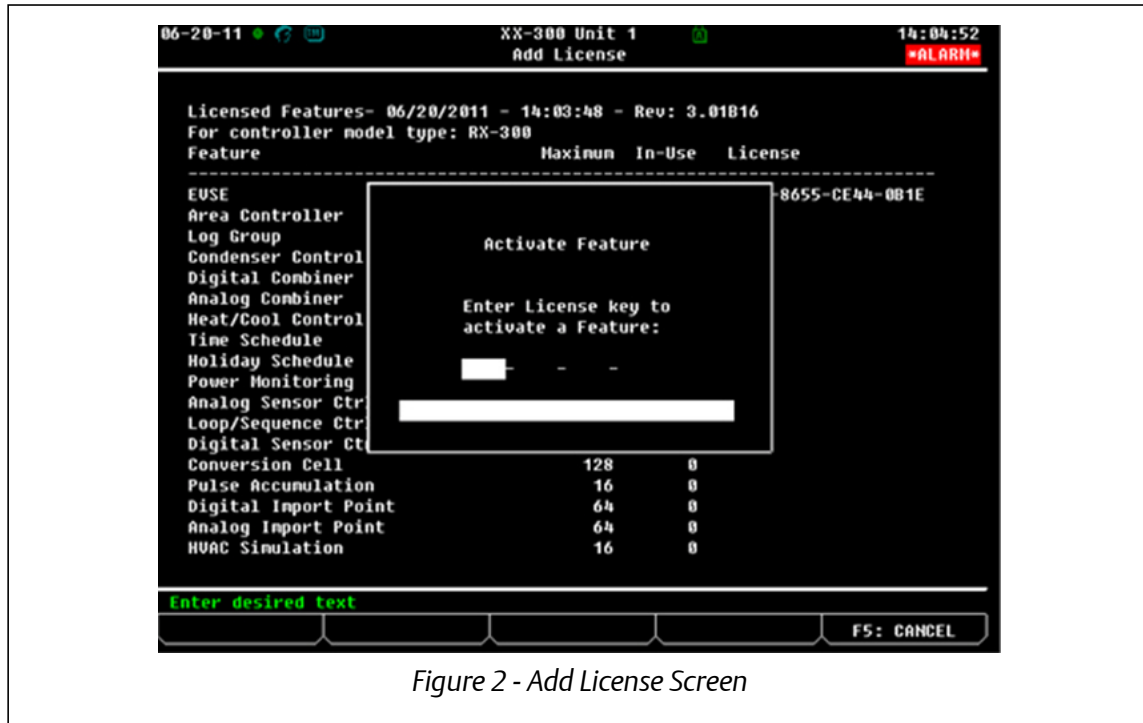

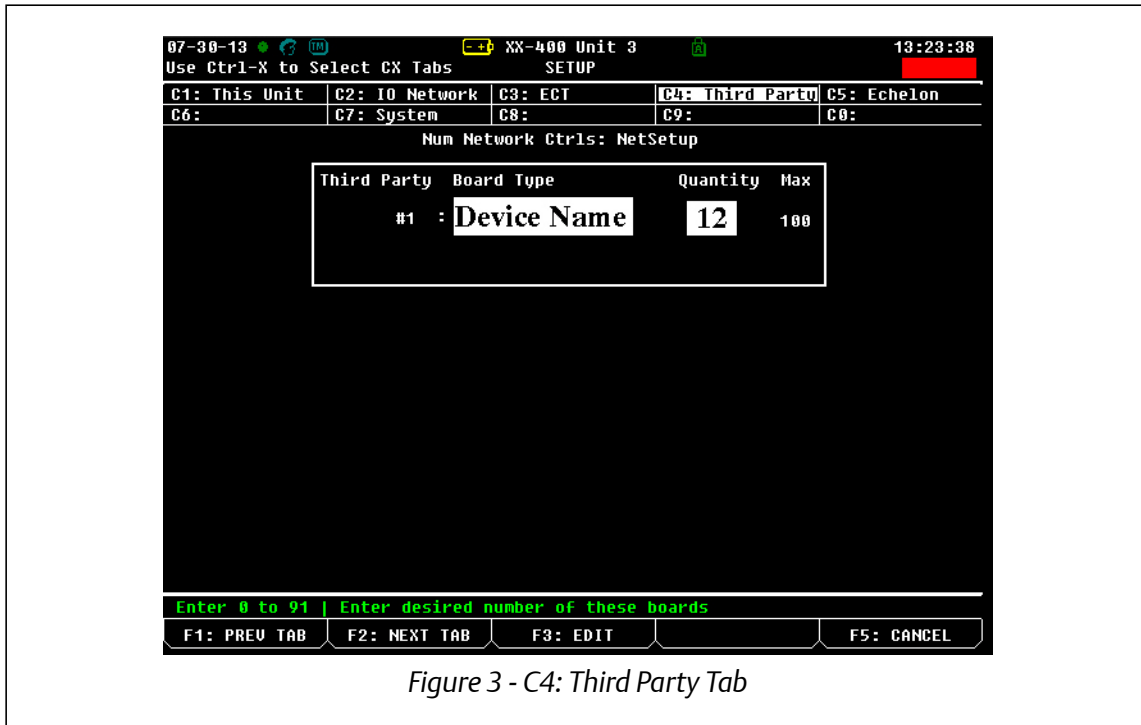


Figure 2 - Add License Screen


STEP 3: Add the Device in the E2.

1. Press **Menu**, **&7**, **&7**, **@2** (Connected I/O Boards & Controllers).
2. Press **F2** to go to the **C4: Third Party** tab. The name of the device will display in the list. Highlight the device name and enter the number of devices to add under the **Quantity** field.

3. Press  to save the changes.



STEP 4: Set Up the Device E2 Serial Port.

1. Log in to the E2 controller.
2. Press , **7**, **3**, **1** (*General Controller Information*).
3. Select **F2** to go to the *C3: Serial* tab. Highlight the physical COM Connection Port that will be assigned to the device and set up the Manufacturer's communication configurations as follows:
 - COM# Baud: **9600 kb**
 - COM# Data Size: **8**
 - COM# Parity: **None**
 - COM# Stop Bits: **1**

4. Press  to save the changes.

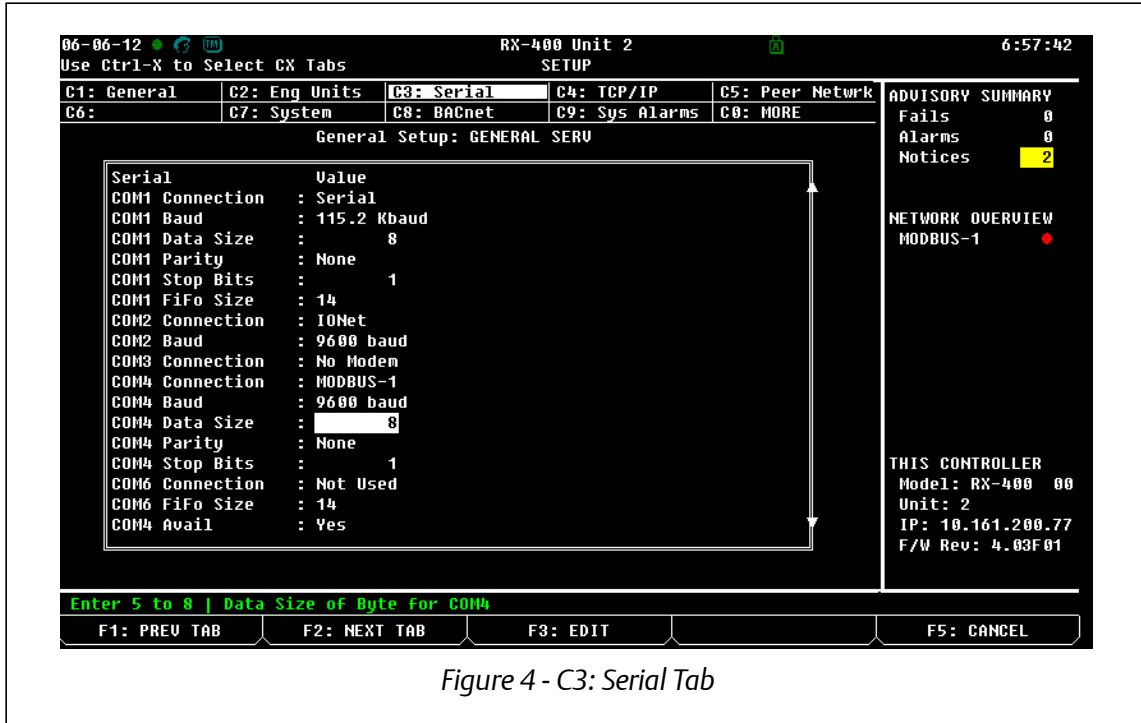
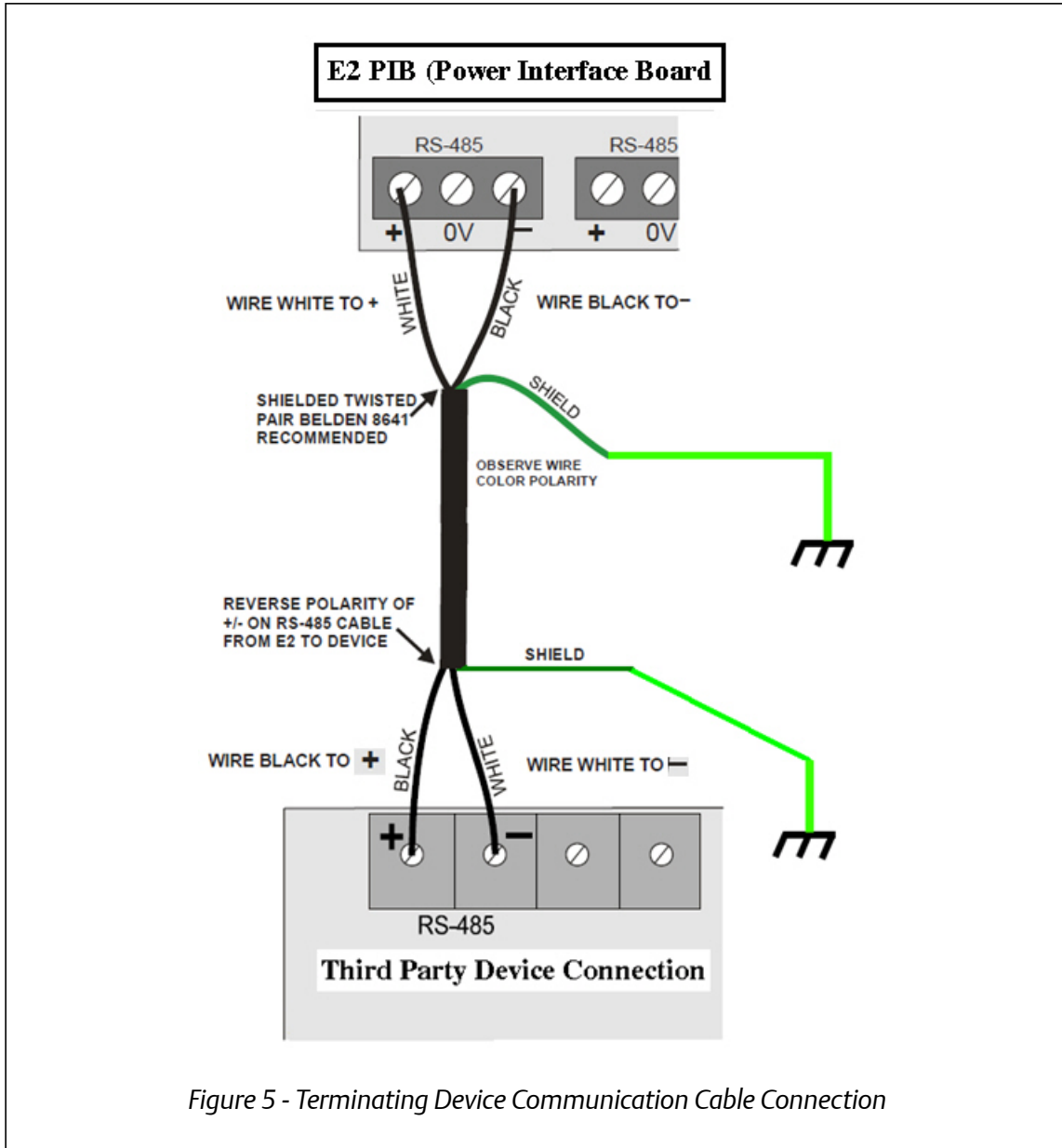


Figure 4 - C3: Serial Tab

STEP 5: Terminate the Device’s MODBUS RS-485 Communication Cable as Shown in *Figure 5*.

NOTE: Reverse the polarity of the device’s communication cable connection.



STEP 6: Commission the Device.

Selecting the Device MODBUS Network

1. Log in to the E2 controller.
2. Select **Menu**, **7**, **7**, **1** (*Network Summary*).
3. On the *Network Summary* screen, highlight the device name, press **F4** (*COMMISSION*), and select the preferred MODBUS Network (**Figure 6**). (Note that multiple MODBUS Networks appear in the list if more than one serial ports were set up initially.)
4. Press **Enter**.

*NOTE: If there is only one MODBUS-1 Network in the list and **F4** (*COMMISSION*) is pressed, the MODBUS device addressing list will display.*

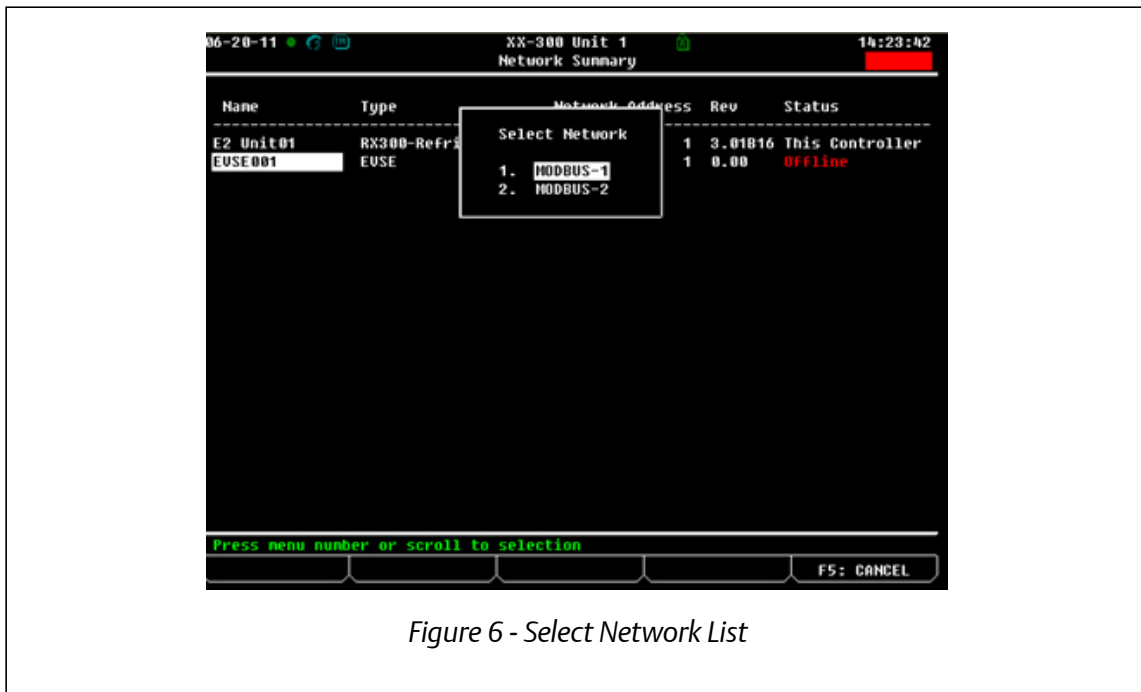


Figure 6 - Select Network List

Setting Up the Device's MODBUS Address in E2

1. Select **Menu**, **7**, **7**, **1** (*Network Summary*).
2. Using the E2 arrow keys, select the desired MODBUS device and press **F4** (*COMMISSION*). The E2 MODBUS addressing list will display. Select the desired MODBUS addressing slot for the device from the list (**Figure 7**).

NOTE: The MODBUS addressing slot pertains to the device address on the E2 controller only. The MODBUS address must be the same with the address assigned on the device. The actual device

address must be configured at the local Third Party MODBUS Remote Terminal Unit (RTU) to enable communication with the E2 controller.

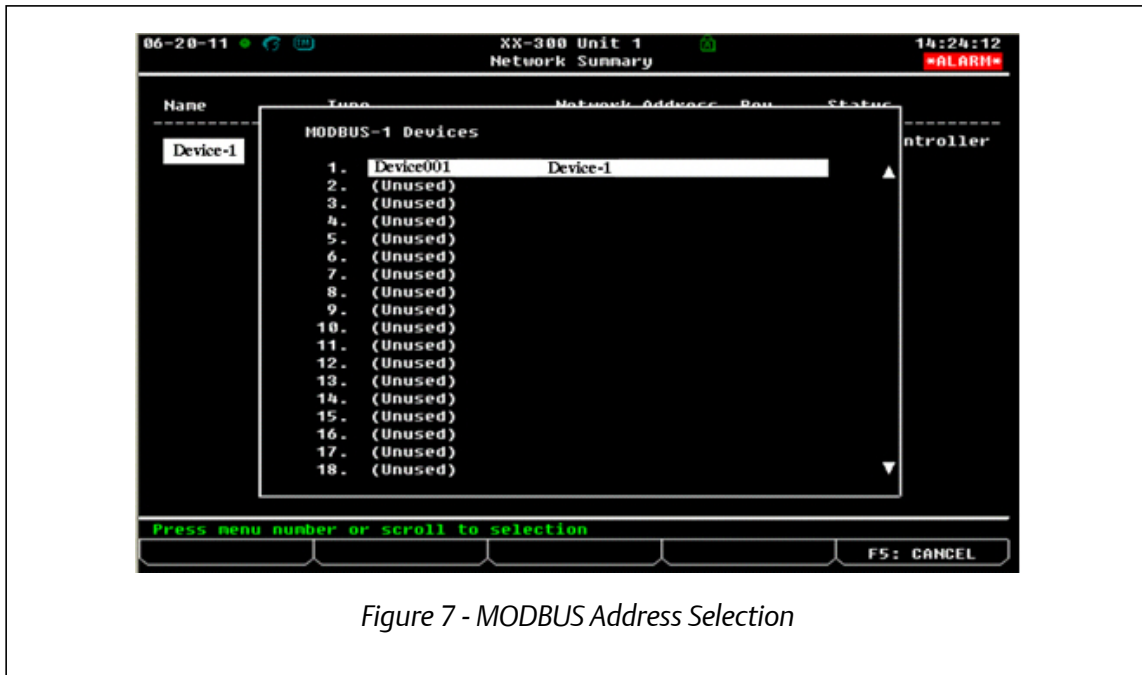



Figure 7 - MODBUS Address Selection

3. Next, press  and the MODBUS address will be set as shown:

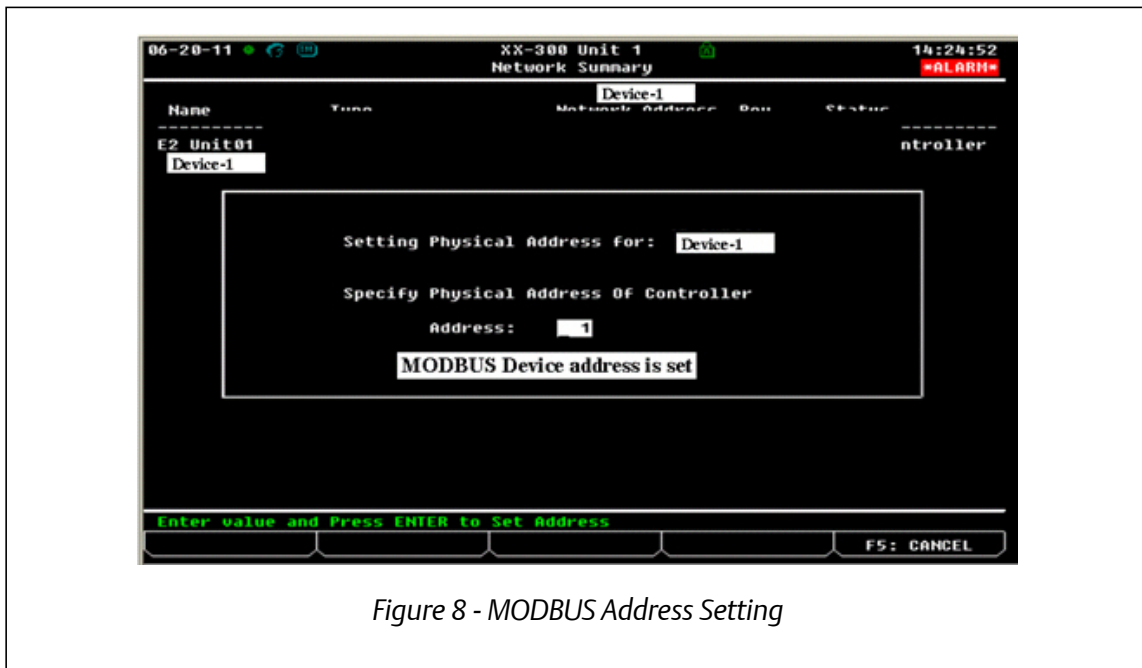



Figure 8 - MODBUS Address Setting

NOTE: After a few seconds the device will appear online (Figure 9) to confirm that the commissioning process has completed. If the device still appears offline, re-check the RS-485 Cable terminations and repeat the commissioning process.







The screenshot shows a terminal window titled "Network Summary" with a "FULL" status indicator. The window displays a table of network devices. The table has five columns: Name, Type, Network Address, Rev, and Status. The first row shows "E2 Unit05" of type "BX400-Bldg" with Ethernet address "5" and revision "3.01F01", labeled as "This Controller". The second row shows "Device001" of type "Device-1" with MODBUS address "1" and revision "0.00", with a status of "Online" in green text. At the bottom of the screen, there are four function key prompts: F1: DELETE RCRD, F2: STATUS, F4: COMMISSION, and F5: SETUP. The top of the screen shows the date "06-20-11", the unit identifier "XX-300 Unit 1", and the time "19:06:03".

Name	Type	Network Address	Rev	Status
E2 Unit05	BX400-Bldg	Ethernet: 5	3.01F01	This Controller
Device001	Device-1	MODBUS-1: 1	0.00	Online

Figure 9 - Network Summary Screen

STEP 7: View the Status of the Device.

NOTE: The commissioning process is completed once the RTU is online.

1. Press , ,  (Configured Applications). The Configured Applications list displays.
2. Highlight the name of the device in the list using the arrow keys and press  to view the Status screen of the device.

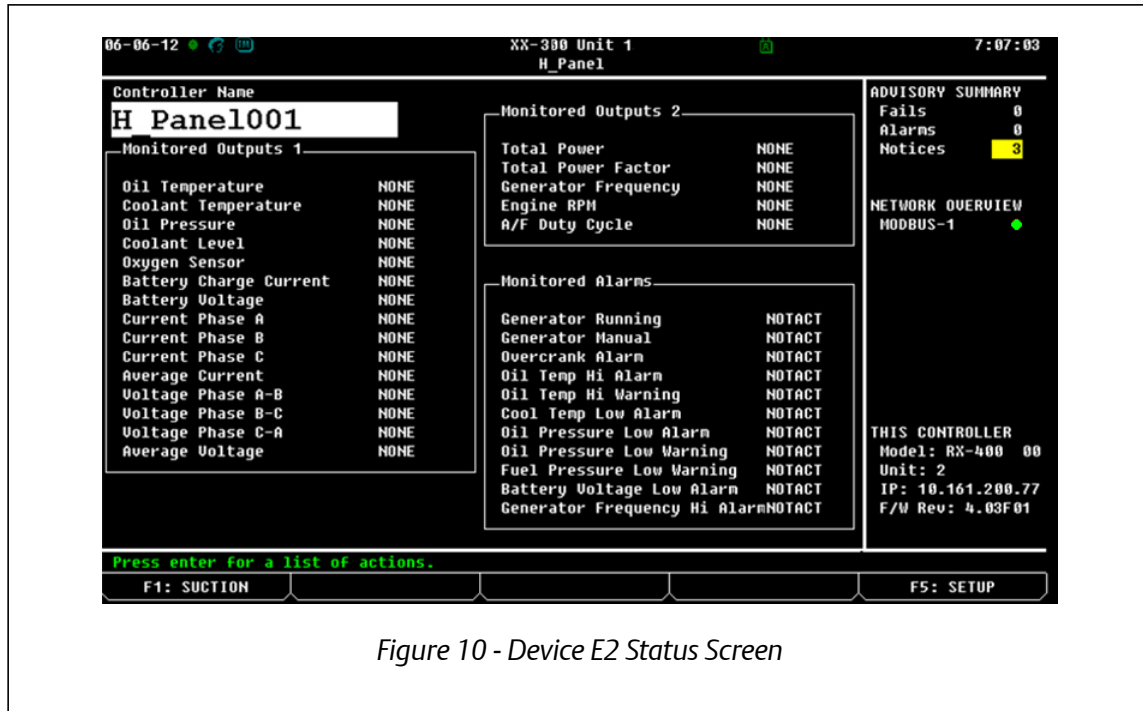


Figure 10 - Device E2 Status Screen

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