

E2 Setup with Veeder-Root TLS-350 MODBUS Device for 527-0370

This document will guide you through setting up and commissioning the Veeder-Root TLS-350 (Automatic Tank Gauging System) MODBUS Device in the E2 controller.

NOTE Note that this device requires E2 firmware version 3.01 or higher

STEP1: Upload the description file to the E2 controller.

1. From UltraSite, connect to your E2 controller.
2. Right-click the E2 icon and select **Description File Upload**.
3. Browse to the location of the description file and click **Upload**.
4. After uploading, you will need to reboot the E2 controller.

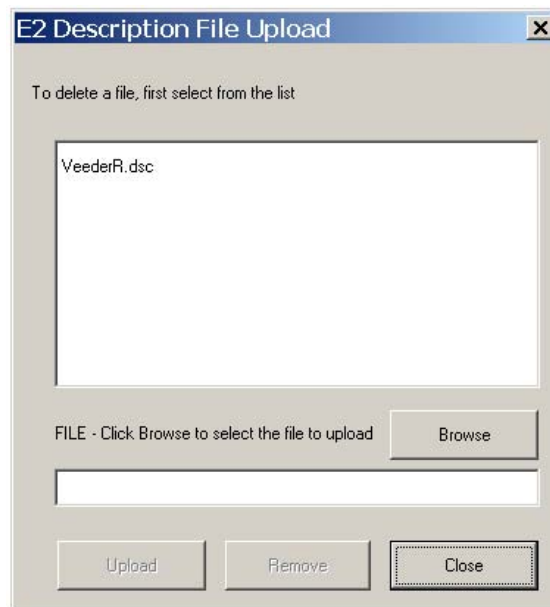


Figure 1 - Description File Upload

STEP 2: Activate the license of the device.

- From the E2 front panel (or via the Terminal Mode), press **Menu**, **7** (System Configuration), and **9** (Licensing).
- Press **F1 (ADD FEATURE)** and enter your license key.

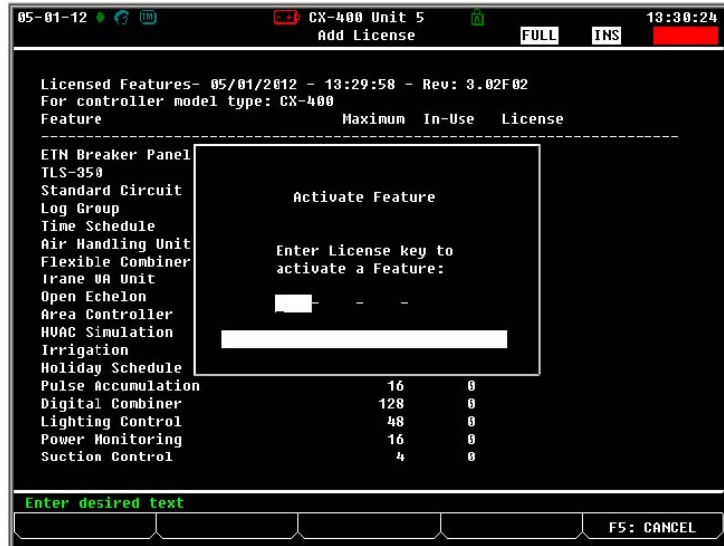


Figure 2 - Add License Screen

STEP 3: Terminate the RS485 communication cable.

- Connect the DB-9 Pin Serial Communication Cable Plug as shown in Figure 3 - Wiring Diagram to RS485 Network Cable, (3)TXD + and (4)TXD -.
- Ensure that communication polarity is reversed when connecting to the E2.

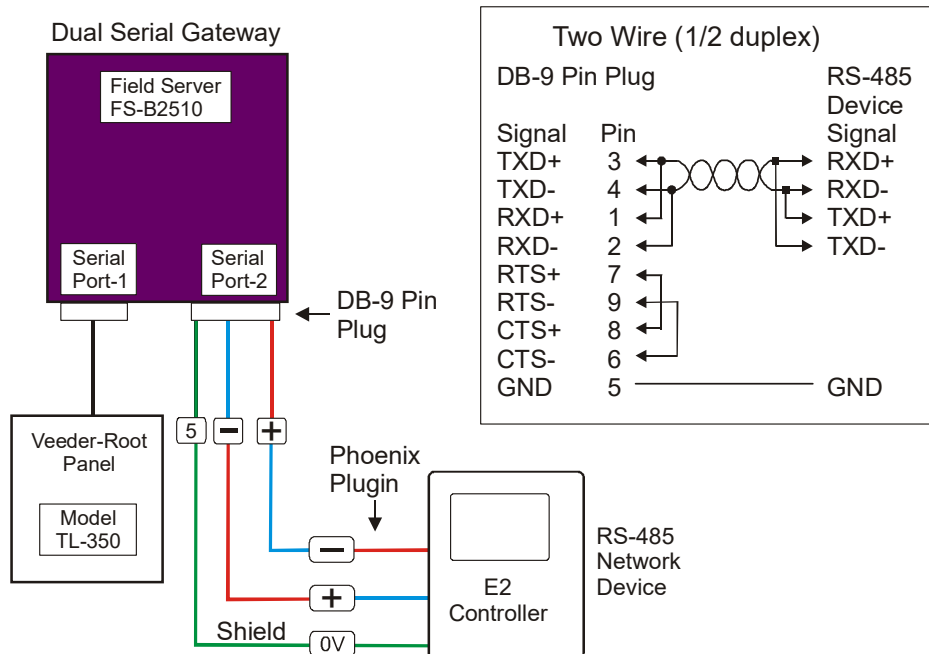






Figure 3 - Wiring Diagram to RS485 Network Cable

STEP 4: Configure the MODBUS serial port.

1. From the E2 front panel (or via Terminal Mode), select , , ,  then toggle the F2 key to **C3: Serial** tab and set up as shown.

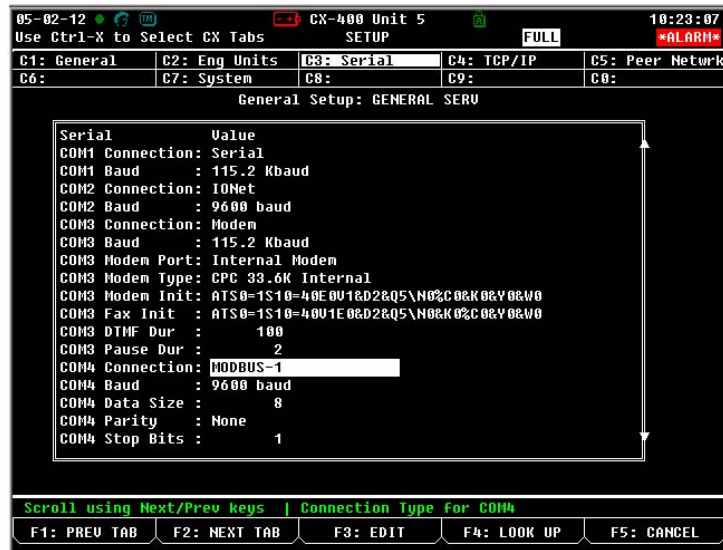


Figure 4 - MODBUS Port Serial Configuration

- **COM4 Connection:** MODBUS-1
- **COM4 Baud:** 9600 baud
- **COM4 Data Size:** 8
- **COM4 Parity:** None
- **COM4 Stop Bits:** 1

STEP 5: Once the license is activated, add the device to the E2 controller.






1. Press ,  (System Configuration),  (Network Setup),  (Connected I/O Boards & Controllers).
2. Press F2 (NEXT TAB) to go to **C4: Third Party** tab. You should see the device in the list. Enter the number of devices to add and press the  button to save your changes.



Figure 5 - Adding the Device to the E2 Controller

KEY POINTS:

- The FieldServer FS-B2510 is a Gateway Protocol Translator that enables data transfer between the E2 controller and the Veeder-Root TLS-350.
- RS485 Network Cable used > (BELDEN 8641-24 AWG 2 Conductor Shielded Cable) or equivalent.

STEP 6: Commission the device.

1. Press **Menu**, **7** (System Configuration), **7** (Network Setup), **1** (Network Summary).
2. Press **F4 (COMMISSION)** and select the MODBUS port that you will be assigning the device to and then select the MODBUS device address.



Figure 6 - Commissioning the Device

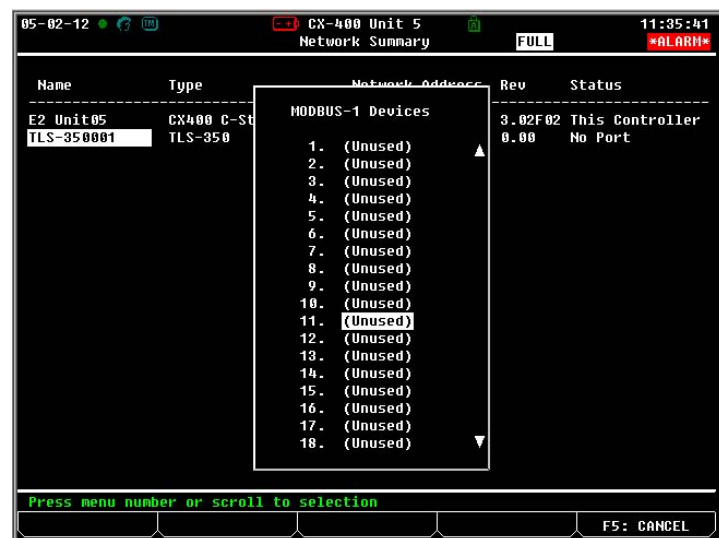


Figure 7 - MODBUS Port Assignment

Once the MODBUS Physical Address is commissioned, this window will appear:



Figure 8 - MODBUS Physical Address Commissioned

After the MODBUS Port Address has been initiated, the **Network Summary** window will appear (Figure 9 - Network Summary Screen).



Figure 9 - Network Summary Screen

Once the device is online, it will display the status screen as shown:

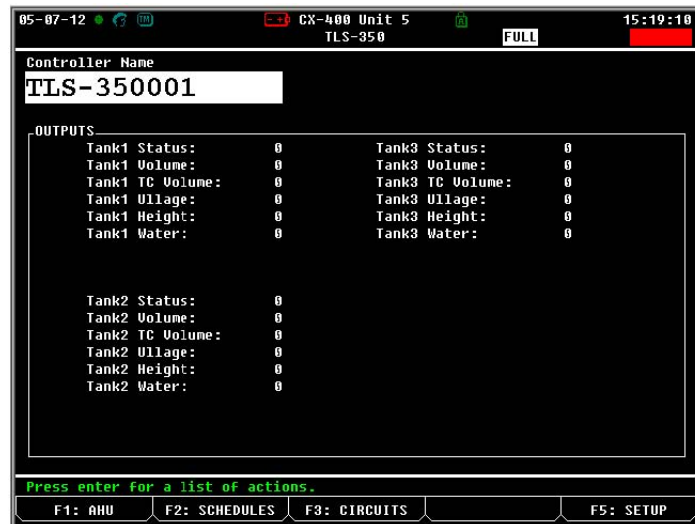


Figure 10 - Status Screen

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