



Tigo EI Inverter

Support for Multi-Inverter Commissioning in PPL Electric Utility via Unique Modbus ID

Background

To enable multi-inverter installations in the PPL (Pennsylvania) utility territory, each inverter in the system must be individually addressable by a Utility Control Device (UCD). This requires assigning a unique Modbus ID to each inverter.

Previously, only single-inverter systems were supported due to the inability to differentiate communication with multiple inverters. With this release, the system now supports multi-inverter configurations, allowing the UCD to independently communicate with each inverter in the multi-inverter system.

Note: The CCA must be updated to the latest firmware.

Commissioning Steps Using the EI Mobile App

1. The installer physically installs all EI Inverters.
2. Launches the EI Mobile App and discovers each inverter.
3. Connect each inverter to Wi-Fi.
4. Complete all required firmware updates.
5. Navigate to: **Utility Control Devices > PPL**.
6. The app displays a list of all EI Inverters in the system.
7. The installer clicks the "Assign IDs for All" button, which auto-generates and assigns unique IDs to all devices and sends the required commands.
8. The IDs are automatically generated, and users cannot manually change or set them.
9. Once IDs are assigned successfully, the "Assign IDs for All" button becomes grayed out.
10. Commissioning proceeds as normal.

The following screenshots illustrate the step-by-step process in the Tigo EI Mobile App for commissioning a multi-inverter system in the PPL utility region:

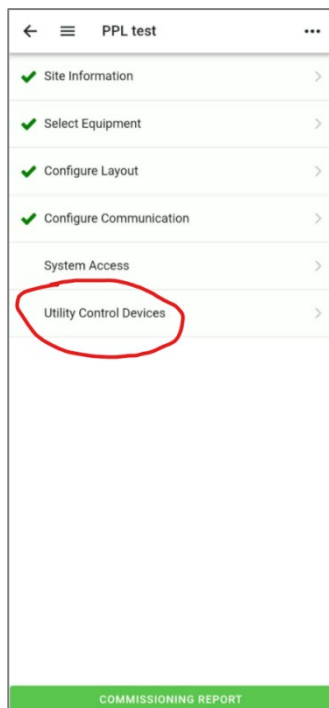


Figure 1: Navigating to Utility Control Devices

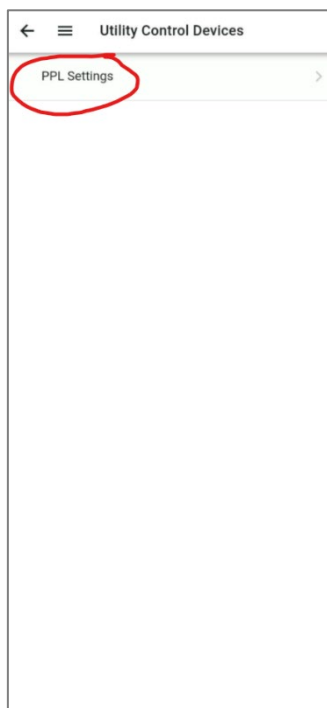


Figure 2: Select "PPL Settings" to configure individual inverter communication.

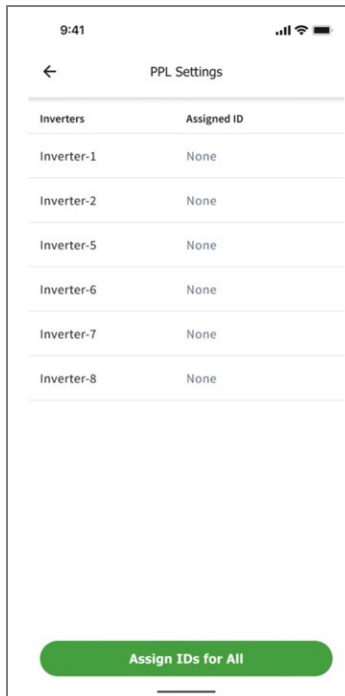


Figure 3: Tap "Assign IDs for All" to automatically assign unique Modbus IDs



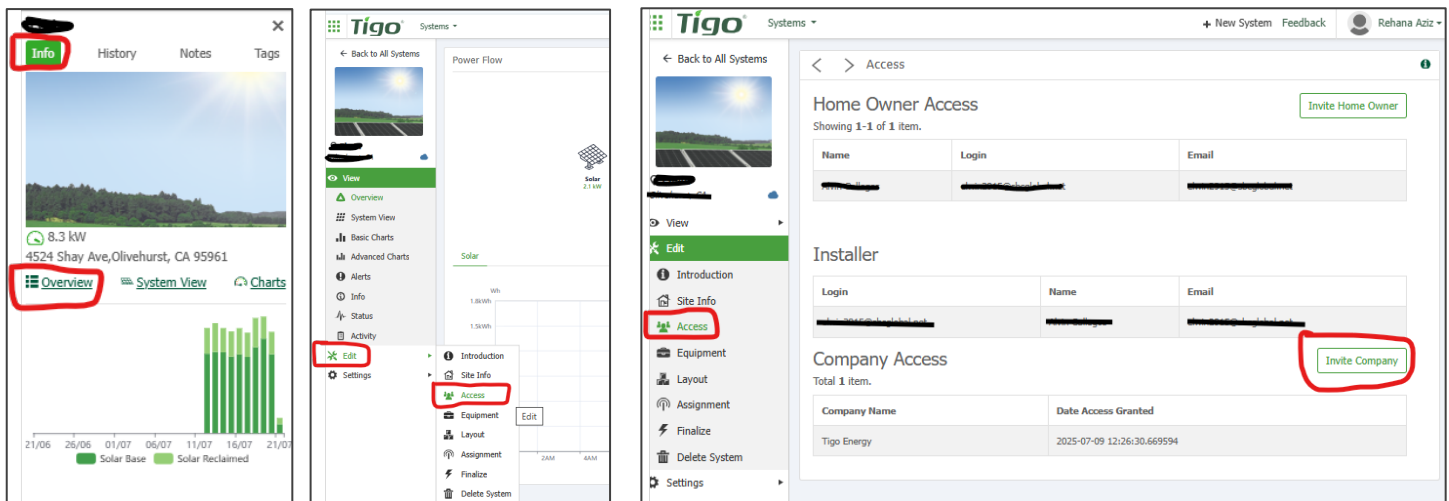
Figure 4: IDs have been assigned

Adding PPL for Fleet Monitoring

Tigo has created a dedicated PPL company account to enable the utility team to monitor and manage their fleet of systems.

Installer Action – Post Commissioning:

1. **Log into the Tigo EI Portal** with your installer credentials.
2. Navigate to: **Info** → **Overview** → **Edit** → **Access**.
3. Click **Add Company**.
4. Enter the PPL email: euderlab@pplweb.com
5. Submit the request.



PPL Access & On-Site Actions

Once access is granted, the PPL team will receive an **email invitation** to accept system access. After accepting:

- PPL will be able to **remotely monitor and manage systems**.
- When visiting a site, they can **verify if Modbus IDs were assigned** during commissioning.
- If not assigned, **PPL can assign unique Modbus IDs directly** via the EI Mobile App (same steps as above).
- This ensures system compliance and enables UCD operation.