Device Operations in SolarEdge ONE for C&I – Application Note

Revision History

Version 1.0, August 2024: Initial Version
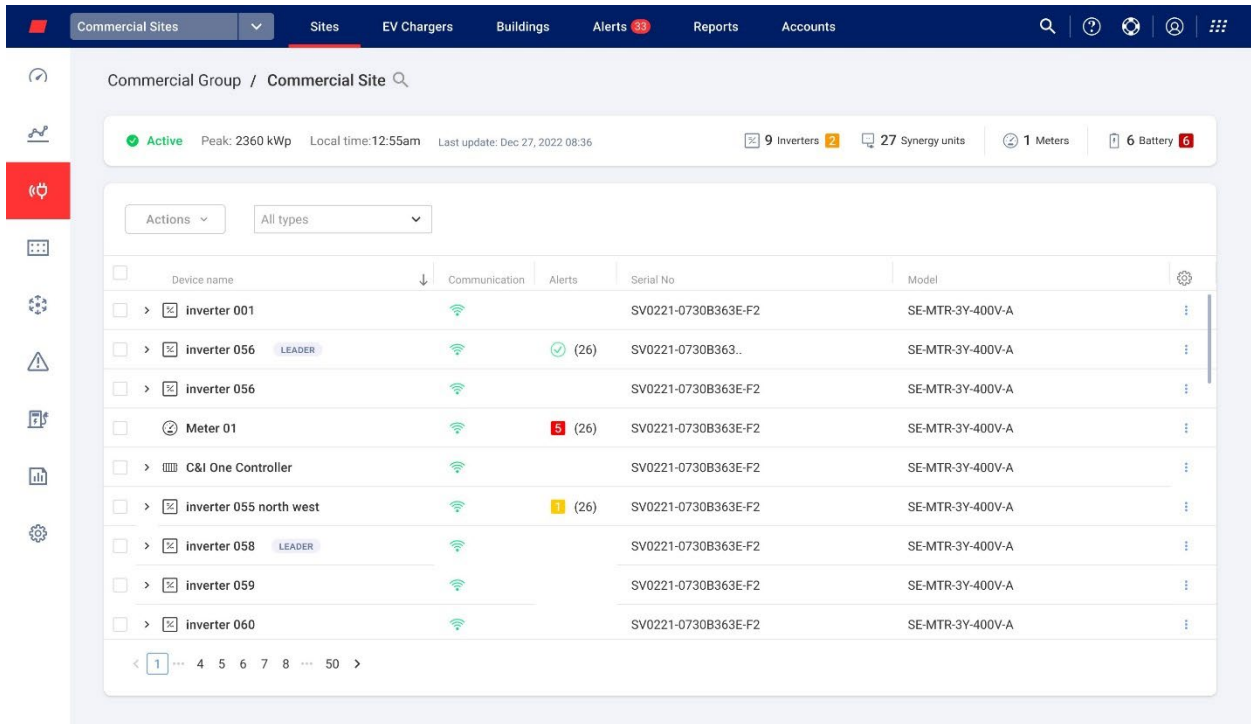
Contents

SolarEdge ONE for C&I overview

SolarEdge ONE for C&I is an orchestrated platform for monitoring and managing PV fleets, storage, EV-charging stations, and load optimization. You can optimize all your energy assets using live data analytics to save costs.

Device Operations overview

Device Operations enables you to view and configure devices at your site remotely.

To open the Device Operations dashboard:

1. Log in to the Monitoring platform.
2. To access your site, click the **SITE NAME**.
   The **ONE for C&I** dashboard is displayed.
3. On the **Main Menu**, click ⏻ .

   The **Device Operations** dashboard is displayed.

To change your portfolio or site name:

From the **Search** 🔍 dropdown lists, select from the options available, or type in the names of the portfolio and site you are searching for.

Devices on site

The devices table on the dashboard displays all the devices installed on site.

To search for a device:

1. In the **Device type** dropdown list, select the type of device you want displayed in the device table. You can select more than one type of device. By default, all devices are displayed in the table when the dashboard opens.

OR

2. From the **Device** table search for specific devices by clicking the arrow › next to the device. For example, you can search for **Inverter** › **String** › **Optimizer**.
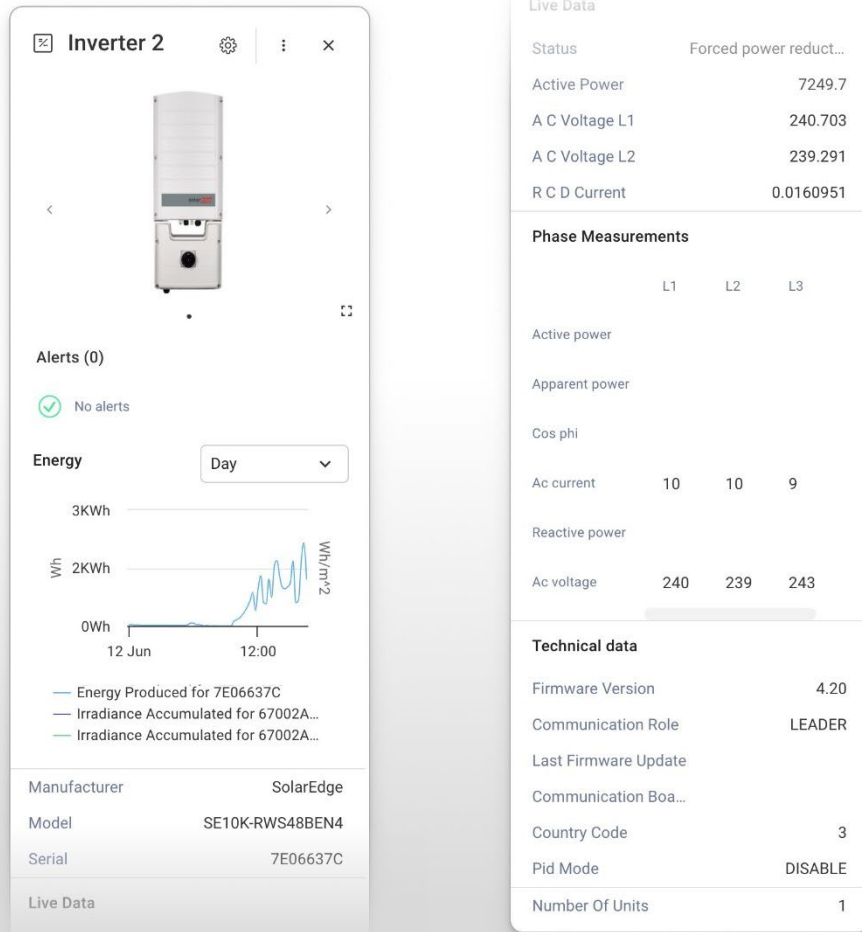
> 💬 **NOTE**
> You can only reconfigure a batch of the same type of device and model at the same time.

Device side panel

To open a side panel:

1. On the **Device** table, click on a **device**.

   A **side panel** appears and displays the following information:

> **NOTE**
>
> The image below is a representation of a side panel.

The following information can be viewed on the panel:

- The type of device and an image of the device. To enlarge the image click ⛶ .
- Device alerts
- **Energy**: On the chart view the energy produced and the irradiance accumulated on a given day/week/month/year. The default setting is **Day**.
- Manufacturer
- Model
- Serial Number
- Live Data
    - Status

- Active Power

- AC Voltage L1

- AC Voltage L2

- RCD Current

- Phase Measurements for L1 L2 L3:

  - Active power

  - Apparent power

  - Cos phi

  - AC current

  - Reactive power

  - AC voltage

- Technical Data:

  - Firmware Version

  - Communication Role - Leader or Follower Inverter

  - Last Firmware Update

  - Communication Board Version

  - Country Code

  - PID Mode

  - Number of Units

To view another device's information when the panel is open:

Click the device on the table.
The information in the side panel automatically updates.

To close the side panel:

Click ⊗ .

Reconfigure an inverter

To reconfigure your inverter:

1. On the side panel, click ⚙ .
   A screen is displayed with inverter settings, described in the following table :

Inverter Settings	Description
Power Control	Controls and adjusts the power output of inverters. Power Control is designed to optimize the performance of the solar PV system and ensure that it operates efficiently while meeting specific requirements.
Energy Control	Controls the export power limit.

Inverter Settings	Description
Inverter Reactive Power Controls	Manages the inverter's production and injection of reactive power into an electrical system. Reactive power is an essential component of alternating current (AC) power systems and plays a role in maintaining voltage stability and supporting the operation of inductive loads.
Grid Protection	Sets up various parameters and controls that help ensure the safe and reliable operation of the inverter, within the context of a larger electrical grid. These parameters are designed to detect and respond to abnormal grid conditions, faults, and disturbances, and prevent potential damage to the inverter, the solar PV system, and the grid.

2. Click one of the options to update your settings.
3. Click **fetch settings,** or type the values in the relevant fields.
4. To save your updated values, click **Submit**.
   Your updated values are submitted and saved.

> **NOTE**
> Refer to these application notes for further information on Modbus Mapping and Power Control Options.

To batch reconfigure a device

1. In the devices table, select the checkboxes of the devices to reconfigure, and click **Actions>Device Setup**.

   A popup window is displayed.

2. In the fields provided add your values.
3. To save your updated values, click **Submit**
   Your updated values are submitted and saved.

> **NOTE**
> You can only batch reconfigure the same type of device and model.