

# Application Note – Designing a SolarEdge C&I system with the S1000 power optimizers in India

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## Version History

Revision Number	Date	Notes
Version 1.0	March 2026	Initial version.

## About

This application note provides guidance on the design and configuration of SolarEdge inverter models SE33.3K, SE66.6K, and SE100K when used with the S1000 Power Optimizer. It includes detailed SolarEdge Go procedures for the following:

- Configuring the inverter's fixed string voltage to 850 Vdc
- Limiting inverter maximum production

## Supported Regions

The information presented in this document applies solely to installations within the India region.

## Overview

The S1000 can be designed with the SE33.3K, SE66.6K, and SE100K inverters using two valid design approaches. Each approach requires specific settings for string count, fixed string voltage, and AC power behavior.

### 1. Three-String Design:

Valid only when each string contains a minimum of 14 optimizers (27 modules). This design does not limit the AC output. The inverter continues operating with a fixed string voltage of 750 Vdc delivering the nominal production rates: SE33.3K → 33.3kW, SE66.6K → 66.6kW and, SE100K → 100kW. This approach is recommended when full AC capacity is required and the string length provides adequate DC voltage.

### 2. Two-String Design:

Used when the three-string design cannot meet the required optimizer count. This approach is intended for low-string-count designs and ensures stable operation at higher fixed voltages.

However, the following configurations are required through the SolarEdge Go application (refer to the procedures in the following sections)

- Limit the Inverter's maximum production rate ( SE33.3K → 30kW, SE66.6K → 60kW and, SE100K → 90kW).
- Increasing string DC voltage to 850 Vdc.



#### NOTE

For mixed 2- and 3-string designs on SE66.6K and SE100K inverters, set the fixed string voltage according to the design requirements. Contact SolarEdge Support if guidance is required.

## How to configure the inverter's fixed string voltage to 850Vdc using SolarEdge Go

This section describes the procedure for setting the inverter's DC voltage rating to 850Vdc.

To configure the inverter to the 850Vdc voltage rating, follow the steps below (refer to the image below for application screenshots):

1. Open SolarEdge Go application and scan the inverter's QR code in order to connect to it. Once connected, navigate to the 'Commissioning' section, and then select 'Power Control'.
2. In the 'Power Control' menu, select Advanced and ensure that the 'Grid Control' option (the first menu item) is set to *Enabled* (as shown in the example screenshot).
3. In the 'Advanced Power Control' menu select 'Fixed String Voltage'.
4. In the 'Fixed String Voltage' menu, select '850Vdc' from the available options ('750Vdc' or '850Vdc'). The selection will be confirmed by a check mark. The fixed string voltage has now been successfully set to 850Vdc.



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Commissioning

- Legacy Country & Grid >
- Country & Grid >
- Optimizers >
- Monitoring Communication >
- Site Communication >
- Power Control >**
- Grid Protection >
- Central Commissioning >
- Device Manager >
- Maintenance >
- Information >
- Status >

2

Power Control

- Grid Control Enabled >
- Energy Manager >
- Power Reduction Interface (RRCR) Disabled >
- Reactive Power CosPhi >
- VAR at night Disabled >
- Active Power >
- Wakeup Profile >
- Advanced >**
- Alternative Power Source Generator >
- Load Defaults

3

Advanced Power Control

- FRT Mode 0 (Disable) >
- Open AC Relay at 0W limit Enabled >
- Signaling Relay Not Available >
- Fixed String Voltage 750 Vdc >**

4

Fixed String Voltage

750 Vdc

**850 Vdc ✓**



**NOTE**

Configuring the fixed string voltage to 850Vdc should only be performed on inverters paired with S1200 or S1000 Power Optimizers and not with any other Power Optimizer. Configuring the inverter to 850Vdc under other circumstances will void the inverter warranty.

## How to limit the inverter's maximum production using SolarEdge GO

This section details how to limit the inverter's exported power rating using the SolarEdge Go application for the following inverter ratings:

- 33.3kW to 30kW
- 66.6kW to 60kW
- 100kW to 90kW

To limit the inverter power rating, follow the steps below (refer to the image below for application screenshots):

1. Open SolarEdge Go application and scan the inverter's QR code in order to connect to it. Once connected, navigate to the 'Commissioning' section, and then select 'Power Control'.
2. In the 'Power Control' menu, select 'Energy Manager'.
3. In the 'Energy Manager' menu select 'Limit Control' and then In the 'Limit Control' menu, select 'Production Limit'.
4. In the 'Production Limit' page:
  - Activate 'Production Limit' menu by hitting the 'Active' button, then click 'Edit'.
  - Once 'Production Limit' menu is enabled, Enter the required production limit value in watts, according to the inverter model:
    - To limit SE33.3K to 30kW, enter: 30000
    - To limit SE66.6K to 60kW, enter: 60000
    - To limit SE100K to 90kW, enter: 90000
  - Verify that 'Phase Mode' is set to 'Total'.
  - Review the pop-up message and click 'Set' to apply the modified limitation setting.

