Using SolarEdge Inverters with Vigdu-P Preventive Degradation Device — Application Note

This document describes SolarEdge inverter compatibility with the Vigdu-P: Preventive Degradation Device (PDD). It also explains how to configure the SolarEdge inverter, when required, so that the operation of the inverter is not interrupted.
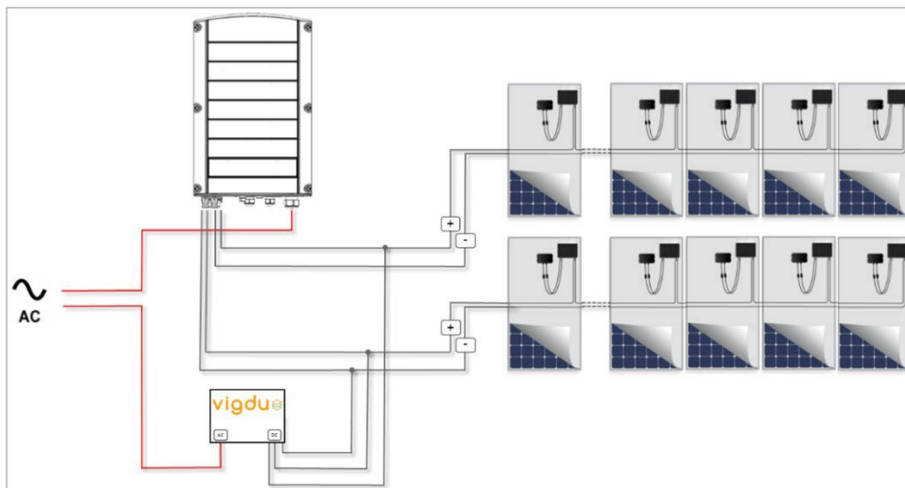
Revision history

- Version 1.2, June 2024: Added note about Three Phase Inverters with Synergy Technology that are not supported
- Version 1.1, December 2020: Various updates
- Version 1.0, August 2016; Initial release

Figure 1: SolarEdge inverter connected to two strings and a PDD box

NOTE

SolarEdge does not guarantee nor is it responsible for the proper functioning, operation, or performance of the Vigdu-P Preventive Degradation Device. The Vigdu-P Preventive Degradation Device is covered exclusively under its own manufacturer's warranty terms and is expressly excluded from the SolarEdge Limited Product Warranty available at https://www.solaredge.com/service/warranty.

Inverter Compatibility

- ll Vigdu PDD models starting with 10x can be used with SolarEdge inverters.
- The Vigdu PDD can be used with the following SolarEdge inverters:

Region	Single phase inverters	Three phase inverters
North America	SE3000A-US, SE3800A-US, SE5000A-US, SE6000A-US SE7600A-US, SE10000A-US, SE11400A-US	SE9K-US, SE10K-US, SE14.4K-US, SE17.3K-US, SE20K-US, SE30K-US, SE40K-US, SE43.2K-US, SE66.6K-US, SE100K-US 💬 **NOTE** Three Phase Inverters with Synergy Technology with the PN structure, SExxK-xxxxIxxxx, are not compatible. Requires the following inverter firmware versions: • CPU – 2.0640 / 3.xxxx / 4.10.25 and above • DSP1 – 1.13.700 and above / 1.20.7xx and above • DSP2 – 2.19.337 and above / 2.20.5xx and above
Europe and APAC	SE2200, SE3000, SE3500, SE4000, SE4000- 16A, SE5000, SE6000	SE3K, SE4K, SE5K, SE7K, SE8K, SE9K, SE10K, SE12.5K, SE15K, SE16K, SE17K, SE25K, SE27.6K, SE30K, SE33.3K, SE40K, SE50K, SE55K. SE82.8K, SE100K 💬 **NOTE** Three Phase Inverters with Synergy Technology with the PN structure 2, SExxK-xxxxIxxxx, are not compatible. Requires the following inverter firmware versions: • CPU – 2.0640 / 3.xxxx / 4.10.25 and above • DSP1 – 1.13.327 and above / 1.20.7xx and above • DSP2 – 2.19.237 and above / 2.20.5xx and above

💬 **NOTE**

The Vigdu PDD can only be used in combination with modules for which the manufacturer has issued explicit approval. Each inverter should be connected to a different Vigdu PDD input. The PDD must be installed according to manufacturer instructions.

Enabling PID Mitigation on Three Phase Inverters

2.xxxx and 3.xxxx inverter models use an LCD Display for configuring inverter settings, whereas 4.xx.xx and later models use the SolarEdge Inverter SetApp application to configure inverter settings.

Configuring PID Mitigation on Inverters that use the SolarEdge Inverter SetApp

For inverters that use the SolarEdge Inverter SetApp application for configuration you enable PID Mitigation by setting the PID Mitigation value as Rectifier.

→ To configure PID Mitigation using the SetApp application

1. Login to the SolarEdge Inverter SetApp and connect to the inverter.
2. From the Commissioning menu tap **Maintenance** > **PID Mitigation** >**Rectifier**.

Configuring PID Mitigation on Inverters with LCD screens

For inverters that you use an LCD screen for configuration you enable PID Mitigation by setting the Maintenance Diagnostics value to Night Offset.
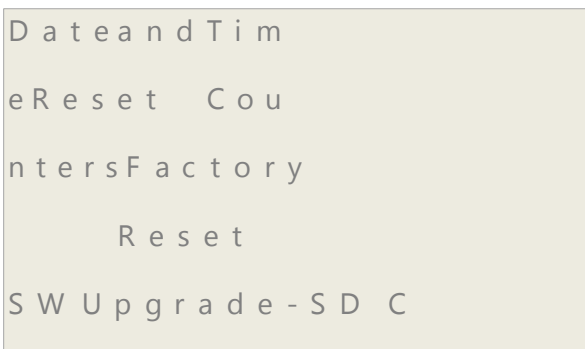
→ To configure PID Mitigation using an LCD screen:

1. Press and hold down the LCD light button until the following message is displayed:

```
Keep holding button
for pairing, release
to enter menu...
Remaining    3sec
```

2. Release within 5 seconds to enter Setup mode.
3. Short-press (one second) to scroll down to the **Maintenance** menu and long-press to enter the menu. The following screen is displayed:

```
Date and Tim
e Reset  Cou
nters Factory
     Reset
SW Upgrade-SD C
```

4. Short-press to scroll down to the Diagnostics menu and long-press to select **Diagnostics ➔ Night Offset <Dis>**.
5. Short-press to toggle to **Enable**.
6. Long-press to select the Enable option.
   Wait until the message **Enabled** is displayed.