

Using SolarEdge Inverters with iLUMEN PIDbox mini — Application Note

This document describes SolarEdge inverter compatibility with the iLumen PIDbox mini. It also explains how to configure the SolarEdge inverter, when required, so that the operation of the inverter is not interrupted.

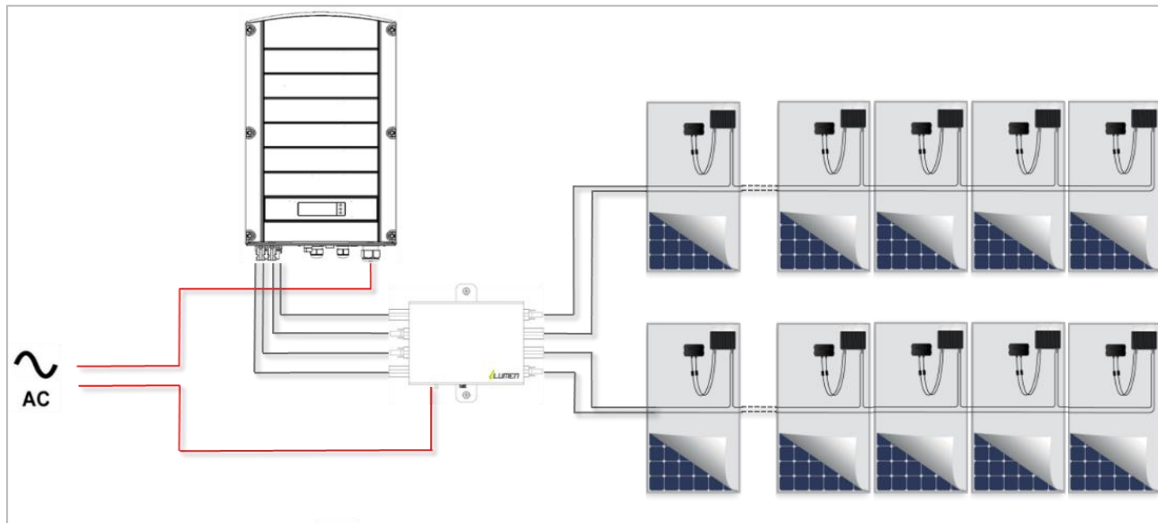


Figure 1: SolarEdge inverter connected to two strings and a PIDbox mini



NOTE:

SolarEdge does not guaranty nor is it responsible for the proper functioning, operation, or performance of the iLUMEN PIDbox mini. The iLUMEN PIDbox is covered exclusively under its own manufacturer’s warranty terms and is expressly excluded from the SolarEdge Limited Product Warranty available at <http://www.solaredge.com/sites/default/files/solaredge-warranty-june-2016.pdf>

Inverter Compatibility

The iLUMEN PIDbox Mini can be used with the following SolarEdge inverters:

	Single phase inverters	Three phase inverters
North America	SE3000A-US, SE3800A-US, SE5000A-US, SE6000A-US SE7600A-US, SE10000A-US, SE11400A-US	SE9KUS, SE10KUS, SE20KUS Requires the following inverter firmware versions: <ul style="list-style-type: none"> • CPU – 2.0640 and above • DSP1 – 1.13.700 and above • DSP2 – 2.19.337 and above
Europe and APAC	SE2200, SE3000, SE3500, SE4000, SE4000-16A, SE5000, SE6000	SE4K, SE5K, SE7K, SE8K, SE9K, SE10K, SE12.5K, SE15K, SE16K, SE17K, SE25K, SE27.6K, SE33.3K. Requires the following inverter firmware versions: <ul style="list-style-type: none"> • CPU – 2.0640 and above • DSP1 – 1.13.327 and above • DSP2 – 2.19.237 and above

When connecting the iLUMEN PIDbox mini to a SolarEdge single phase inverter, operating the unit does not require any additional configuration.

When connecting the iLUMEN PIDbox mini to a SolarEdge three phase inverter, the inverter must be configured to operate with the unit. This feature is referred to as Night Offset mode and requires the inverter configuration as described below.



NOTE:

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

Enabling Night Offset in Three Phase Inverters

- 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 3 sec
```

- 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 Time  
Reset Counters  
Factory Reset  
SW Upgrade - SD Card  
AFCI <En>  
Manual AFCI Test  
Diagnostics
```

- 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.