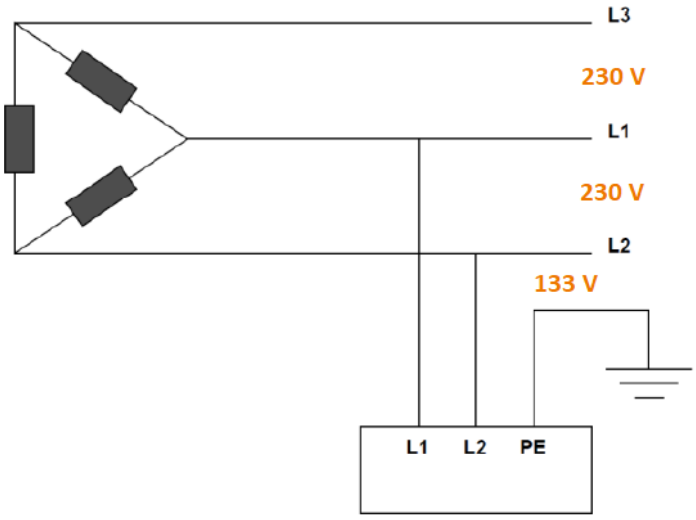
1-phase String Inverter-FAQ

Delta Grid Guide (earth detection)

Applicable to: 1-phase string inverters

In some regions the grid provides a 230V three-phase network. Phase to phase voltage is 230V and phase to PE ~ 133V.

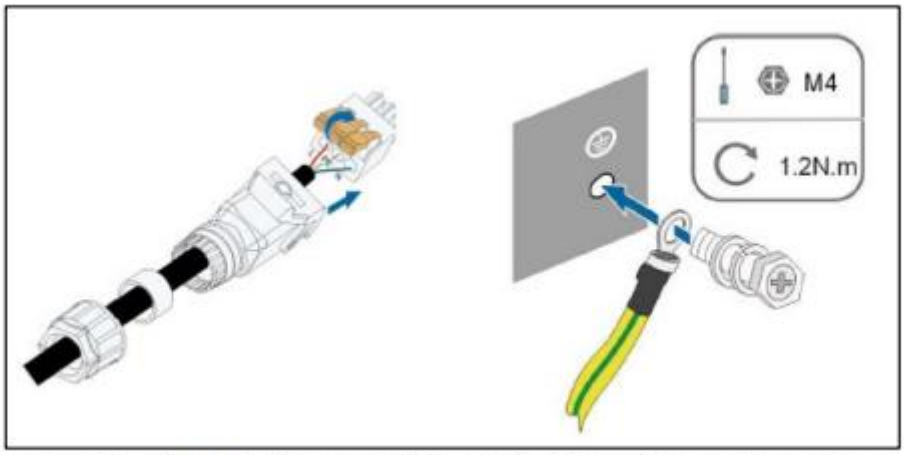
Following SUNGROW 1-phase inverters support this type of grid:
SH3.0/3.6/4.0/5.0/6.0RS
SG2.0/2.5/3.0RS-S
SG3.0/3.6/4.0/5.0/6.0RS



Delta IT (3 x 230V) grid

To set up the inverter for this grid-type, several adjustments must be made.

1. Ground detection must be deactivated
2. The PE of the AC grid terminal and enclosures must be solidly connected to house PE-bar.



PE wire connection for both inverter's AC grid (left) and inverter's enclosure (right)

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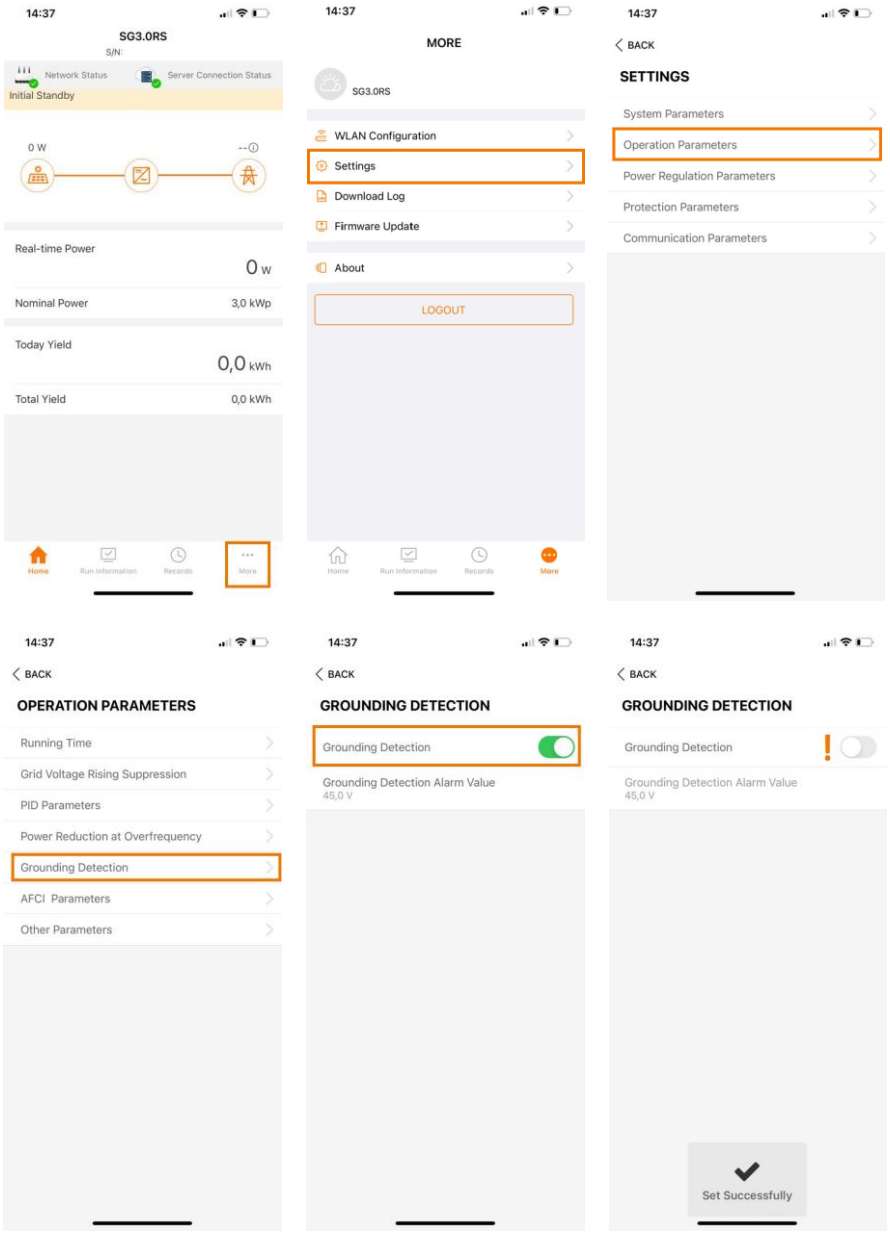
De-activating Grounding Detection

To operate a 1-phase inverter in a 230V 3phase system, the grounding function must be disabled. This can be done locally or via remote access on iSolarCloud web interface.
If Grounding Detection is not disabled or the inverter is not properly grounded, the inverter will show error code 106. (E106)

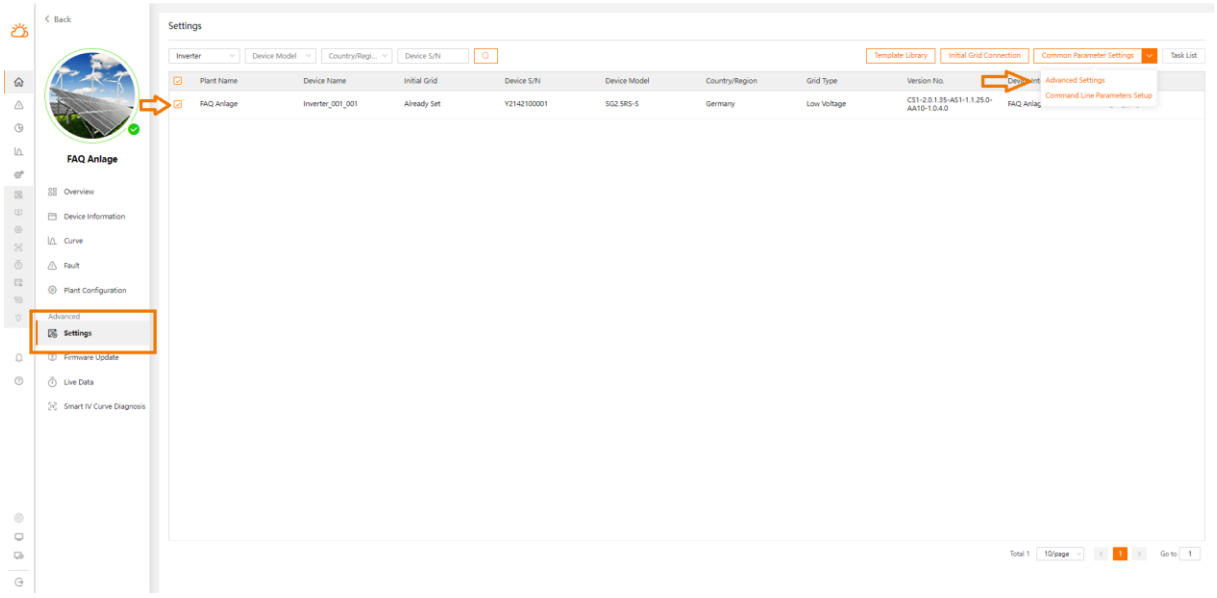
Disable Grounding Detection function locally:

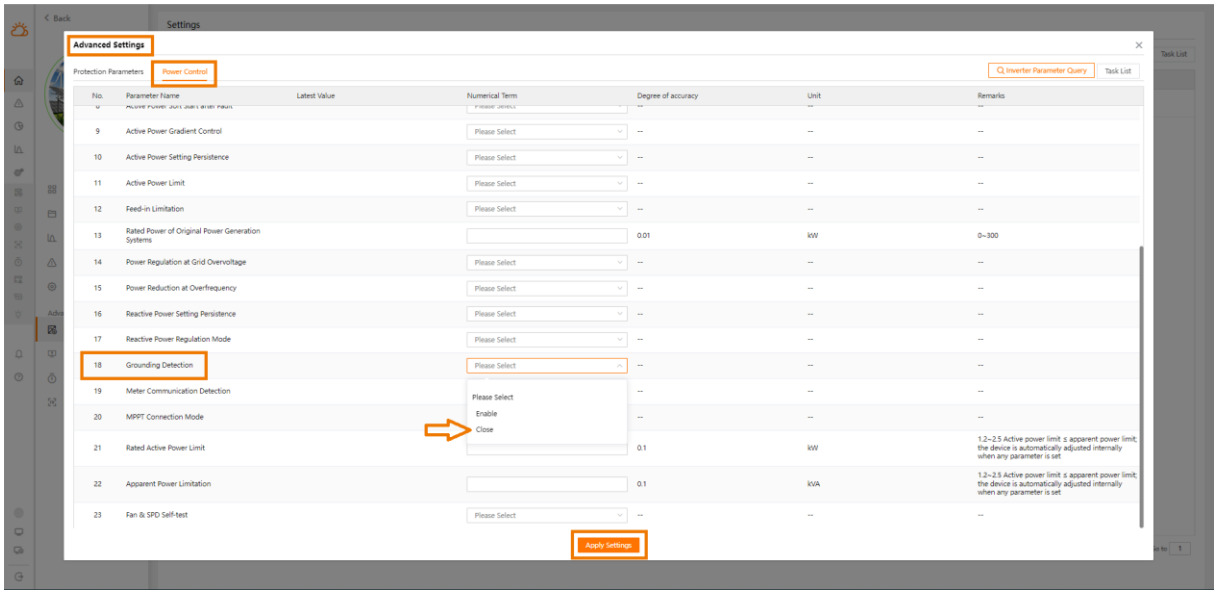
- Select Local Access on your iSolarCloud App.
- Scan QR-Code on your communication device to access local WiFi and login with admin/pw8888.
- Navigate to: More -> Settings -> Operation Parameters -> Grounding Detection.
- Disable Grounding Detection and wait for the confirmation.



Disable Grounding Detection via iSolarCloud web interface

- Login to iSolarCloud and select the plant.
- Click Settings, mark the inverter and choose Advanced Settings.
- In Advanced Settings, choose Power Control and scroll down until you find Grounding Detection.
- Choose Close from the dropdown menu und finally confirm your setting with Apply Settings.





Please be aware, that it is necessary to connect the inverters AC grid terminal as well as the inverters enclosures straight and solidly to the PE bar of the house.

For further information, please download the user manual here.

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This manual is intended for professional technicians who are responsible for installation, operation, maintenance and troubleshooting of inverters, and users who need to check inverter parameters. The inverter must only be installed by professional technicians.

The professional technician is required to meet the following requirements:

- Know electronic, electrical wiring and mechanical expertise, and be familiar with electrical and mechanical schematics.
- Have received professional training related to the installation, commissioning and troubleshooting of electrical equipment.
- Be able to quickly respond to hazards or emergencies that occur during installation, commissioning and troubleshooting.
- Be familiar with local standards and relevant safety regulations of electrical systems.
- Read this manual thoroughly and understand the safety instructions related to operations.

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