

1-phase Hybrids-FAQ

Delta Grid Guide (earth detection)

Applicable to: SHxxRS series

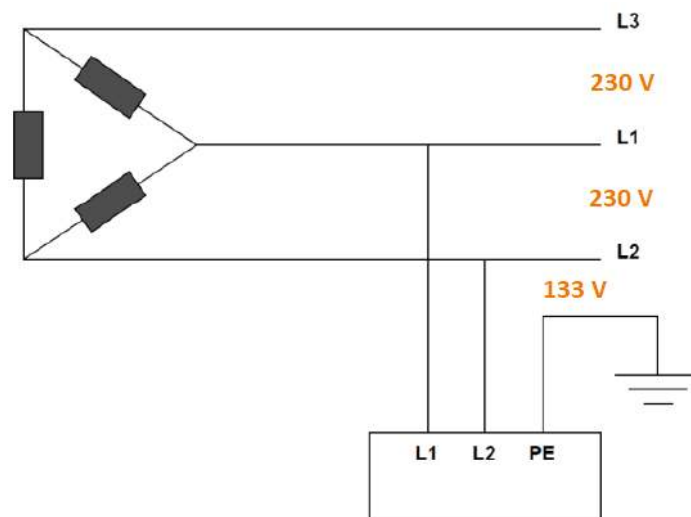
In some regions the grid provides a 230V three-phase network. Phase to phase voltage is 230V and phase to PE ~ 133V.

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

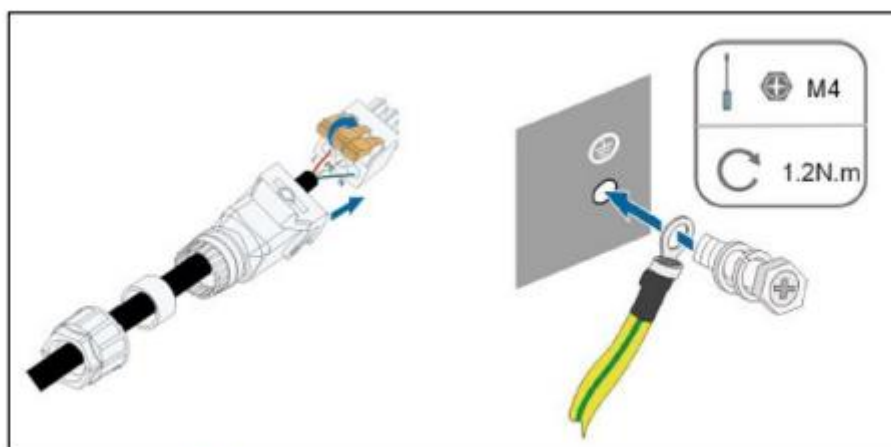
SG3.0/3.6/4.0/5.0/6.0RS



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**, **Backup Port** 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)

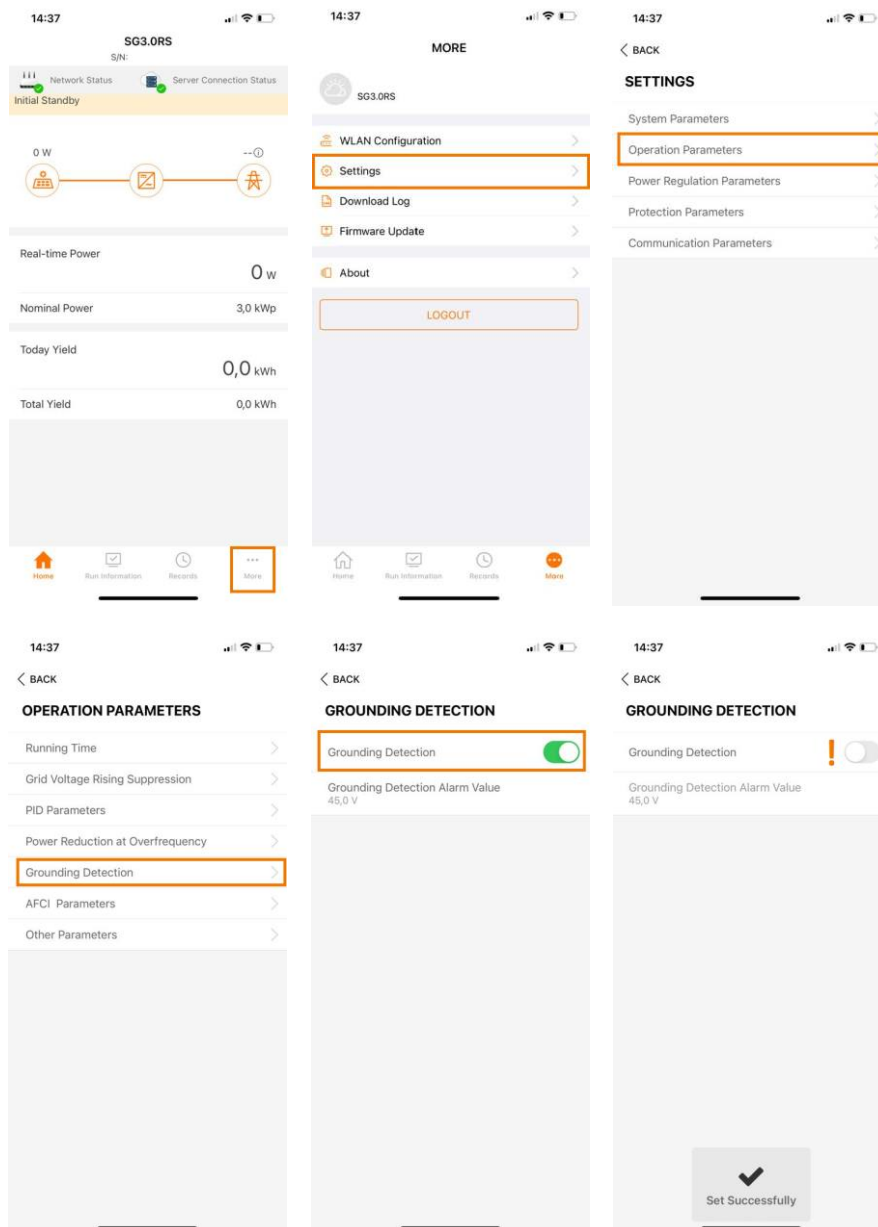
De-activating Grounding Detection

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 and Backup port is not properly grounded, the inverter will show error code 106. (E106)

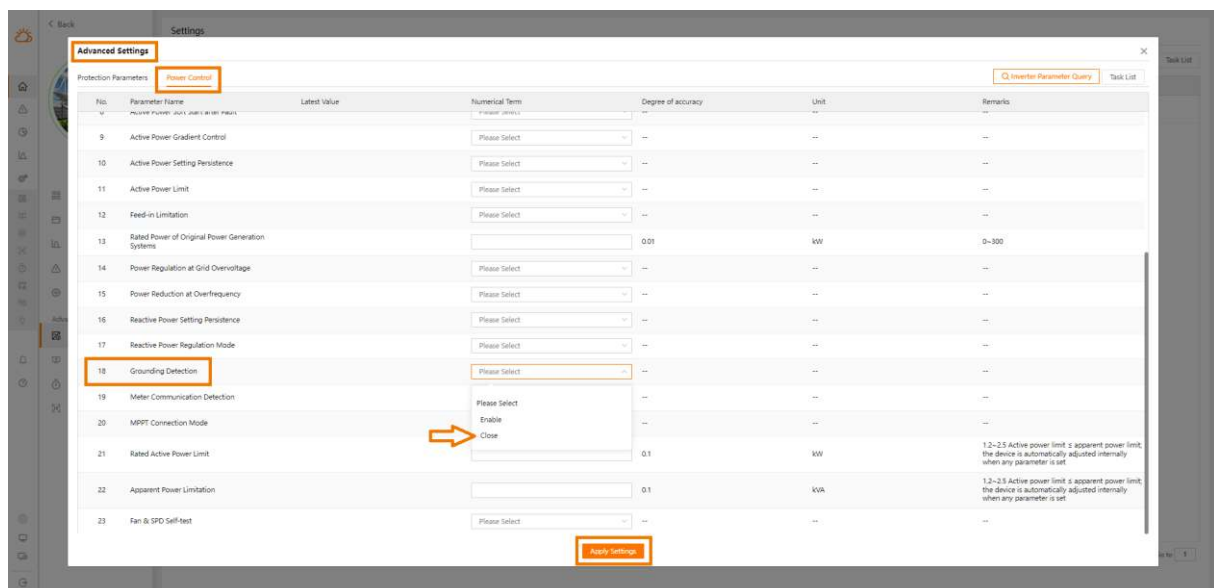
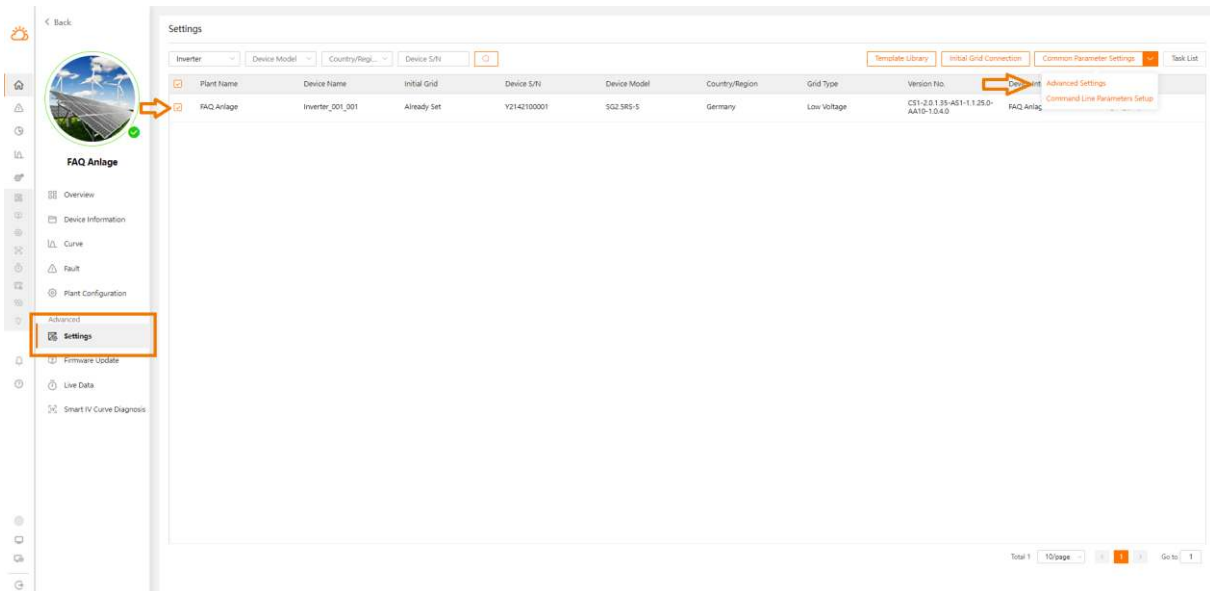
Disable Grounding Detection function locally:

- 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.



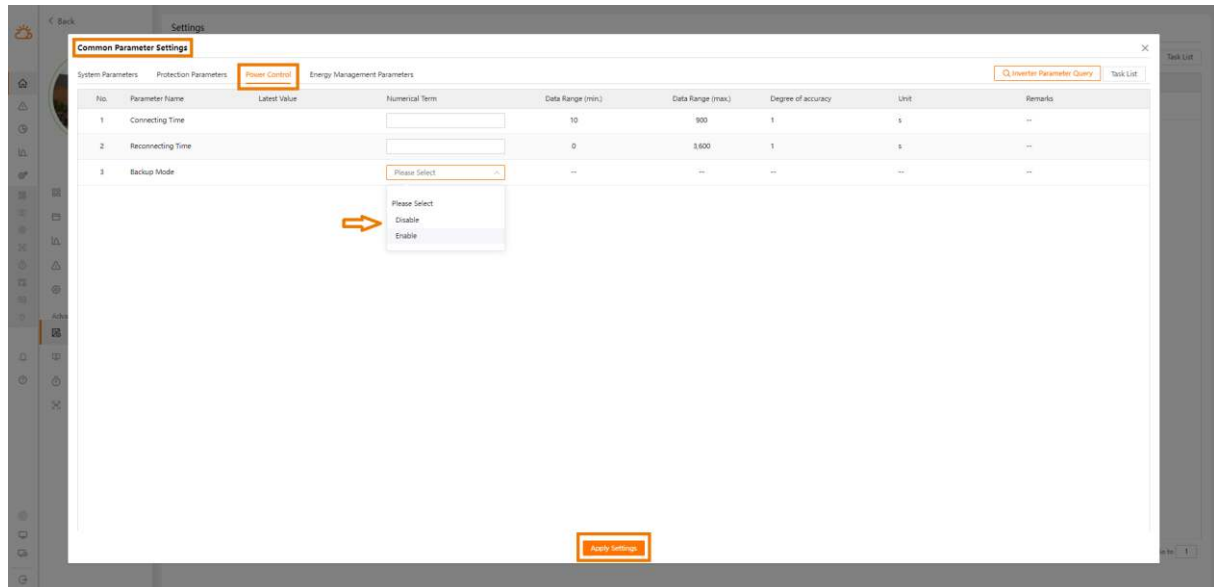
Disable Grounding Detection via iSolarCloud web interface

- 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 and finally confirm your setting with **Apply Settings**.



Disable Backup Mode

- Login to iSolarCloud and select the plant.
- Click **Settings**, mark the inverter and choose **Common Parameter Settings**.
- In **Common Parameter Settings**, choose **Power Control** and find **Backup Mode**.
- **Disable** the **Backup Mode** and **Apply Settings** to save the parameter changes.



Please be aware, that it is necessary to connect the inverters AC grid terminal, Backup port 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](#).

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.