

# Method of Procedure: Change Rule 21 Grid Standard and Disable Rule 21 Standard Modes

## Phenomenon

Ginlong Solis technical support specialists have observed that many installers are not verifying the grid standard is set according to their local utility standard.

The inverters ship with Rule 21 grid standard as default. For installations outside of R21 territory, the failure to change to the UL standard and disable associated standard modes per the manual can lead to reduced power output and the need for additional site visits to set the standards correctly.

## Affected Models

All 1PH and 3PH inverters that shipped with a Rule 21 grid standard as default, that are changed to the IEEE 1547 standard (e.g. UL-240V-A).

## Cause

Inverters with Rule 21 grid standard as default also have Rule 21 work modes set. If the grid standard is changed to an IEEE 1547 standard like UL-240V-A, the R21 work modes must also be disabled in accordance with the product manual.

## Solutions

For states other than California, verify standard modes are set properly after changing the grid standard from R21.

## Procedure

Step 1: Verify Grid Standard is Set Correctly

- i. Enter the Advanced Settings Menu: Advanced Settings → Password: 0-0-1-0 → ENTER
- ii. Turn off the AC power to the inverter: Grid On/Off → Select "Off" → ESC. This brings you back to the Advanced Settings Menu.

- iii. Next, verify that the grid standard currently selected matches your local AHJ requirements. Outside of California, this will typically be UL-240V-A, UL-208V-A, ISONE240A, or ISONE208A.
- iv. Scroll through the list of grid standards, and select the correct standard for your area. Then, Save & Send.
- v. Leave the Grid "OFF" and proceed to Step 2.

#### Step 2: Verify Advanced Settings Correspond with the Selected Grid Standard

- i. If you are not using one of the Rule 21 (R21) grid standards, verify that all the settings associated with R21 are inactive. Under Advanced Settings → STD. Mode Settings:
  - a. Working Mode Set → Select "NULL"
  - b. Freq Derate Set → Select "Mode 00"
  - c. Freq-Watt → Select "Hysteresis: OFF"
- ii. ESC from STD. Mode Settings, but remain in Advanced Settings menu.

#### Step 3: Restore AC Power to Verify Normal Operation

- i. Advanced Settings → Grid On/Off → Select "ON" → ESC.
- ii. Observe inverter and verify normal operation.
- iii. If you experience continued operation problems, notify Ginlong Solis USA technical support via 1-866-438-8408 or [usservice@ginlong.com](mailto:usservice@ginlong.com).