Generac PWRcell™ Commissioning Quick Start

Pre-Commissioning Checklist

Check REbus wiring for short circuits and correct polarity

NOTE: Perform a voltage check on REbus connections prior to measuring resistance to prevent meter damage should line voltage be present.

NOTE: All REbus checks must be performed prior to energizing the system.

☐ Turn all DC Disconnects OFF and measure resistance at RE1/RE2/RE3/RE4
  ☐ RE+ to RE- resistance is >10 kOhms
  ☐ RE+ to Ground resistance is >10 kOhms
  ☐ RE- to Ground resistance is >10 kOhms

☐ Turn DC Disconnects ON

☐ Verify ground connection from inverter grounding bar to each device (<2 Ohms)

Check AC Power

Turn on supply breaker and make the following checks based on the inverter series installed.

NOTE: Ranges listed are for IEEE1547 grid compliance default settings only.

Single Phase 120/208 V X7600 AC Power Checks

Line Voltage Check
  ☐ Neutral to Ground is <5 VAC
  ☐ L1 to Neutral is 110-128 VAC
  ☐ L2 to Neutral is 110-128 VAC

Phase Voltage Check
  ☐ L1 to L2 is 220-256 VAC

3 Phase 120/208 V X11400 AC Power Checks

Line Voltage Check
  ☐ Neutral to Ground is <5 VAC
  ☐ L1 to Neutral is 110-128 VAC
  ☐ L2 to Neutral is 110-128 VAC
  ☐ L3 to Neutral is 110-128 VAC

Phase Voltage Check
  ☐ L1 to L3 is 190-222 VAC
  ☐ L1 to L2 is 190-222 VAC
  ☐ L2 to L3 is 190-222 VAC

Verify Internet Connection

☐ Verify blue Internet LED on inverter control panel is ON.

If Internet LED is not illuminated:
  • Verify Beacon is installed. See the Generac PWRcell Inverter Installation Manual for more information.
  • Navigate to the inverter Ethernet settings page and disable Ethernet.
  • Use network cable tester to verify cable continuity back to router OR plug in laptop to check connection at inverter.
Commissioning Procedure

NOTE: Perform Pre-Commissioning Checklist prior to commissioning.

NOTE: If installing high-voltage PV modules or an automatic transfer switch, read the manuals included with your Generac PWRcell products for scenario-specific instructions.

1. Connect Generac PWRcell Inverter to AC power.
2. Select inverter system mode on Generac PWRcell Inverter control panel.

NOTE: Do not select Grid-tie mode for battery systems.

3. Configure inverter settings.
   - If zero-export is required:
     – Change EnaZeroExp from 0 to 1 on Mod Settings page.
   - If backup power is required,
     – Confirm EnaIslanding is set to 1 on Mod Settings page.
     – Turn ON Generac PWRcell Inverter critical loads breaker.
     – Turn ON Generac PWRcell Battery disconnect switch.

4. Select inverter compliance setting
   - If local grid specifications differ from IEEE 1547, use the installer tool application available on Beacon to configure these settings while on site. Refer to Installer Configuration Tool Guide for instructions.
     – Select Installer Tool option on Beacon device page
     – Connect to local WiFi network from Beacon and open a web browser to URL ‘10.10.10.10’.
     – Navigate to Utility Compliance Configuration.

NOTE: Inverter must be Disabled to change settings
   – Activate Warranty.
   – Generate Compliance PDF.

5. Enable Connected REbus™ Devices.
   - Verify inverter DC disconnects are ON.
   - Enable Generac PWRcell Inverter through inverter device page.
   - If CTs installed, verify the utility pole icon displays on the bottom right of the home screen. If CT icon does no display:
     – Confirm wiring and CT placement. See Connecting Current Transformers section in Generac PWRcell Inverter installation manual for more information.
     – Recalibrate CTs per instructions in the Generac PWRcell Inverter Installation Manual.
     – Verify CT icon display on inverter control panel home page.
   - Verify connected Generac PV Links and Generac PWRcell Battery display as their own page on inverter.
   - Enable S2502 PV links one at a time
     – If installing with SnapRS devices, select Enable with PVRSS.

NOTE: Enable with PVRSS option is only used when commissioning.
   – Verify SnapRSInstallld value under Mod. Settings matches the installed number of SnapRS devices.

   - Confirm Generac PV Links are making power.
     – Low Sun could indicate a connection issue or reverse polarity if sun is shining.
     – If PV Link device page does not appear on inverter, check ground connections and polarity.

   - Enable Generac PWRcell Battery from battery device page on inverter
     – See Generac PWRcell Battery Owner’s Manual for information on adjusting battery depth of discharge.

6. Test islanding ability by shutting OFF home AC power.