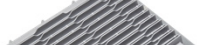








ProHarvest 480V

Discover




Button and LED Indicator

The image shows a 4G LTE module with a button and LED indicator. A dashed line points from the text to a circular inset showing a close-up of the button and LED indicator on the module.

Inverter Indicators	
Indicator State	Meaning
Solid 	<ul style="list-style-type: none"> Powered up Not generating No faults
Left-right flash 	<ul style="list-style-type: none"> Power-on self-test <ul style="list-style-type: none"> Will take <1 minute
Green chaser 	<ul style="list-style-type: none"> Powered up Generating, no faults
Rapid flash 	<ul style="list-style-type: none"> Faulted; for example, arc fault detected
Mostly on 	<ul style="list-style-type: none"> “Off and Locked”; unit is disabled
Mostly off 	<ul style="list-style-type: none"> Sleeping Not generating

CAUTION: EQUIPMENT DAMAGE


- ❖ This system is to be connected to 480 Vac 3-phase wye input ONLY (three phases, neutral, ground).
- ❖ This product has no user-serviceable parts. Tampering with the product will void the warranty.
- ❖ Applying incorrect polarity to DC string inputs will result in damage. This will void the warranty.
- ❖ The Communications Gateway is for indoor use only.
- ❖ All conductors (L1, L2, L3, neutral, ground) must be connected. Neutral must be bonded to earth ground. Failure to do so can damage the inverter and void the warranty.



A ProHarvest 480V Inverter

- PRO208-8k
- PRO208-8k-AUX


TOOL-KIT-1
(ordered separately)



Includes AC Connector Tool,
DC Connector Tool



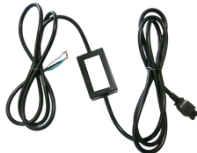
AC Cable (ordered separately)

- CBL-480A-05 (5')
- CBL-480A-15 (15')
- CBL-480A-30 (30')
- CBL-480A-50 (50')



Communications Gateway (ordered separately)


- PROGW-A-277

Includes SD card, Ethernet cable,
277 Vac cable

AC Splice (optional component)

- PROSPL-60




B Installation Notes:

- NEMA Type 6 rated
- Cooling is most efficient if this product is mounted vertically in shade, bolted to PV racking and with connectors pointed downward. However, any orientation is acceptable.
- Use mounting hardware sizes up to 5/16". This is the largest size that will fit the baseplate mounting slots.

C Grounding Notes:

- Metal enclosure must be grounded (NEC 690.43).
- AC connector provides equipment ground.
- **Optional:** Grounding may be achieved by adding a lay-in lug (pictured, not provided) or by using mounting bolts. These must be attached to a grounded metal structure using paint-cutting washers.

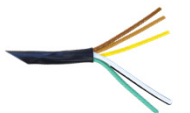


Date and Revision
January 2017, Revision B

Installation

D Connecting to Grid

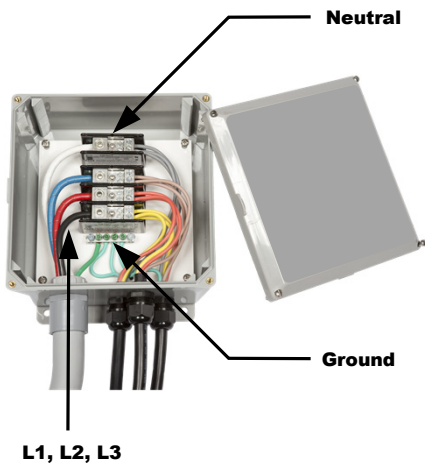
- Remove the sealing cap using the AC connector tool.
- Connect the inverter AC cable to the AC system.
NOTE: This connector is a certified AC disconnect.
- When wiring:
 - Any colored conductor can connect to any phase (L1, L2, or L3).
 - The white conductor connects to neutral.
 - The green conductor connects to equipment ground.
- Connect the AC receptacles as shown to the right.



- NOTE:** The unit is only watertight when all connectors are fully engaged.
- To unmate the receptacles, see the image to the left. Insert the center pin of the AC connector tool into the hole in the connector collar. Turn the assembly.

E AC Splice

- The optional AC splice, PROSPL-60, may be used to combine up to three ProHarvest 480V inverters to one dedicated branch circuit.



F Connecting Gateway

- Using the Gateway AC cable, make connections to one AC phase through a 15A OCPD.
 - This connection should be as close to the array as possible.
- White = neutral
- Green = ground
- Black = one phase



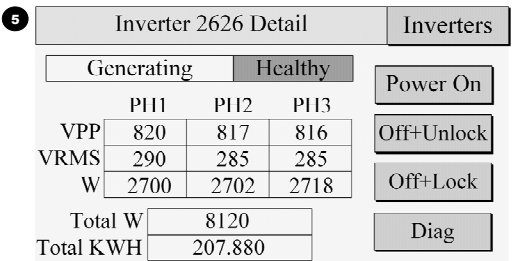
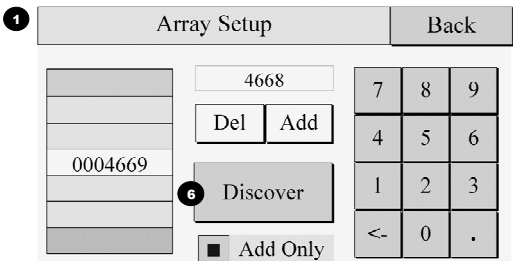
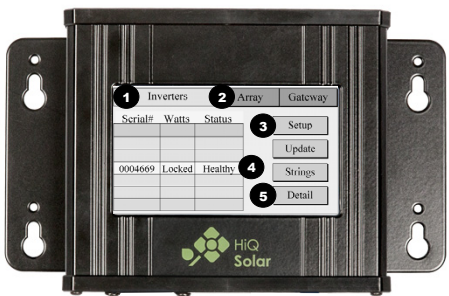
NOTES:

- The Gateway is for indoor use only.
- The Ethernet connection can be made at this time.



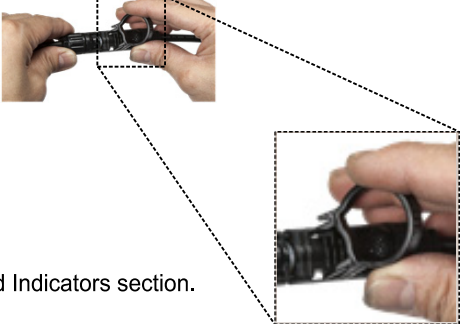
G System Discovery

- Connect AC power to the Gateway and inverter(s).
- On the **Inverters** tab **1**, press the **<Setup>** button **3**.
- On the **Array Setup** screen, press the **<Discover>** button **6**. The Gateway will search for all ProHarvest inverters and determine if they are functional. The message onscreen will be **Healthy (4)**.
- Press the **<Detail>** button **5** to bring up that screen. If a fault is indicated, check the AC wiring.



H Connecting the PV Strings

- Disconnect AC power from the inverter.
- Remove connector end caps.
- Connect 2 PV strings as shown to the right.
- Secure the DC wiring to the array racking.
 - To unmate the receptacles, use the DC connector tool as shown to the far right.



NOTES:

- The front button will indicate an error at this stage. This is normal. See the Buttons and Indicators section.
- The unit is only watertight when all connectors are fully engaged.
- This connector is a certified DC disconnect. Additional disconnects are not needed.
- For PV string lengths, stacking, and so on, see the installation manual. Uneven string lengths are acceptable.
- This product is rated for 1,000 Vdc.



CAUTION: EQUIPMENT DAMAGE

Do not reverse the DC “+” and “-” input polarities. This will damage the inverter and void the warranty.

I Connecting the AC

- Reconnect AC power to the Gateway and inverter(s).
 - The system will wait 5 minutes and then perform a self-test. (See the Buttons and Indicators section for self-test indications.)
 - It will then begin generating power.

Congratulations! The installation is complete.

NOTES

Select the **Array** tab to enter the **Array Summary** screen. See item **2** in **G**.

- Press the **<Off+Unlock>** button **10** to unlock the power generation function on any previously locked inverters.
- Press the **<Power On>** button **9** to omit the 5-minute delay if desired.
- Select the **Inverters** tab (**7**) to return to the previous screen.

Gateway communication status is shown with the indicators **AC**, **SD**, **NET**, and **HIQ** (**8**). These are normally shaded green and indicate that the system is in good condition. One or more will turn red when a fault occurs. See the installation manual for troubleshooting.

