

A What's in the box?

You'll need most of the following. For some items we will send you one per shipment to save waste



TrueString Inverter TS480-8k



AC Connector Tool



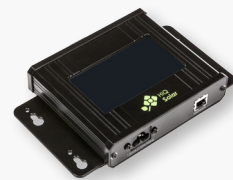
PV Connector Tool



AC Cable - ordered separately, CBL-480A-05 (5') CBL-480A-15 (15') CBL-480A-30 (30') CBL-480A-50 (50')



AC Splice, ACSPL-60 (optional)



Gateway (GW-A-277) with included SD Card, Ethernet cable



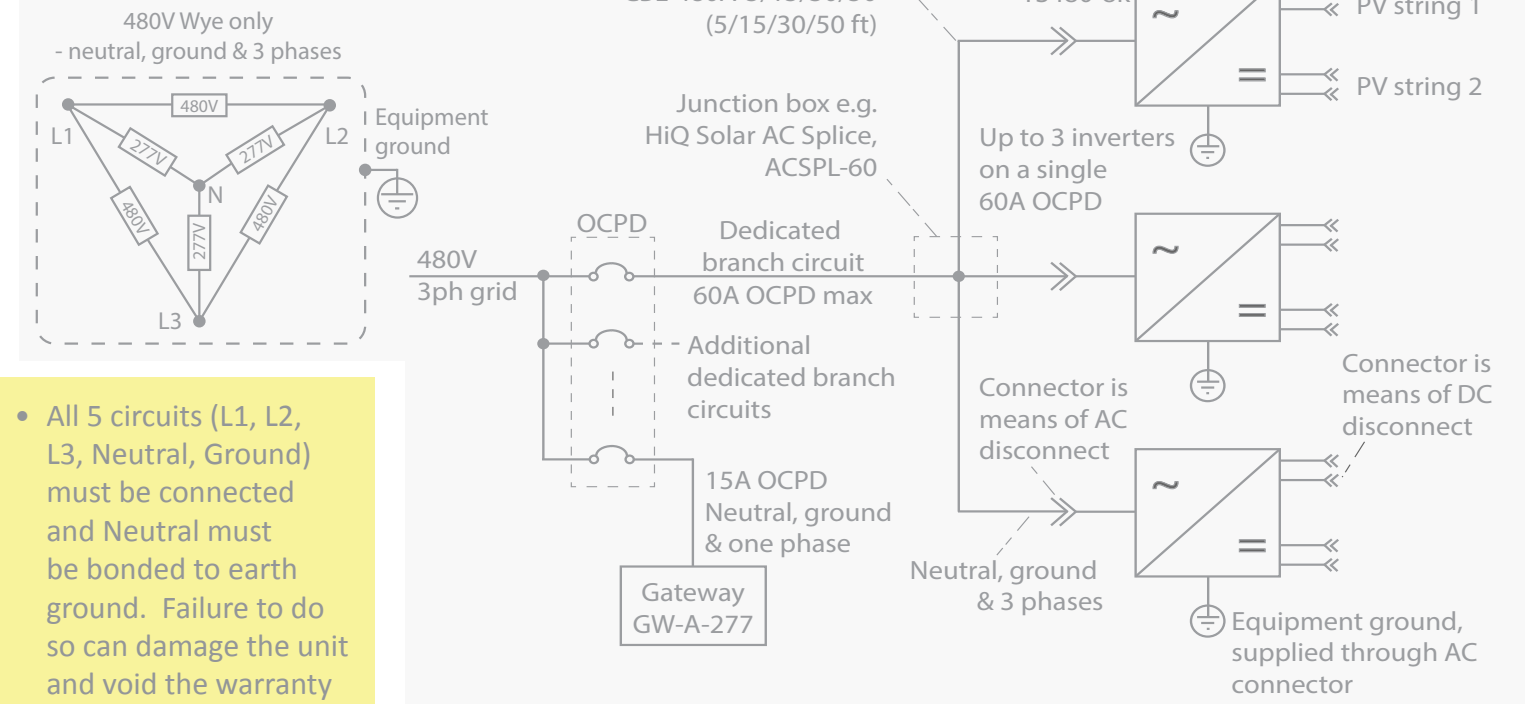
Included 277V Gateway AC cable



B Warnings

- System to be connected to 480V 3-phase Wye (3 phases, neutral, ground) ONLY
- No user-servicable parts inside - tampering with the unit will void the warranty
- Applying the incorrect polarity to DC string inputs will result in damage and void the warranty
- Communications Gateway is for indoor use only

C Line Diagram



D Notes on siting

- NEMA6 rated
- May be placed almost anywhere
- Cooling most efficient if unit is mounted vertically in shade, bolted to racking, with connectors pointing downwards. However, any orientation is acceptable
- Mounting hardware up to 5/16" will fit the baseplate mounting slots.

E Grounding

- Metal enclosure must be grounded (NEC 690.43)
- Equipment ground achieved through AC connector
- Optionally, grounding may be achieved by adding a lay-in lug (not provided) or through mounting bolts to a grounded metal structure using paint-cutting washers



F Connect to Grid

Remove sealing cap
Connect inverter AC cable to the AC system. Connector is certified means of AC disconnect



Any color to any phase

White to **Neutral**
Green to **Equipment Ground**



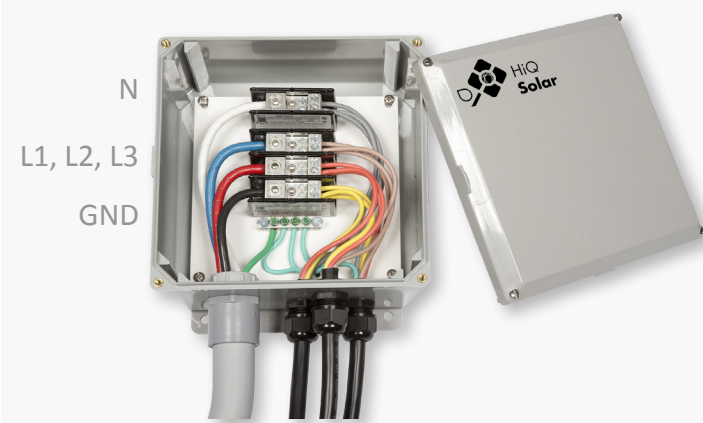
Mate AC connector receptacles. **Unit is only watertight when all connectors fully engaged**

(Unmating requires tool - insert center pin into hole in connector collar and turn assembly)



G Optional AC Splice

HiQ Solar ACSPL-60 may be used to combine up to 3 TrueString inverters to one dedicated branch circuit

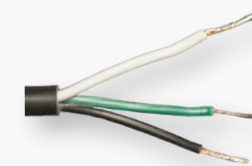


Dedicated branch circuit. 60A OCPD max

AC Cables of up to 3 TrueString inverters

H Connect Gateway

Using Gateway AC cable, make connections to one phase through 15A OCPD, as close to PV array as possible



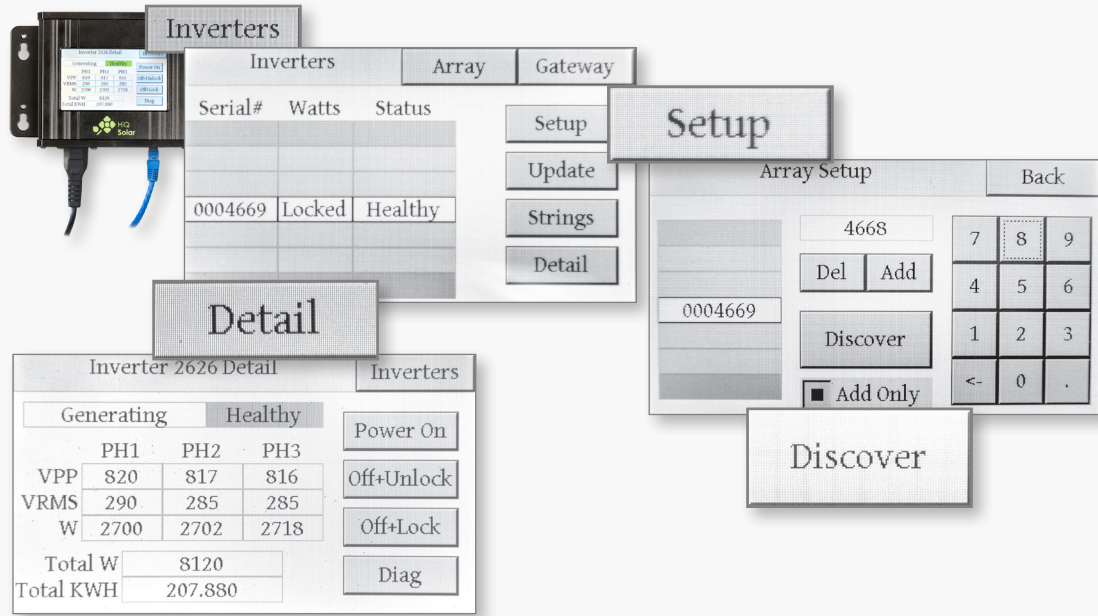
White - Neutral
Green - Ground
Black - One phase

Site Gateway indoors. Ethernet network connection may be made now.



Discover System

- Switch on AC power to the Gateway and the inverter(s)
- Press 'Discover' button
- Gateway will search for any/all TrueString inverters and check they are healthy
- Press 'Detail' button. If a fault is indicated, check AC wiring



Connect PV Strings

- Instructions
- Optionally, switch off AC to inverter
 - Remove connector end caps
 - Connect 2 strings
 - Secure DC wiring to array racking
- Design
- 1,000V-rated
 - String lengths, stacking etc. - see installation manual
 - Uneven strings are ok, see manual
 - Connectors are certified means of DC disconnect, don't need additional disconnects

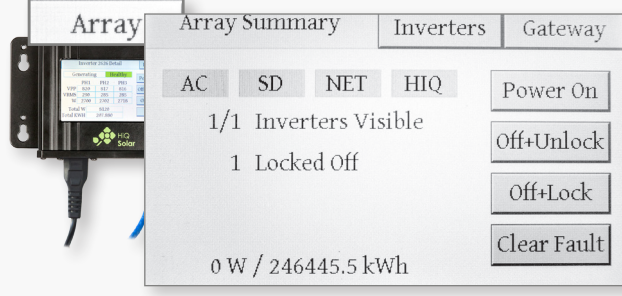
- Warning
- Do not reverse + and - polarities on DC inputs, this will damage unit and invalidate warranty



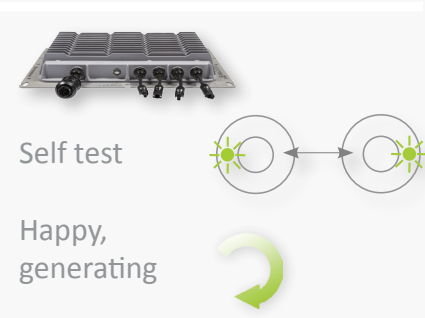
Inverter Button Push	Result
1 press	• Make inverter beep ("are you alive?")
2 presses	• "Off & locked" - disabled • Do not 5-minute self-start
3 presses	• Start generating immediately • If locked, unlock & generate immediately • (If system is faulted, will unlock but won't generate)
Inverter Indicator State	Meaning
Solid	• Powered up • Not generating • No faults
Left-right flash	• Power-on self-test (will take <1 minute)
Green chaser	• Powered up • Generating • No faults
Rapid flashing	• Faulted. For example, arc detected
Mostly on	• "Off & locked" - disabled
Mostly off	• Sleeping - not generating

Switch on AC

- Switch AC back on if necessary
- The system will wait 5 minutes, self-test then start generating power.



- Press 'Array' button on Gateway
- Pressing 'Off+Unlock' button will unlock any previously locked inverters
- Press 'Power On' to omit the 5 minute delay if desired
- Gateway communication health is shown



Buttons & Indicators

- More information and other indications detailed in the installation manual

Button State	Meaning
DISCOVER	• Initial state
DISCOVER	• Once pressed, in process of discovering inverters. Will return to initial state with empty serial number list if no inverters found
DISCOVER	• Error found, for example signal strength too low, too much background noise on circuit. Red color only clears when user retries & fault condition no longer applies
DISCOVER	• Once discovery has successfully occurred, button returns to original state

- Gateway Indications:
- AC** • Gateway's AC wiring is correct (Neutral is connected, voltage is within tolerance)
 - SD** • The SD card is inserted and the file system is OK
 - NET** • The network is connected. Ethernet cable is OK, Gateway has acquired an I.P. address
 - HIQ** • Gateway was able to contact the HiQ server and upload data

On-Line Literature



You're done!

Congratulations. More information at www.hiqsolar.com.

