

Welcome! Thank you for choosing the HiQ Solar 480V TrueString Inverter. Set up is easy....



Installation and safety instructions are available at [www.hiqsolar.com/docs/tsxl480-10k](http://www.hiqsolar.com/docs/tsxl480-10k)

1

**WARNING** This Quick Start Guide is not a substitute for reading the installation and operator's manual. To reduce risk of injury, user must read and understand installation and operator's manual before using this product.

## 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  
TSXL480-10k



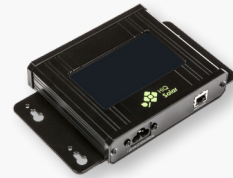
AC Connector Tool



PV Connector Tool



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



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



Included  
277V  
Gateway  
AC cable

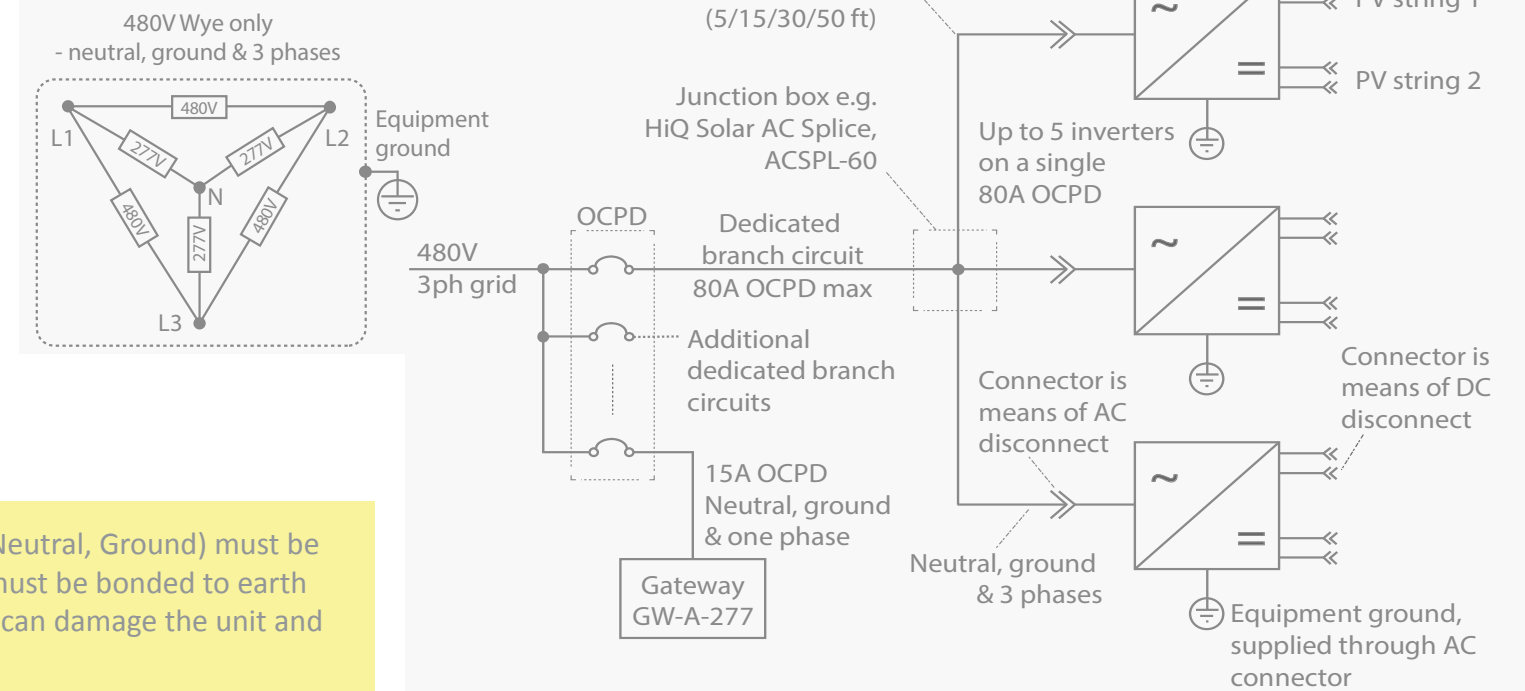


AC Splice, ACSPL-60  
(optional)

## 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
- Communications Gateway is for indoor use only
- All 5 circuits (L1, L2, L3, Neutral, Ground) must be connected and Neutral must be bonded to earth ground. Failure to do so can damage the unit and void the warranty

## C Line Diagram



## D Notes on Siting

- NEMA type 6 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 3/8" will fit the baseplate mounting slots.

## E Grounding

- Metal enclosure must be grounded (NEC 690.43)
- Equipment ground achieved through AC connector
- For installations in Canada, grounding must be achieved by adding a lay-in lug.
- 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**



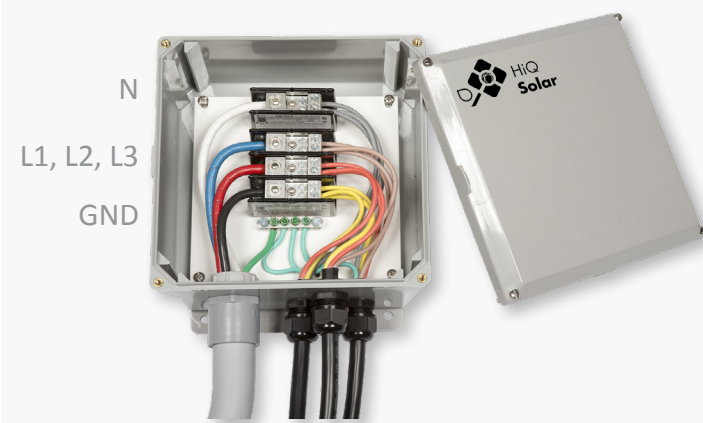
Mate AC connector receptacles. **Unit is only watertight when all connectors fully engaged**

(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 XL inverters to one dedicated branch circuit

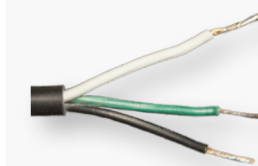


Dedicated branch circuit.  
80A OCPD max

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.



All work shall be performed to meet NEC and local codes. Installation instructions must be followed.

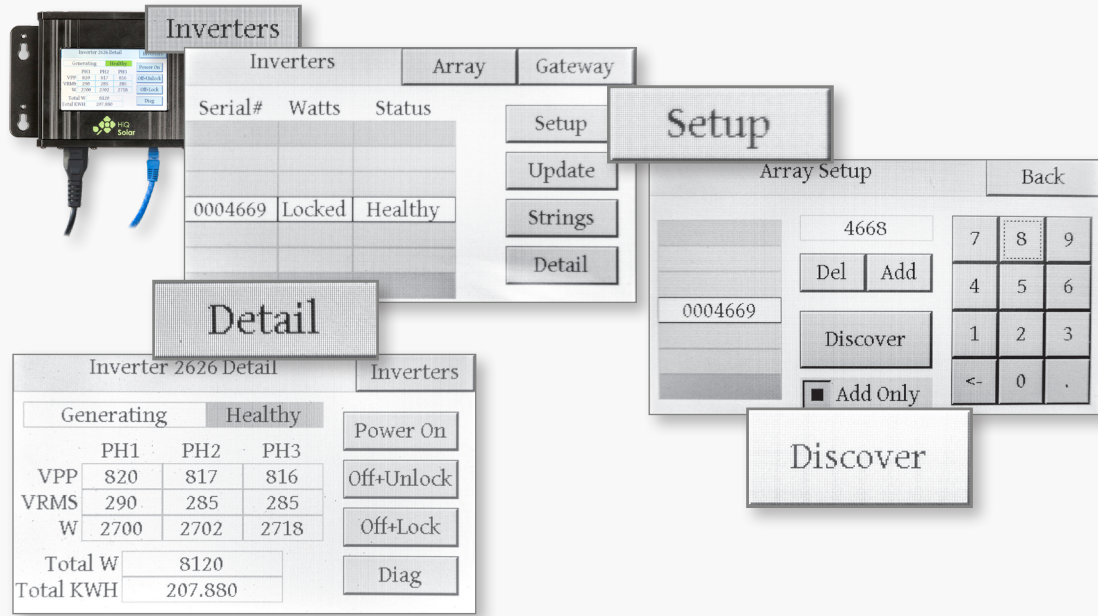
1259 Reamwood Ave, Sunnyvale, CA 94089  
info@hiqsolar.com, www.hiqsolar.com

Rugged Solar Inverters for Commercial 3-Phase Installations



### 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

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



Unmating requires included tool as shown

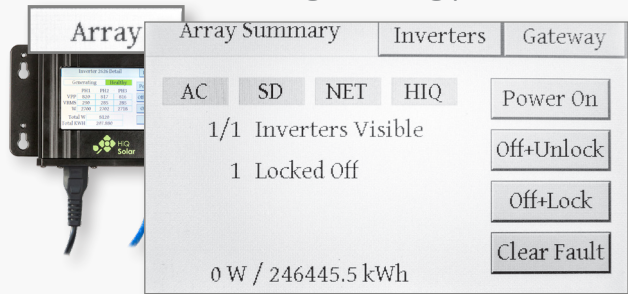


If no AC, button flashes red - normal at this stage

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

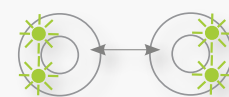
- Switch AC back on if necessary
- The system will wait 5 minutes, self-test then start generating power.



- 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



Self test



Happy, generating



### Buttons & Indicators

- More information and other indications detailed in the installation manual

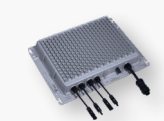
Button State	Meaning
DISCOVER	• Initial state
DISCOVER	• Once pressed, in process of discovering inverters. Will return to initial state with empty serial number list if no inverters found
DISCOVER	• Error found, for example signal strength too low, too much background noise on circuit. Red color only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

### On-Line Literature

TrueString XL Inverter



Tech. Specs



Installation & Operators Manual



AC Splice



Tech. Specs



Installation Manual



### You're done!

Congratulations. More information at [www.hiqsolar.com](http://www.hiqsolar.com).

