Welcome! Thank you for choosing the HiQ Solar 208V TrueString Inverter. Set up is easy.

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 TS208-5k75
- AC Cable - ordered separately, CBL-208A-05 (5’), CBL-208A-15 (15’), CBL-208A-30 (30’), CBL-208A-50 (50’)
- Gateway (GW-A-120) with included SD Card, Ethernet cable
- Included 120V Gateway AC cable
- AC Splice, ACSPL-60 (optional)
- AC Connector Tool
- PV Connector Tool

B  Warnings
- System to be connected to 208V 3-phase Wye (3 phases, neutral, ground) ONLY
- No user-serviceable 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
- 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
- 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
- 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
- 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 208V inverters to one dedicated branch circuit

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.
Nearly there! Finishing up.....

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
- 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

Unmating requires included tool as shown

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

Buttons & Indicators

More information and other indications detailed in the installation manual

Inverter Button Push

<table>
<thead>
<tr>
<th>Button Push</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 press</td>
<td>• Make inverter beep (“are you alive?”)</td>
</tr>
</tbody>
</table>
| 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
  - 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

You’re done!


Rugged Solar Inverters for Commercial 3-Phase Installations

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