



QUICK INSTALLATION GUIDE

5G PRO INVERTER

KSY:- 1KW- 4KW /4.2KW 1MPPT

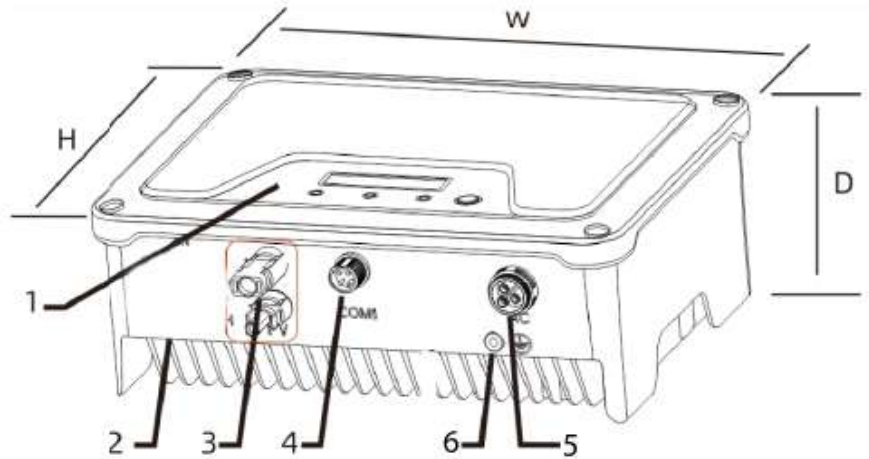
Single-Phase Grid-tied Solar Inverter

QUICK INSTALLATION GUIDE

1KW -4.2KW 1 MPPT

1. Product Overview :

1. LCD & LED or LED
2. PV Terminal (s)
3. Wi-Fi/Stick (Optional)
4. Cable gland for Meterr/DRM
5. AC Terminal
6. Second PE Terminal



Dimension : W x H x D = 297 x223X117mm

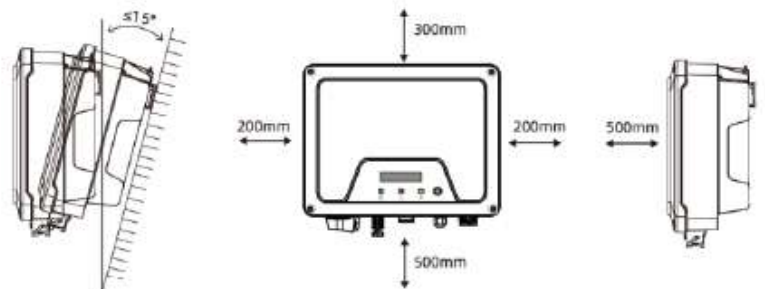
2. Packing List

INVERTER	MOUNTING ACCESSORIE	DCPLUGS (SEALED)	ACCONNECTOR	METER CONNECTOR	COMMUNICATION DATALOGGER (OPTIONAL)	DOCUMENTS
1	1	1pair	1	1	1	1

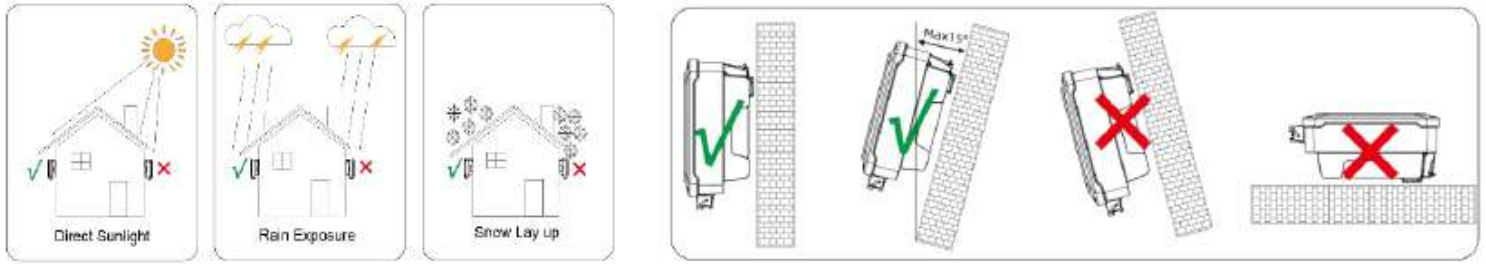
3. Installing

Installation Requirements

1. Please install the inverter(s) in places that can avoid inadvertent contact.
2. Please install the inverter on solid/ smooth surfaces.
3. The inverter(s) should not be installed near inflammable or explosive objects.



Avoid



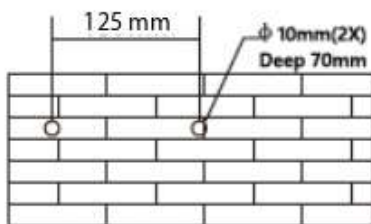
Specification

No.	Item	Type	Specifications
1	PE Cable	Single-core outdoor copper cable	Conductor cross-section: 4-6mm ²
2	AC Output cable	Outdoor copper cable	Cross-section: 2.5-4 mm ² Cable outer diameter: 5.5-12.5 mm
3	DC Input cable	Standard outdoor PV cable, PV1-F Model recommended	Conductor Cross-section: 2.5-6 mm ² Cable outer diameter: 5-8 mm
4	Meter/RS485	Two-core outdoor shielded twisted pair cable	Conductor Cross-section: 0.14-1.0 mm ² Cable outer diameter: approx. 6 mm
5	DRED	CAT - 5E, outdoor shielded cable Standard for EIA/TIA 568B	Cable outer diameter : apporex 9 mm Cable maximum length 1000m

3 Mounting

1. Use the Heatsink bracket holes as a template and mark the drill holes 10mm diameter & 70mm depth
2. Fix the Inverter with the screws and expansion bolts packed in mounting accessories
3. Check both sides of the heat sink to ensure the inverter is stably attached.

.. Step 1



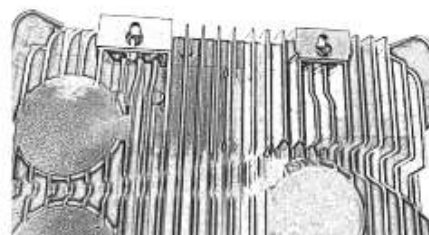
.. Step 2



.. Step 3



.. Step 4

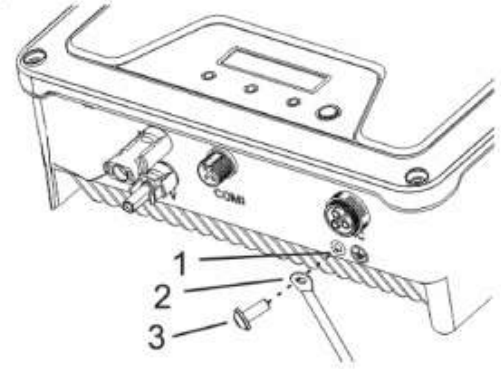


Installing the PE cable

A second PE terminal is equipped at the bottom of the inverter. Ensure the PE terminal is terminal is reliably grounded & the grounding resistance is less than 10 Ohm.

Object	Description
1	Housing
2	M5 terminal lug with protective conductor
3	M 5x13 pan head screw

Tighten it firmly into the housing (T25 screwdriver, torque:2.5Nm).



Notice

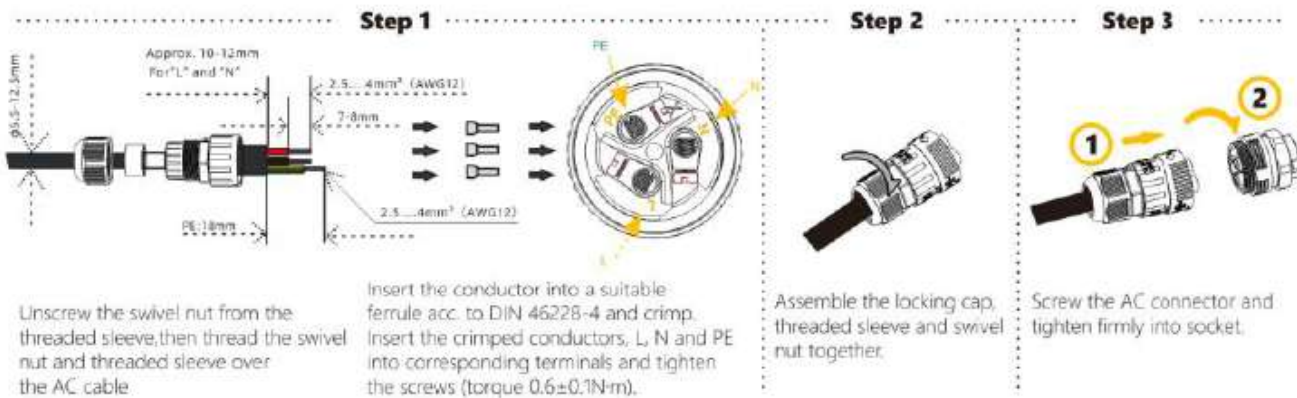
Proper Grounding connection of the second PE terminal and the AC terminal is mandatory. NOT properly connecting both PE will void all product warranty.

3.4 AC Wire Assembly & Connection

DANGER

Danger to life due to High Voltage in the Inverter.

Before connecting any electrical wires & components, please ensure the DC Switch & AC circuit breaker are switched OFF & cannot be reactivated.



Note: Please Ensure that the connector has been correctly installed!

3.4 DC Wire Assembly & Connection

Meeting the following requirements is mandatory. All warranty rights will otherwise be invalid.

3.3.1 Maximum open circuit voltage of each string is less than 500V/550V

3.3.2 Maximum short circuit current of each PV input is less than inverter allowable limit.

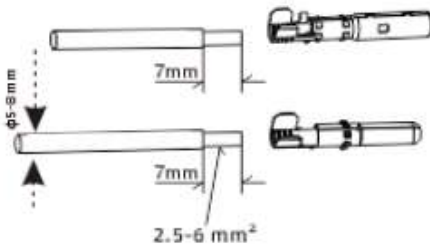
3.3.3 The string is well insulated to ground in all cases.

3.3.4 Make sure that the DC connectors have the correct polarity.

3.3.5 If the PV connectors are not assembled properly & locked into place, arc or overheat may be induced.

Step 1

Strip off the insulation



Step 4



Check the polarities of the PV strings

Check the open-circuit voltage is less than inverter input limit 500V/550V

Step 2

Assemble the cable ends



Step 5

Remove the waterproof caps from PV terminals



If there is an unused terminal, please seal it with the cap



Step 3

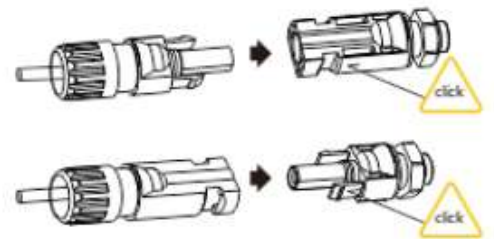
Assemble the connectors



Please check if the cables are securely installed by pulling outwards

Step 6

Insert the connectors into the terminal till you hear an audible click.

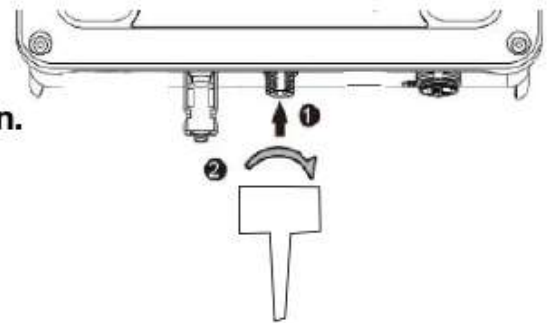


3.5 Wi-Fi/ GPRS Connection (Optional)

The Stick is included in the scope of delivery as an option.

3.4.1 Tighten the stick into the COM1 port. Make sure the stick is securely connected.

3.4.2 For the connection & configuration of the stick please refer to <Wi-Fi stick User manual>



3.6 5G Pro Error Codes

Error Code	Error Code
5	PV Voltage too high
6	Surface insulation resistance error
7	Ground Fault circuit interrupter(GFCI) exceeds the Permissible range
8	Inverter temperature too high
9	Utility grid disconnected
10	Grid voltage exceeds the permissible range
11	Grid voltage exceeds the permissible range
15	Bus-voltage too high
16	Bus-voltage too low
19	N-PE Voltage too high

NOTICE : Make sure the cover & the communication cable gland has been mounted properly & adequately

4. Commissioning

Please check if

1. The inverter and mounting bracket have been correctly installed.
- 2 The inverter's exposed metal surface has a ground connection.
3. The resistance between PV arrays and ground is greater than 1Mohm.
- 4 For any unused DC terminals there are DC connectors inserted to the terminal and sealed with waterproof caps.
5. The grid voltage at the point of connection of the inverter is within the permitted range.
6. The AC circuit breaker must be correctly rated and wired
7. The cable communication connectors have been correctly wired and tightened.

Startup

Switch on the DC switch after finishing the above checks, then switch on the AC circuit breaker When there is sufficient DC power applied and the grid conditions are met, the inverter will start to operate automatically

Warranty card will be shipped with inverter. HOTLINE NUMBER-8530111222



Poonam petrol pump, KSolare Technology Park, Sr.No. 62,
Hissa No.03, Mangdewadi, Pune, Maharashtra 411046

Service Email: Sales@ksolare.com

Enquiry Email: service@ksolare.com

Contact: 853011222

Follow Us On

