TSUN

Quick Installation Guide

TSOL-M350/ M400 / M800 / M1600

Step 1. Make an installation map

Use the blank installation map in the package to record the location of micro-inverters according to the system design. Each cell of the map corresponds to one PV module.

CAUTION

The row of the table corresponds the shorter side of PV module and the column of the table corresponds the longer side of PV module. The direction on the upper left corner means the actual installation orientation.

CAUTION

If there are more than one installation site, please make the installation map separately and give a clearly description about the installation site.

There are two SN labels on the backside of micro-inverter. Pick up one and stick the SN label to the corresponding cell of the installation map according to the actual installation. As TSOL-M800 and M1600 are connected to several PV modules, the SN label should be sticked as shown below.

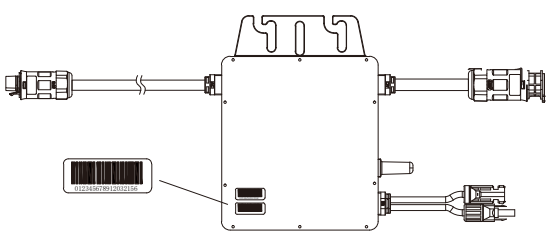

Figure the SN label of micro-inverter

The finished installation map is shown as below:

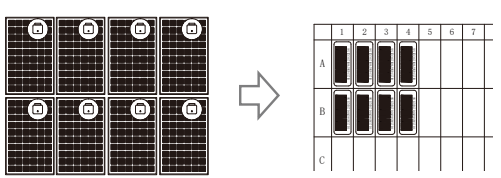

Figure The installation map (TSOL-M350/M400)

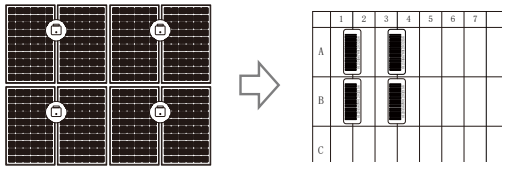

Figure The installation map (TSOL-M800)

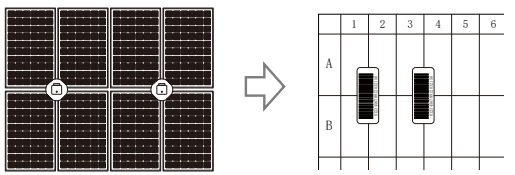

Figure The installation map (TSOL-M1600)

CAUTION

In order to provide a better after-sale service, please make the installation map carefully and keep the drawing in good condition.

Step 2. Install micro-inverter

Mark the approximate center of PV module on the frame and install the micro-inverter with the LED side facing outside.

CAUTION

The distance between every two micro-inverters should meet the length of AC cables. The length of AC cables are shown as below:

Model	Length
TSOL-M350/400	1.25m
TSOL-M800/1600	2.08m

WARNING

Micro-inverter should be installed in a suitable position with good ventilation and no directly sunshine.

Using two pairs of screws and nuts to fix the bracket holes of the micro-inverter onto the frame.

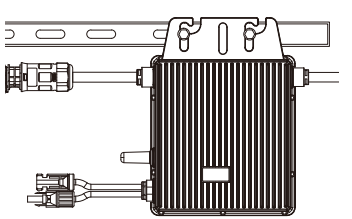

Figure Installation example

CAUTION

There are no screws and nuts in the package.

Step 3. Connect AC cable

Every micro-inverter could be connected to the other one by its AC cables.

CAUTION

According to the max current of the AC cables, there is a max installation quantity for the micro-inverter in each cable section.

Model	Quantities for each cable section
TSOL-M350	18 pcs
TSOL-M400	16 pcs
TSOL-M800	7 pcs
TSOL-1600	3 pcs

Plug the female AC connector of one microinverter into a male AC connector of another micro-inverter to form a continuous AC branch circuit.

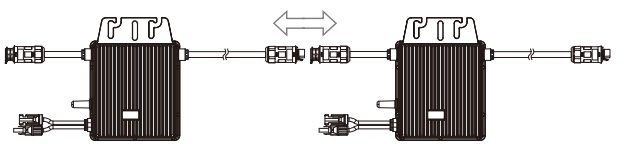

Figure Connect the AC cables

Use Nylon cable ties to fix the AC cables onto the frame.

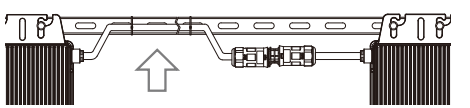

Figure Fix the AC cable

CAUTION

If the AC cable is too short for installation, use an Interconnection Cable (TSOL-MC200-G2, 2m) to connect two TSOL-M1600 which are installed in one line or two TSOL-M350/400 which are installed in two different lines.

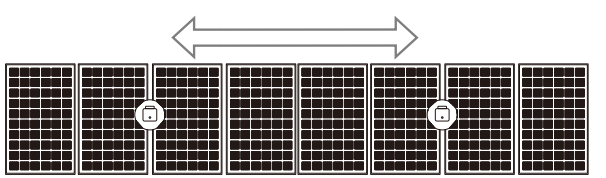

Figure TSOL-M1600 installed in one line

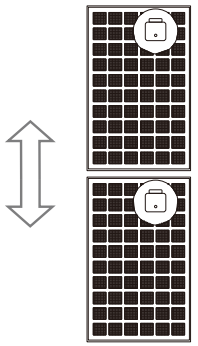

Figure TSOL-M350/400 installed in two different lines

DANGER

Use a Connector Protective Cap (TSOL-MP-F/M) to make sure the unused AC connector to be closed.

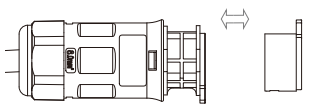

Figure Connector Protective Cap

Step 4. Connect AC end cable

Separate the AC connector as shown below.

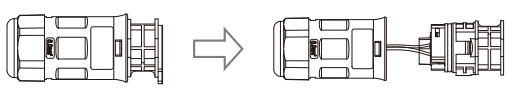

Figure Separate the AC connector

Connect the cable to the right port of the connector. The definition of the port is shown below:

L: Live (Brown/Red)
N: Neutral (Blue/Black)
PE: Ground (Yellow-Green)

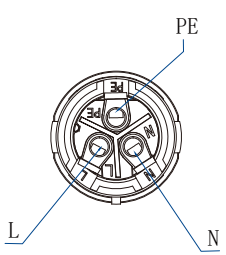

Figure Definition of the port

WARNING

Use AWG 12 (4 mm²) cable for AC end cable.

DANGER

Make sure each cable is connected to the right port.

Reassemble the AC connector as shown below.

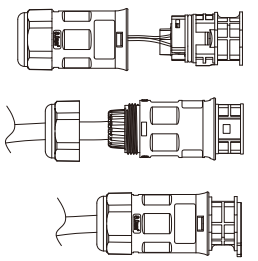

Figure Reassemble the AC connector

Plug the AC connector of the AC end cable into the micro-inverter.

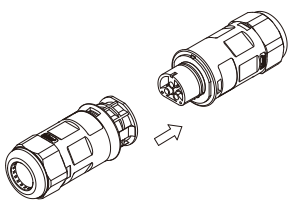

Figure Connect the AC connector

DANGER

To prevent electrical hazards, Make sure the micro-inverter system is disconnected from the home distribution network and the AC breaker is open.

CAUTION

There are no cables for the AC end cable in the package. The installation technician is responsible for selecting a kind of AC cable and connecting the micro-inverter system into the home distribution network correctly.

Step 5. Connect PV module

Connect the DC cables of the PV module to the DC connectors of micro-inverter.

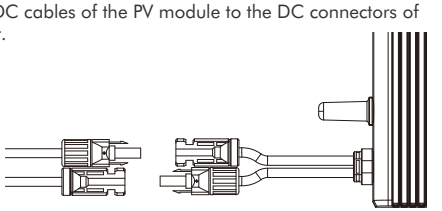

Figure Connect the DC connector

DANGER

When the PV module is exposed to light, it will supply a DC voltage to the micro-inverter.

CAUTION

If the DC cable is too short for installation, use a DC Extension Cable to connect two PV modules to TSOL-M1600 which are installed in one line.

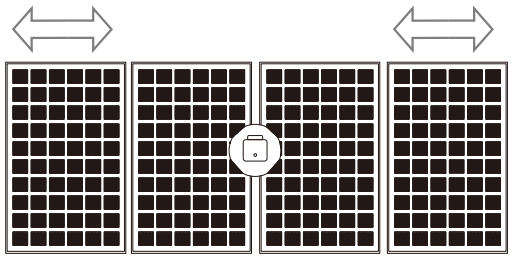

Figure TSOL-M1600 installed in one line

Step 6. Start the system

While installation is all finished, turn on the main utility-grid AC circuit breaker. Your system will start producing power after about a two-minute wait time.

The LED will flash green and red at start up. The definition of LED is shown as below.

LED	Indicates
Fast Flashing Green	Working normally and communicate with the monitoring system
Slow Flashing Green	Working normally but no communication with the monitoring system
Flashing Red	The power grid is abnormal
Solid Red	GFDI Fault

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