

Single-Phase Meter Installation Guide

(Release Date: February, 2022)

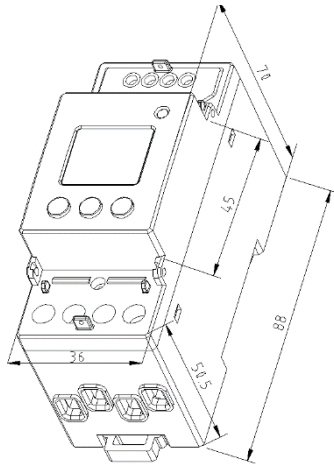
1. Scope

CSI inverters integrate the export limitation function, please read this installation guide to install the single-phase meter and set the inverter.

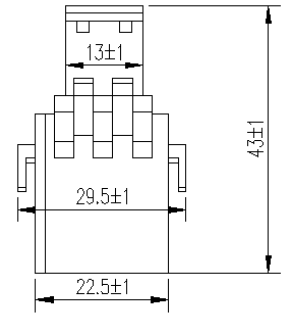
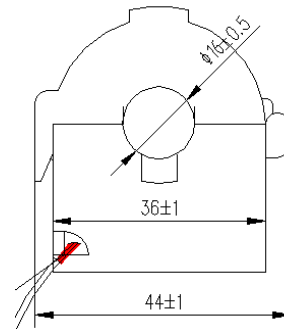
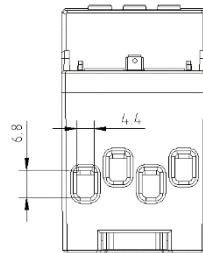
This meter applies to PV inverter models: CSI-3K-S22002-E, CSI-5K-S22002-E; CSI-3K-S22002-ED, CSI-5K-S22002-ED; CSI-7K-S22002-E, CSI-8K-S22002-E, CSI-9K-S22002-E; CSI-7K-S22002-ED, CSI-8K-S22002-ED, CSI-9K-S22002-ED , CSI-5K-S22003-E,CSI-7K-S2203A-E,CSI-7K-S22003-E,CSI-9K-S2203A-E, CSI-9K-S22003-E.

2 Meter Specification

Model Name	DDSD 1352-CT
Grid Topology	1P+N
Rated Voltage	220V
Input Current	20 (100) A, CT external
Accuracy	Active Energy Class 1;
Power consumption	<4VA
Operating Temperature	-25°C ~ 55°C
Relative Humidity	< 95% (Non-condensing)
Dimension (W x H x D, mm)	36 x 88 x 70 mm
Installation Method	Rail DIN 35mm
Communication	RS485



Meter Size



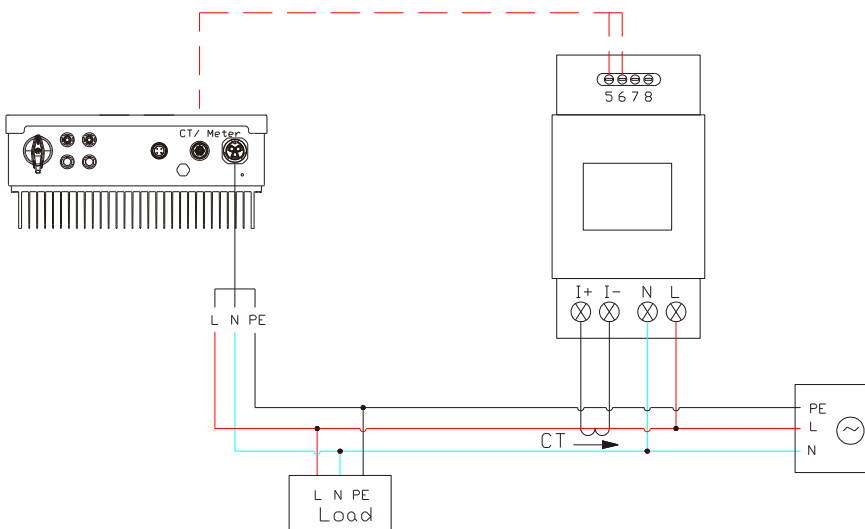
CT Size

FIG.1 Outline and Dimensions of Meter

3. Meter installation

3.1 System diagram

Note: The meter has to be installed to the grid side.



Warning:
DISCONNECT both DC & AC connections before install the meter.
Otherwise there will be risk of electric shock.

— Electrical
--- Signal

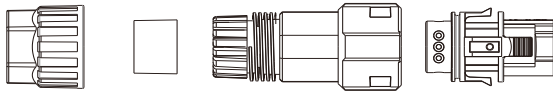
FIG.2 Electrical and Signal Connection Diagram

3.2 Wiring signal cable

3.2.1 Wiring signal connector

- 1) Diagram of connector, as per FIG.3.
- 2) Prepare the Signal Cable

Remove the signal cable's jacket about 23mm, and then strip the wire insulation layer about 7mm, as per FIG.4.



Pressure Nut Sealing Ring Threaded Sleeve Plug (Metal Pins and shell)

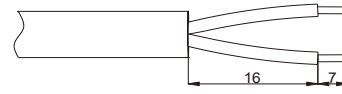


FIG.4 Strip Signal Cable

FIG.3 Components of Connector

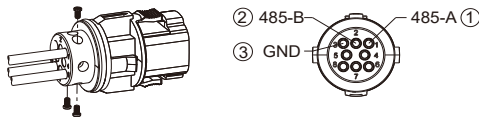
Recommend the specification of the signal cable:

Cable Type	Conductor Cross-Sectional Area	Outer Diameter
Two cores cable.	0.2-0.75mm ² (24-18AWG)	3.5-5.5mm

Note: 1 No cable is supplied with meter. 2. Use signal cable with shield structure.

- 3) Insert the conductors into the corresponding pins of the plug, and then fix the conductors by screws firmly.

Tool: Phillips screwdriver #1. Torque: 0.6~0.8N.m.



Function	METER Connector of inverter	Meter
485 - A	Pin - 1	Pin - 5
485 - B	Pin - 2	Pin - 6
GND	Pin - 3 (Cable shield layer grounding)	/

FIG.5 Pin positions of Connector

- 4) Tighten the pressure nut, and then push the threaded sleeve into the plug, as per FIG.6.

- 5) Finally insert the assembled connector into the CT/Meter receptacle on the inverter.

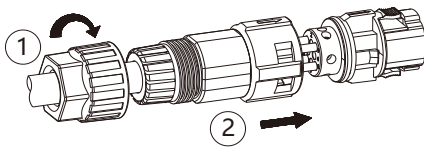


FIG.6 Assembling the Connector

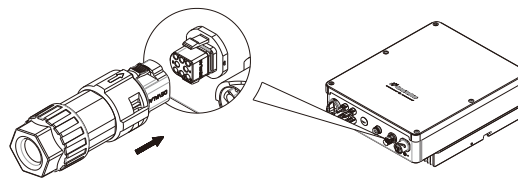


FIG.7 Insert the connector into receptacle

3.2.2 Wiring signal cable in meter (as per FIG.2 and FIG.5 to connect meter)

Tool: Phillips screwdriver #1; Torque: 0.6~0.8N.m.

3.3 Wiring electrical cable

Connect electrical cables as per FIG.2 and following sheet. More detail information, refer to inverter user manual.

Tools: Phillips screwdriver #2; Torque: 1.2~1.6N.m.

AC connector of inverter	Meter	GRID
Pole - L	Pole - L	
Pole - N	Pole - N	
Pole - PE	/	Pole - PE

3.4 Setting on the inverter (default setting is "OFF")

- 1) Enter CSI CloudPro APP;
- 2) Enter the "Local Mode", as per FIG.8;
- 3) Scan the QR code of WiFi stick or input the serial number of WiFi stick manually. Then connect to the AP of WiFi stick, as per FIG.9;
- 4) Enter the "Parameters" page (password "000000");
- 5) Enter the "EPM" page:
 - Set "EPM Mode" to "Meter in Grid";
 - Set all the parameters refer to the local requirement, as per FIG.10 (such as "EPM power setting", "Fail safe Power Setting" etc.)
- 6) Exit local mode.
- 7) If required to show the "consumption monitoring", please follow the steps as below:
 - a) For the plant newly created, as per FIG.11:
 - Go to "Business" - "O&M" - "Create a Plant", click "system type", click "self-consumption".
 - b) For the plant already existed:
 - Go to "Business" - "O&M" - "Plant", then select the plant you want to modify, click "system type", click "self-consumption".

Please refer to CSI CloudPro APP User Manual for CSI CloudPro App details.

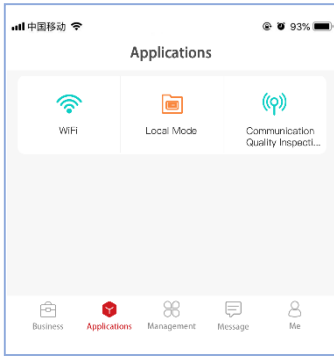


FIG. 8 Enter local Mode



FIG.9 Connect to WiFi stick

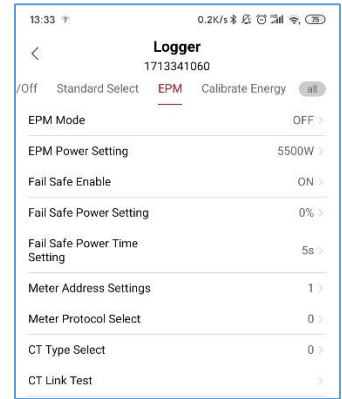
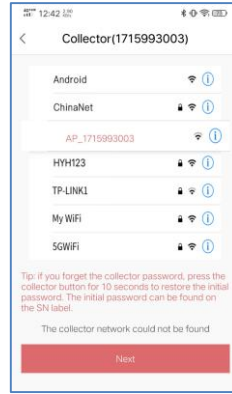


FIG.10 Default setting of EPM page

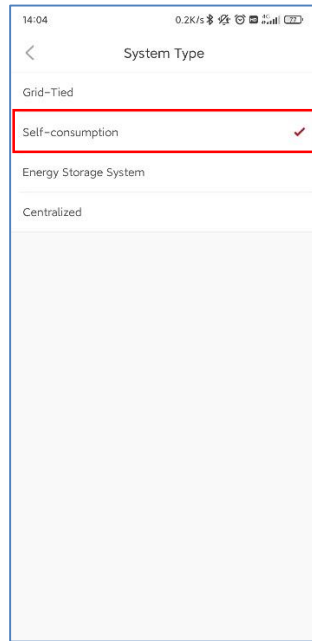
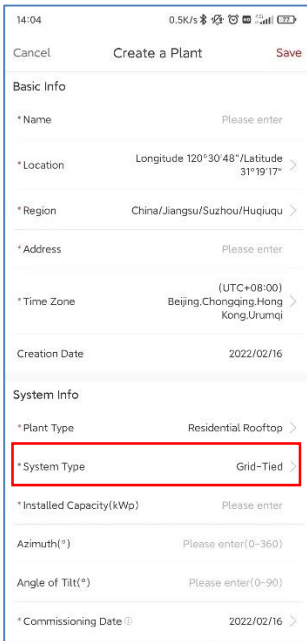


FIG.11 Consumption monitoring setting