



Energy Meter

SDM630MCT

User Manual

Notes and Safety

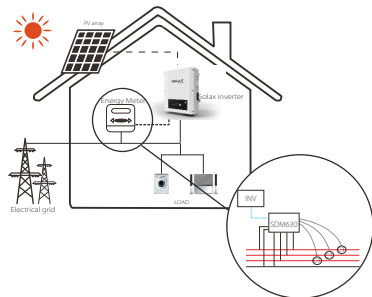
Cut off all power of inverter before installation!
Wait for 5 minutes after power off.

Danger of high voltage!
Danger to life due to high voltage of this machine!

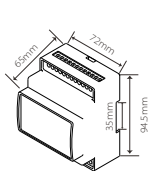
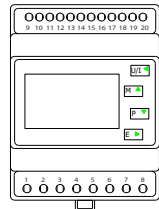
Introduction

① Basic features

SDM630MCT Meter configured with 3 matched CTs can achieve energy management together with solax three phase inverter(CTs don't in the package,need purchase separately).
It applies to 200A system on below, measure the import, export and total power and energy.



② Terminals and Dimension



1-4	measured voltage
5-6	power supply
7-12	NULL
13-14	RS485 port
15-20	CT

Only authorized personnel is allowed to set the connection.

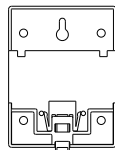
③ Performance and Specification

Phase to Neutral Voltage	100 to 289V
Voltage Between Phases	173 to 500V
Current	5(6)A
Type	Via transformer

Installation

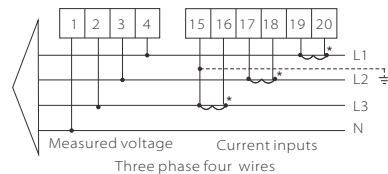
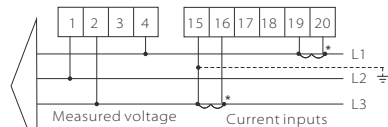
① Mounting

SDM630MCT meter is designed for indoor installation .
You can fix it on the wall.



② Wiring diagram

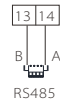
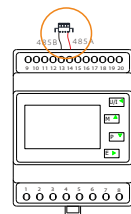
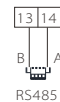
cable size: $\geq 10\text{AWG}$ or $\leq 6\text{mm}^2$



③ Wiring Connection

Step 1: RS485 terminal connection

Insert the wire into the 13,14 ports of Meter, and insert the other side of the wire into the green terminal block which is in the hybrid package,then insert the block into the inverter.



Step 2: Current wire connection

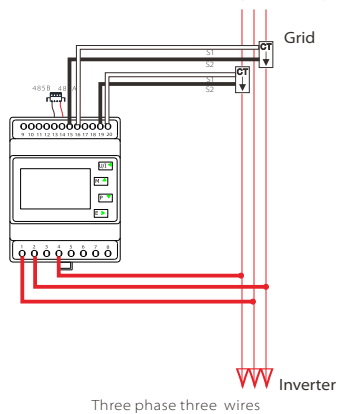
Insert the wire (S1 and S2) of the CT to the 15-20 ports of Meter, then connect the buckle of CT to the grid .

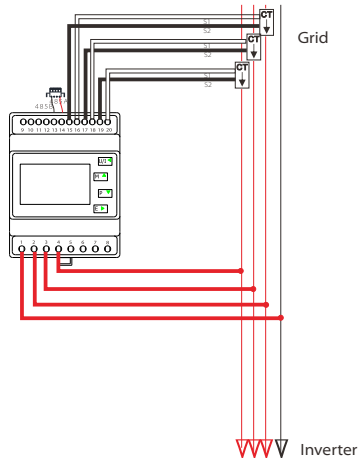


Please refer to the marks on CT carefully.

Step 3: Voltage wire connection

Make wire, insert the wire into the 1-4 ports of Meter, and insert the other side of the wire into the grid following.

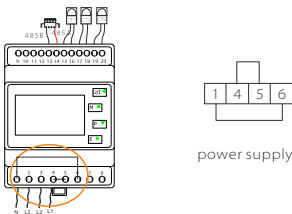




Three phase four wires

Step 4: Voltage wire connection

Make wire, insert the wire into the 5-6 ports of Meter, and insert the other side of the wire into the 1,4 ports.



power supply

CT Ratio

To set CT ratio, use **M** and **P** buttons and select the CT option to screen. Long press **E** to enter the CT secondary current selection routine (5A/1A) using **M**, **P**, then long press **E** to confirm. Press **P** to screen, The range is from 0001 to 9999, then long press **E** to confirm. For example, if using a 200/5A current transformer, you will enter 0040, as you need to divide the primary by the secondary to get the ratio (CT rate).

Please note for the MID approved version device, you will only have one opportunity to set the ratio.

Description of LCD Display

① Voltage and Current

U/I *1'	L1 000.0 L2 000.0 L3 000.0	V	Phase to neutral voltages.
U/I *1-1'	L1-2 000.0 L2-3 000.0 L3-1 000.0	V	Line voltages.
U/I *2'	L1 0.000 L2 0.000 L3 0.000	A	Current on each phase.
U/I *3'	N 0.000	A	Neutral current.
U/I *4'	L1 000.0 THD% L2 000.0 L3 000.0		Phase to neutral voltage THD%.
U/I *5'	L1 000.0 THD% L2 000.0 L3 000.0		Current THD% for each phase.

② Frequency and Power Factor and Demand

M *1'	Σ 00.00 0.999	Hz PF	Frequency and Power Factor (total).
M *2'	L1 0.999 L2 0.999 L3 0.999	PF	Power Factor of each phase.
M *3'	L1 0.000 L2 0.000 L3 0.000	A	Maximum current demand.
M *4'	Σ 0.000	kW	Maximum power demand.

③ Power

P *1'	L1 0.000 L2 0.000 L3 0.000	kW	Instantaneous active power in KW.
P *2'	L1 0.000 L2 0.000 L3 0.000	kVAr	Instantaneous reactive power in KVAr.
P *3'	L1 0.000 L2 0.000 L3 0.000	kVA	Instantaneous volt-amps in KVA.
P *4'	Σ 0.000 0.000 0.000	kW, kVAr, kVA	Total kW, kVAr, kVA.

④ Energy

E *1'	Σ 0000 031.4	kWh	Total active energy in KWh.
E *2'	Σ 0000 00.00	kVarh	Total reactive energy in KVarh.
E *3'	IMPORT 0000 0.314	kWh	Import active energy in KWh.
E *4'	EXPORT 0000 000.0	kWh	Export active energy in KWh.
E *5'	IMPORT 0000 000.0	kVarh	Import reactive energy in KVarh.
E *6'	EXPORT 0000 000.0	kVarh	Export reactive energy in KVarh.
E *7'	Σ 0000 031.4	kWh	Total active energy in Kwh. (Initializable)
E *8'	Σ 0000 00.00	kVarh	Total reactive energy in Kvarh. (Initializable)

Warranty Regulation

Terms and conditions

SolaX grants a warranty of 12 months as standard. Starting from the date of the purchase invoice marked. SolaX will only perform warranty service when the faulty unit is returned to SolaX together with a copy of invoice and warranty card which were issued by the dealer and manufacturer to the users. In addition, the type label of the unit must be fully legible. If these requirements are not fulfilled, SolaX reserves the right for all warranty terms and conditions.

Exclusion of liability

Warranty claims are excluded for direct or indirect damage due to:
 1: Use of unit in ways not intended, improper installation and installation that does not comply with standards, improper operation and unauthorized modification to the units or repair attempt.
 2: Without warranty card and serial number.
 3: Operating the units with defective protective equipment.
 4: Influence of other objects and force majeure.
 5: Inadequate ventilation.
 6: Violate relevant safety regulations.

To register your SolaX product, please mail this warranty card to:
SolaX Power Network Technology (Zhejiang) Co., Ltd.
 ADD. No.288 shizhu Road, Tonglu Economic Zone,
 Tonglu City, Zhejiang Province, China.

Tel. +86 571 56260011
 FAX +86 571 56075753
 EMAIL service@solaxpower.com
 WEB www.solaxpower.com

Online warranty registration is available at
<http://www.solaxpower.com/en/warranty-registration/>

Warranty Registration Form

Name Country

Phone Number..... Zip Code

Email

Address

Product Serial Number.....

Date of Commissioning

Installation Company Name

Date of Delivery

Signature