



Energy Meter

SDM630MCT

User Manual



Notes and Safety

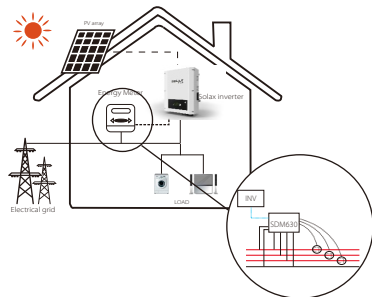
Cut off all power of inverter before installation!
Wait for 5 minutes after power off.

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

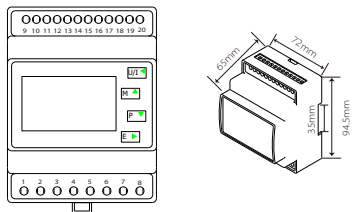
Introduction

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



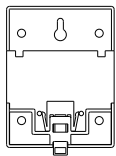
1-4	measured voltage
5-6	power supply
7-12	NULL
13-14	RS485 port
15-20	CT

Only authorized personnel is allowed to set the connection.

Installation

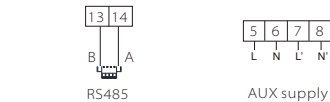
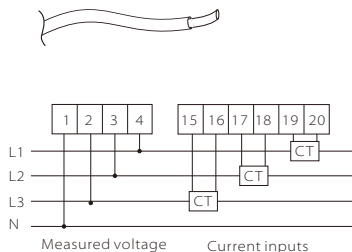
① Mounting

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



② Wiring diagram

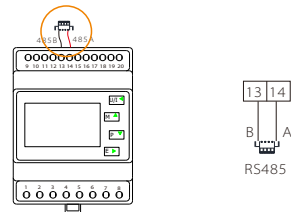
cable size: $\geq 10\text{AWG}$ or $\leq 6\text{mm}^2$



③ Wiring Connection

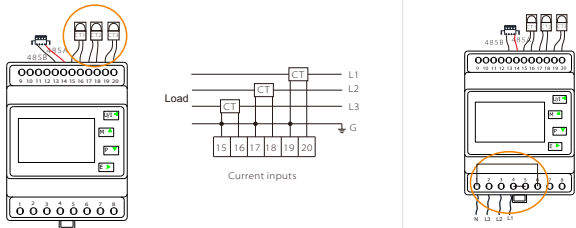
Step 1: RS485 terminal connection

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.



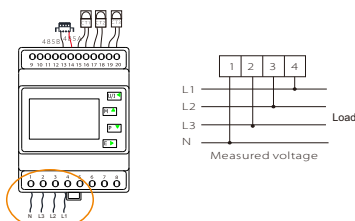
Step 2: Current wire connection

Insert the wire of the CT to the 15-20 ports of Meter, then connect the buckle of CT to the grid.



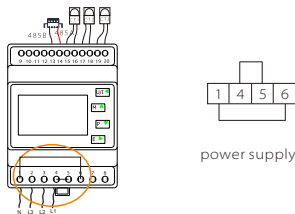
Step 3: Voltage wire connection

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



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.



CT Ratio

The default setting for the current transformer is 200/5A. To set a new CT ratio, using **M** and **P** buttons select the CT option to **SEE Ct2 S** screen. Long press **E** to enter the CT secondary current selection routine (5A/1A) using **M** and **P** buttons, then long press **E** to confirm. Press **P** to this screen **Ct r-RtE 0001**, The range is from 0001 to 9999, then long press **E** to confirm.

LCD description

① Voltage and Current

U/I *1'	L1 0000 V L2 0000 L3 0000	Phase to neutral voltages.
U/I *1-1'	L1-2 0000 V L2-3 0000 L3-1 0000	Line voltages.
U/I *2'	L1 0000 A L2 0000 L3 0000	Current on each phase.
U/I *3'	N 0000 A	Neutral current.
U/I *4'	L1 0000 VTHD% L2 0000 L3 0000	Phase to neutral voltage THD%.
U/I *5'	L1 0000 ITHD% L2 0000 L3 0000	Current THD% for each phase.

② Frequency and Power Factor and Demand

M *1'	Σ 0000 Hz 0999 PF	Frequency and Power Factor (total).
M *2'	L1 0999 L2 0999 PF L3 0999	Power Factor of each phase.
M *3'	L1 0000 A L2 0000 L3 0000	Maximum current demand.
M *4'	Σ 0000 KW	Maximum power demand.

③ Power

P *1'	L1 0000 KW L2 0000 L3 0000	Instantaneous active power in KW.
P *2'	L1 0000 KVARh L2 0000 L3 0000	Instantaneous reactive power in KVAR.
P *3'	L1 0000 KVA L2 0000 L3 0000	Instantaneous volt-amps in KVA.
P *4'	Σ 0000 KW 0000 KVAR 0000 KVA	Total kW,kVAR,kVA.

④ Energy

E *1'	Σ 0000 KWh 0314	Total active energy in KWh.
E *2'	Σ 0000 KVarh 0000	Total reactive energy in KVarh.
E *3'	IMPORT 0000 KWh 0314	Import active energy in KWh.
E *4'	EXPORT 0000 KWh 0000	Export active energy in KWh.
E *5'	IMPORT 0000 KVarh 0000	Import reactive energy in KVarh.
E *6'	EXPORT 0000 KVarh 0000	Export reactive energy in KVarh.
E *7'	Σ 5t 0000 KWh 031,4	Total active energy in Kwh. (Initializable)
E *8'	Σ 5t 0000 KVarh 0000	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 foreign objects and force majeure.
 5: Inadequate ventilation.
 6: Violate relevant safety regulations.

To register your SolaX product, please mail this warranty card to:

ADD: Room 220, West Building A Sci. and Tech Park of Zhejiang University No.525, Xixi Road, Hangzhou Zhejiang Province, China 310007

Tel: +86 571 56260011 Fax: +86 571 56075753

Email: service@solaxpower.com

Web: <http://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