



Quick Installation Guide for PowerHill (233kWh) Grid Meter with CT

V_1.0

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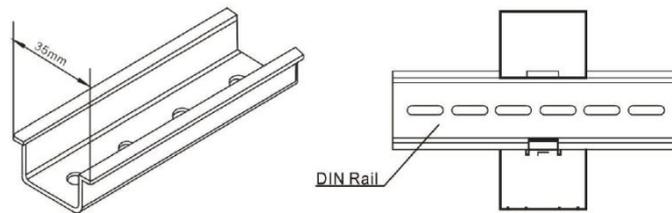
Date 2025/7/8

1 DIN-Rail Mounted Meter Wiring Specifications

Figure 1-1 Grid meter (Model: SDM630MCT V2)



Figure 1-2 DIN-rail installation structure

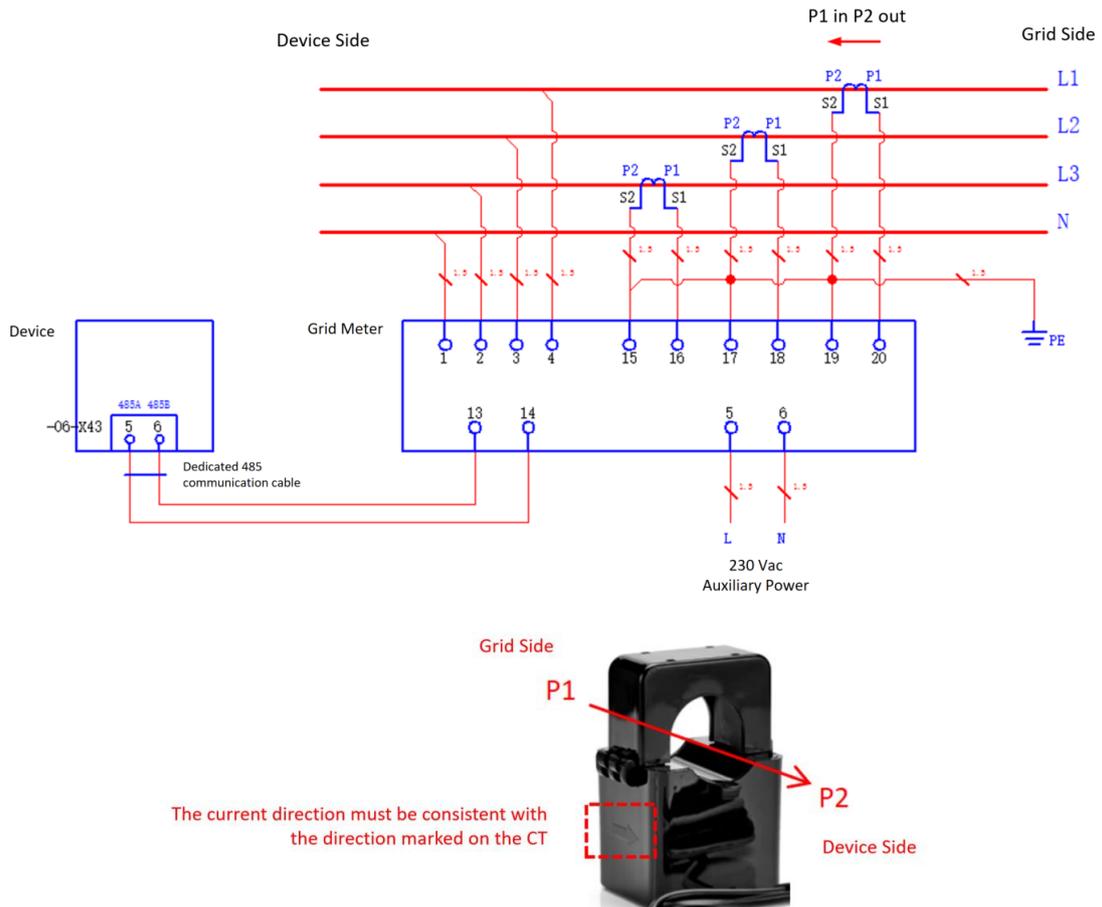


1.1 Voltage and Current Circuit Wiring

It is recommended to use the 1.5 mm² wire.

- Meter terminals 4, 3, 2, 1 are connected respectively to L1, L2, L3, and N phase voltage inputs.
- Meter terminals 20, 18, 16 are connected respectively to the S1 terminals of the L1, L2, and L3 phase current transformers (CTs) (CTs are equipped with white wires).
- Meter terminals 19, 17, 15 are connected respectively to the S2 terminals of the L1, L2, and L3 phase CTs (CTs are equipped with black wires). These S2 terminals must be grounded at a single point.

Figure 1-3 Voltage and current circuit wiring



1.2 Auxiliary Power Supply Wiring

It is recommended to use the 1.5 mm² wire.

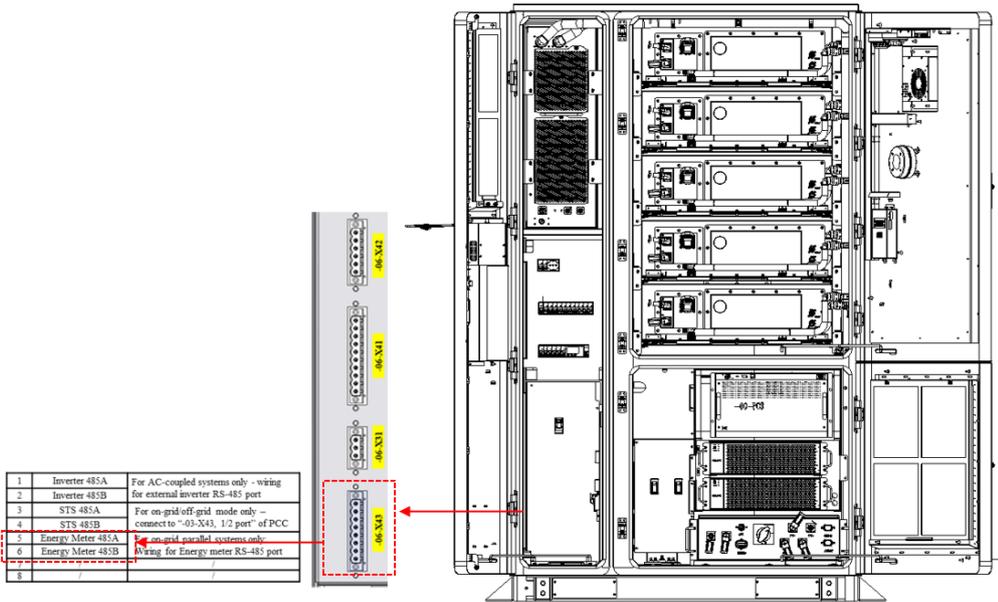
Meter terminals 5 and 6 are connected to the external 230V AC auxiliary power supply L and N, respectively.

1.3 Communication Interface Wiring

It is recommended to use the dedicated 485 communication cable.

Meter terminals 14 and 13 are connected respectively to the reserved ports 5 and 6 of terminal block -06-X43 (Grid meter 485A / B).

Figure 1-4 Communication interface wiring



2 Meter Parameter Configuration Specifications

Meter parameters can be configured after auxiliary power is supplied.

2.1 Setting Operation

Long-press  to enter the setting interface. A password is required. The default password is 1000.



If the password is entered incorrectly, the screen will display "PASS Err."



Press  to exit the settings interface.

2.2 Button Operation Instructions

1. After password confirmation, enter the setting menu. Use  and  to navigate to the parameter page to be set.
2. Press  to enter the selection menu.
3. If the page flashes, use  and  to adjust the setting. If it does not flash, submenus may exist.
4. After selecting the desired menu, press  to confirm and enter. You will see the SET indicator.
5. After completing settings, press  to exit. You can use  and  to adjust other

functions.

- To exit completely, press repeatedly until fully out of the setup program.

2.3 Numeric Input Method

During the setup process, it may be necessary to enter numbers or passwords. This is typically done

left to right as follows:

- Use and to adjust the flashing digit.
- Press to confirm the digit. The next digit will automatically start flashing.
- Repeat the process until all digits are set. Press to exit the setup.

2.4 Communication Address Setting (Set to 1)

1		Use and to navigate to the communication address setup screen.
2		Long-press to enter the flashing setting screen.
3		Use and to select the communication address in the range 001–247. Long-press to confirm. Press to exit.

2.5 Communication Baud Rate Setting (Set to 19200 bps)

1		Use and to navigate to the baud rate setup screen.
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2		Long-press to enter the flashing setting screen.
3		Use and to select the desired baud rate. Long-press to confirm. Press to exit.

2.6 Parity Setting (Set to None)

1		Use and to navigate to the parity setup screen.
2		Long-press to enter the flashing setting screen.
3		Use and to select the desired parity. Long-press to confirm. Press to exit.

2.7 CT Parameter Setting

Set the secondary current to 5A, and CT ratio to 50.

1		Use and to navigate to the CT parameter setup screen.
2		Long-press to enter the flashing setting screen for secondary current. Use and to select between 5A and 1A
3		CT Ratio Setting: Long-press to enter the flashing setting screen for CT ratio. Use and to select a ratio from 0001 to 2000.

3 CT Installation Specifications

Figure 3-1 CT (Model: ESCT-T24)



It uses split-core CTs.

1. Through-Core Wiring

Pass the measured conductor (L1 / L2 / L3) through the center hole of the CT iron core individually (single conductor per CT; do not combine multiple conductors in parallel).

2. Polarity Wiring

1) Primary side direction:

The current flow must be consistent with the polarity markings on the CT (P1 input, P2 output).

2) Secondary side output:

- S1 terminal (white wire) connects to the meter input terminal.
- S2 terminal (black wire) connects to the meter output terminal and is grounded to ensure a closed circuit.

Figure 3-2 Split-core CT

