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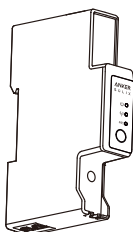
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Disclaimer

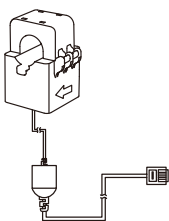
Please read and understand all safety instructions, installation guide, and other accompanied documents before installing or using the product. Failure to follow the instructions may result in electric shock, equipment damage, or personal injury. Please follow the instructions and install this equipment with caution for your safety and the normal operation of the product. The manufacturer is not liable for damage, injury, or loss resulting from incorrect installation, unauthorised modification, misuse, operation in unsuitable environments, or failure to observe safety precautions.

What's in the Box

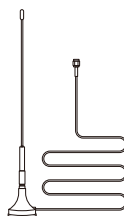
Single Phase (AE1X0310)



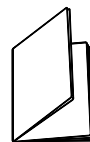
Anker SOLIX Smart Meter
Gen 2 (Single-Phase)



2x 63A Single CT Cable
Assembly

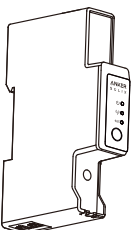


Extension Antenna

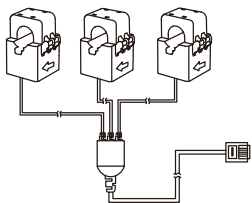


Document

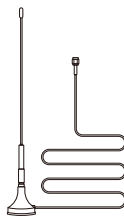
Three Phase (AE1X0311)



Anker SOLIX Smart Meter
Gen 2 (Three-Phase)



63A Triple CT Cable
Assembly



Extension Antenna



Document

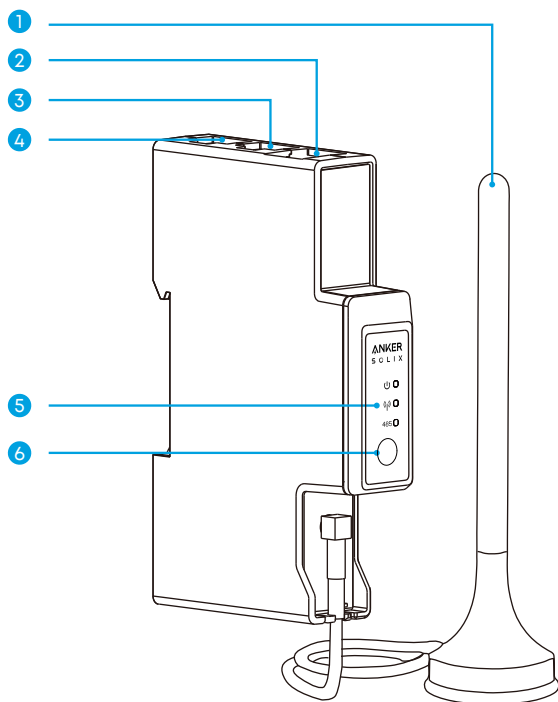
Overview

Anker SOLIX Smart Meter Gen 2 is a DIN rail-mounted, compact smart meter that monitors voltage, current, and power in real time. It supports separate monitoring of household loads and photovoltaic (PV) system or energy storage system (ESS) for smart energy management and safe power use. The meter automatically corrects CT connections and can connect to the Anker app via Bluetooth or Wi-Fi, enabling remote control of operating modes and other functions.

*Note:

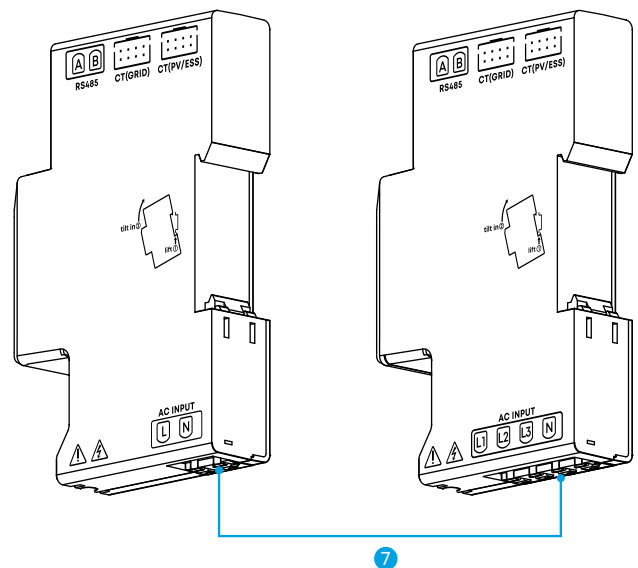
1. When used to monitor an energy storage system, Anker SOLIX Smart Meter Gen 2 is only compatible with **certain Anker SOLIX main units**. For the full compatibility list, please refer to [Anker SOLIX Smart Meter Gen 2 Compatibility](#).
2. When paired with Solarbank, Solarbank 2 or Solarbank 3, the CT (PV/ESS) port on Anker SOLIX Smart Meter Gen 2 is unavailable. Auto-correction, branch circuit protection, and third-party PV monitoring are also not supported. All other functions operate normally.

Product Overview



Single-Phase

Three-Phase

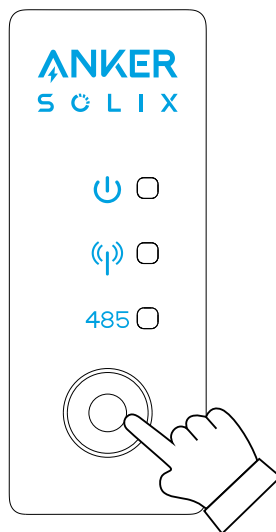


- 1 Antenna
- 2 RS485 Port
- 3 CT (Grid) Port
- 4 CT (PV / ESS) Port
- 5 LED Indicators
- 6 Main Button
- 7 AC Input Port

Button Control

Power On / Off: Press the main button for 2 seconds.

Reset IoT Connection: When the meter is powered on, press the main button for 7 seconds.



LED Indicator

LED Indicator	Colour & State	Indication
	Solid Blue	Working normally.
	Flashing Red Slowly	No data collection or meter malfunctioning.
	Solid Blue	Wi-Fi / Bluetooth connected.
	Flashing Blue Slowly	No Wi-Fi / Bluetooth connected.
	Flashing Blue Quickly	Confirming connection.
	Solid Blue	RS485 port connected and communicated.
	Flashing Red Slowly	RS485 port malfunctioning.
	Indicator Lights Flashing from Top to Bottom	Firmware update in progress.

Install the Smart Meter

Before Installation

1. Identify the entry phases. Under normal circumstances, the brown phase is live wire L1, the black phase is live wire L2, the gray phase is live wire L3, and the blue phase is the neutral wire N.

CAUTION: Always follow the phase sequence markings of the on-site electrical system during wiring. Wire color coding may vary by region, building, or installation period. Never determine phase sequence based on wire color alone.



International Standard) New House - Common Scenarios	(Old German Standard) Old House - Rare Scenarios
Brown----Live Wire L1	Red----Live Wire L1
Black----Live Wire L2	Yellow----Live Wire L2
Gray----Live Wire L3	Blue----Live Wire L3
Blue----Neutral Wire N	Black----Neutral Wire N
Green and Yellow----GND PE	Green and Yellow----GND PE

2. Prepare the corresponding color-coded voltage wires

Wiring Instructions



- Ensure the main breaker is turned off before wiring.
- Wear personal protective equipment before installing or operating the meter.

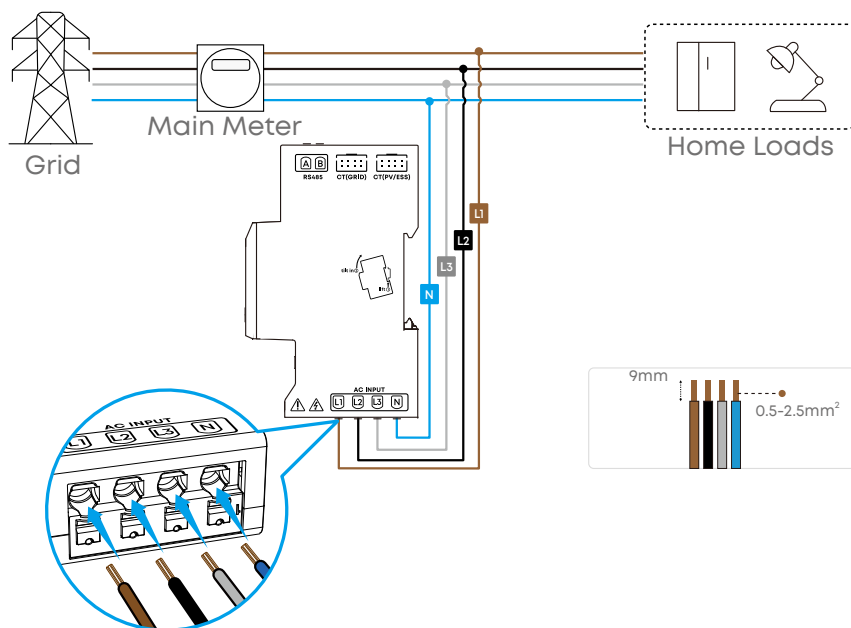
Connect the Voltage Wires

Connect the voltage wire from any unused circuit breaker slot to the corresponding hole on Smart Meter. The latch beneath the terminal will automatically pop up when the connection is successful.

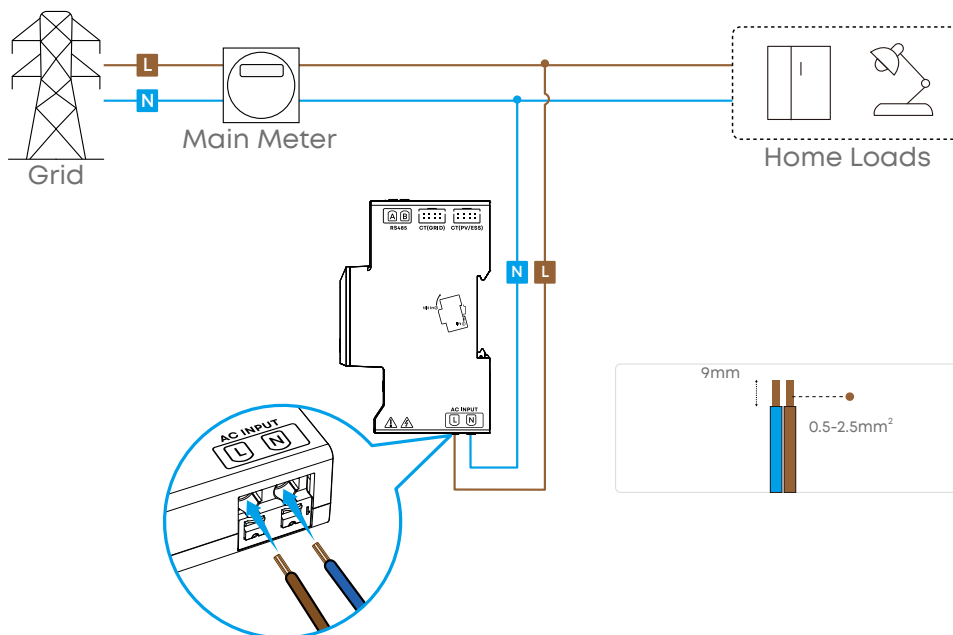


- Pay attention to the AC input holes for the corresponding wires. Live and neutral wires must not be misconnected.
- This product is equipped with Weidmüller SNAP IN connection technology, providing fast, tool-free and secure wire connection.

Three-Phase

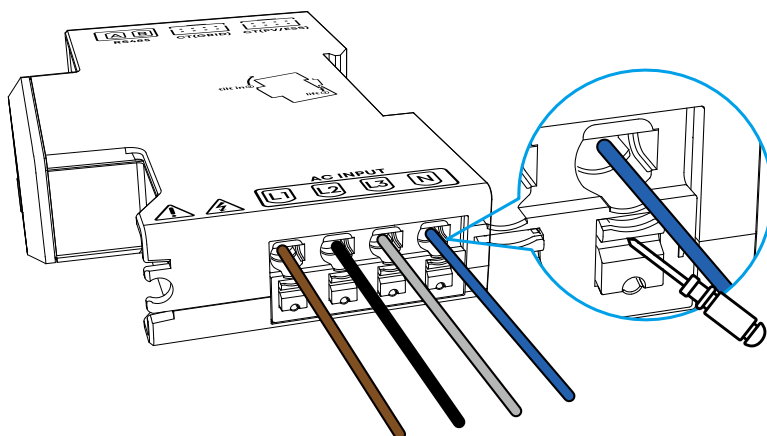


Single-Phase



How to Disconnect the Wire (Optional)

Press down the raised green latch until you hear a click to disconnect the wires.



Connect the CT Cables

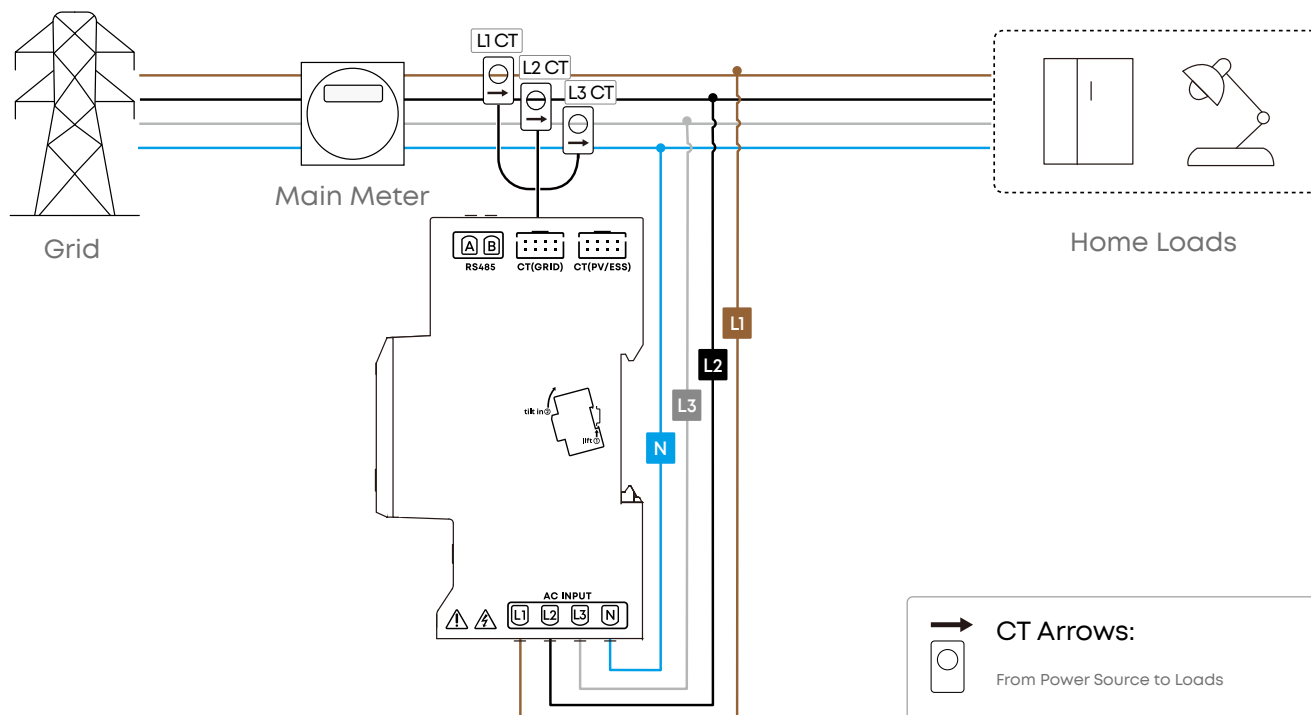
Connect to the CT (Grid) Port

Connect the CT cable to the CT (Grid) Port and snap the CTs onto the main live wires, as shown in the wiring diagram.

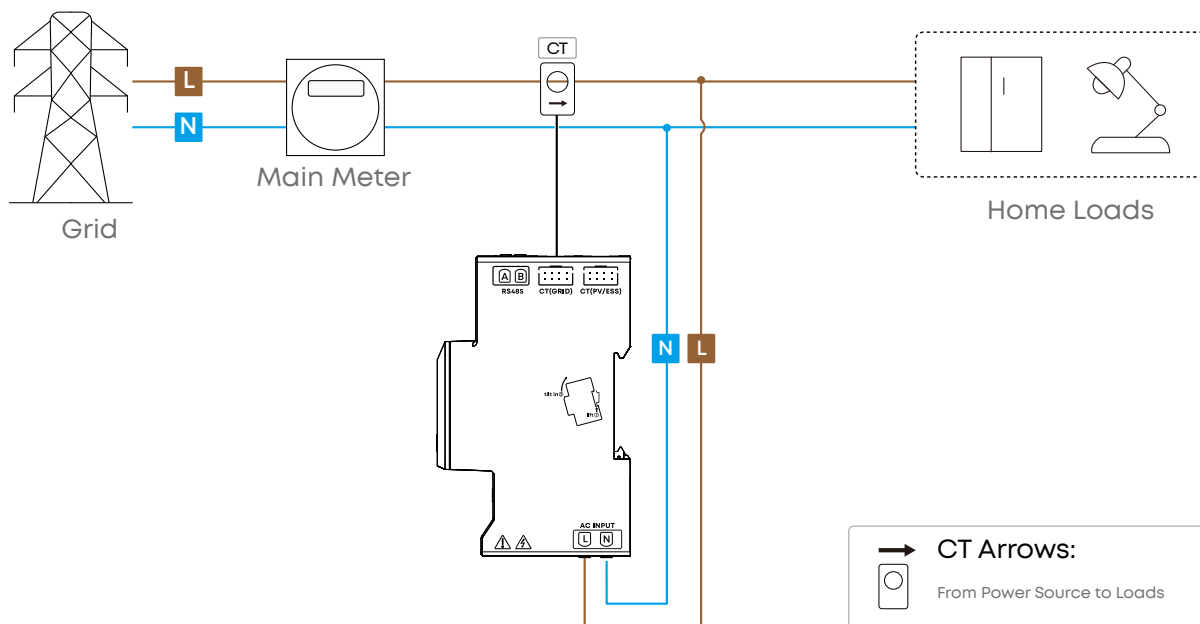
Note: Ensure the CTs are oriented in the correct direction of current:

- Snap L1 CT to L1 in the direction of current.
- Snap L2 CT to L2 in the direction of current.
- Snap L3 CT to L3 in the direction of current.

Three-Phase



Single-Phase



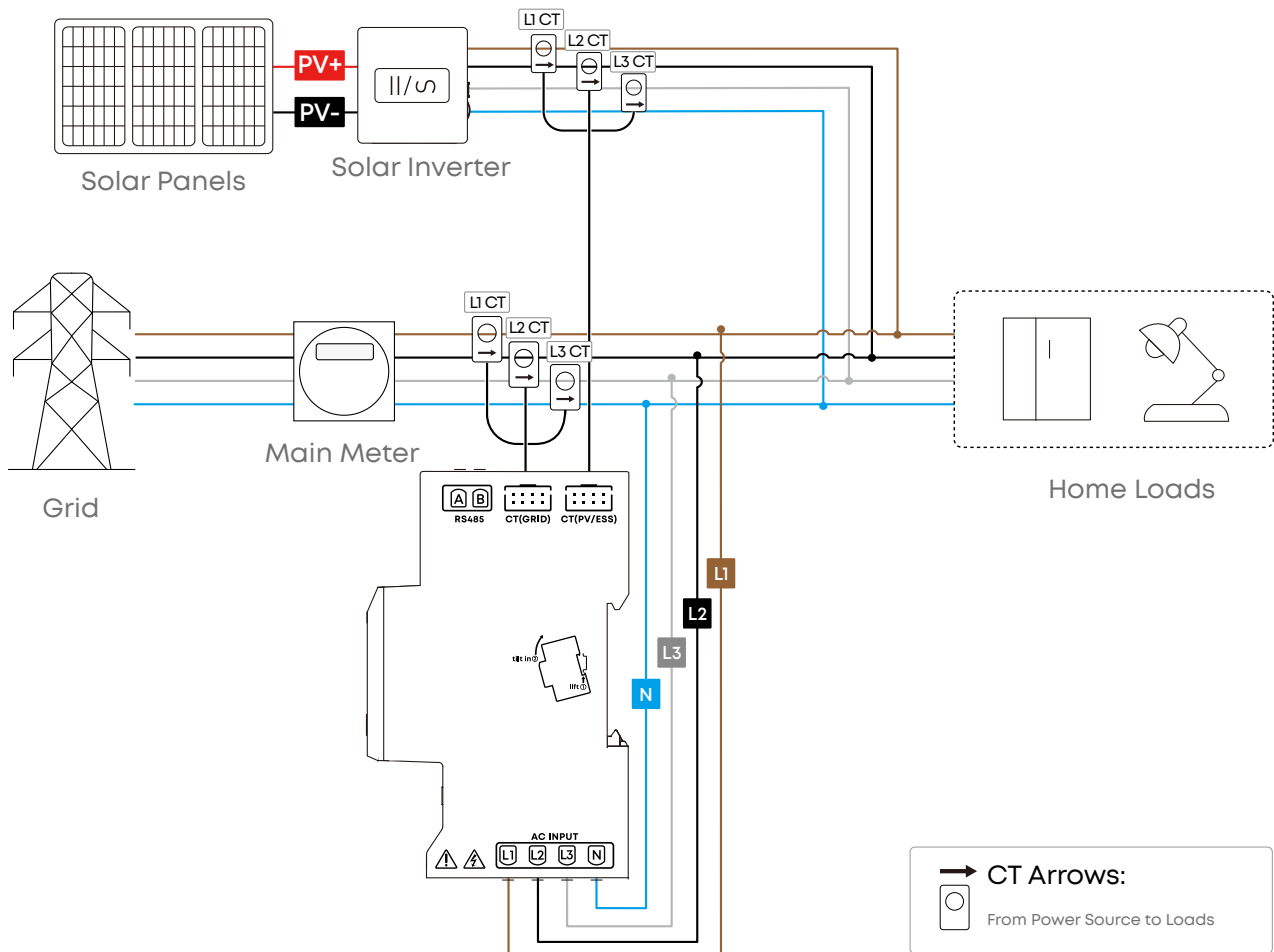
Connect to the CT (PV / ESS) Port (Optional)

Connect another CT cable to the CT (PV / ESS) Port and snap the CTs onto live wires of your PV system or energy storage system to monitor their energy independently.

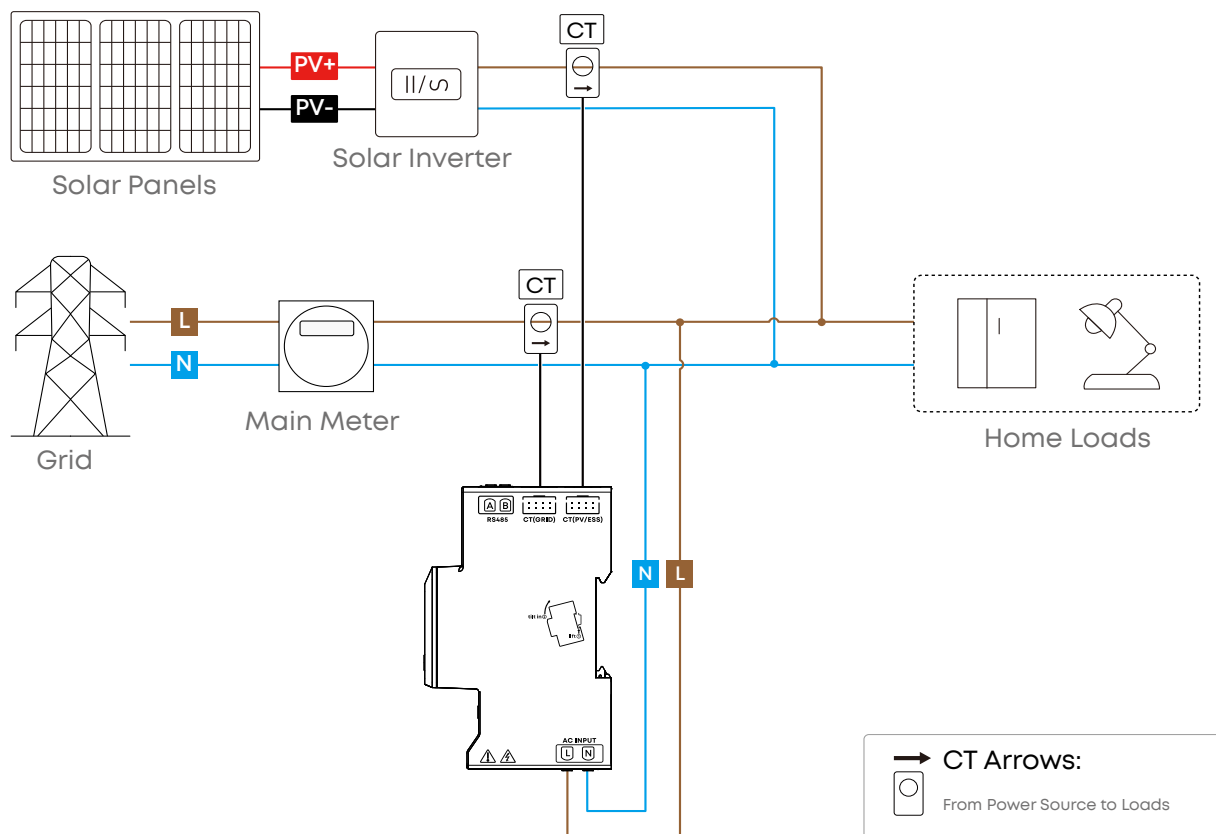


To enable relevant functions when the CT (PV / ESS) Port is used to monitor a third-party PV system or Anker SOLIX energy storage system, refer to [CT \(PV / ESS\) Port Settings](#)

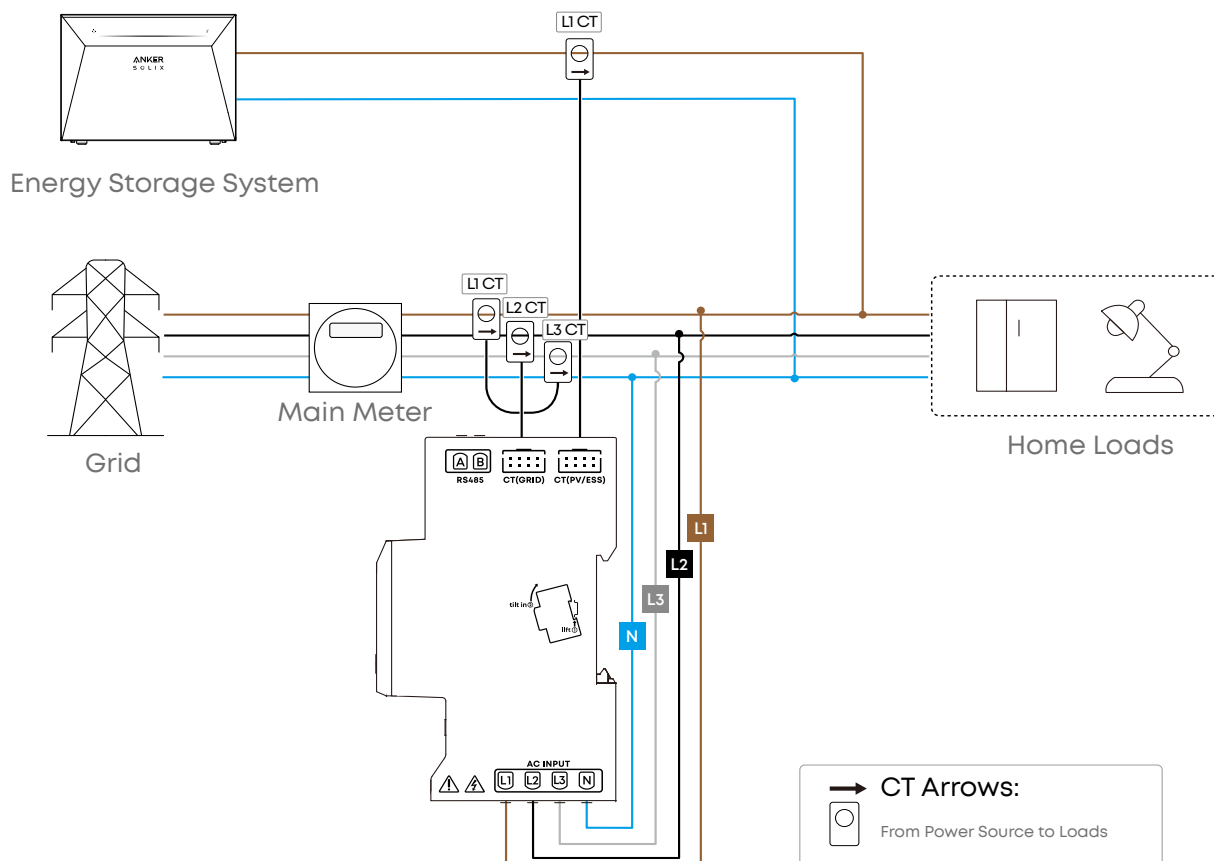
Scenario 1: Smart Meter for Existing Third-Party PV System Three-Phase Grid System



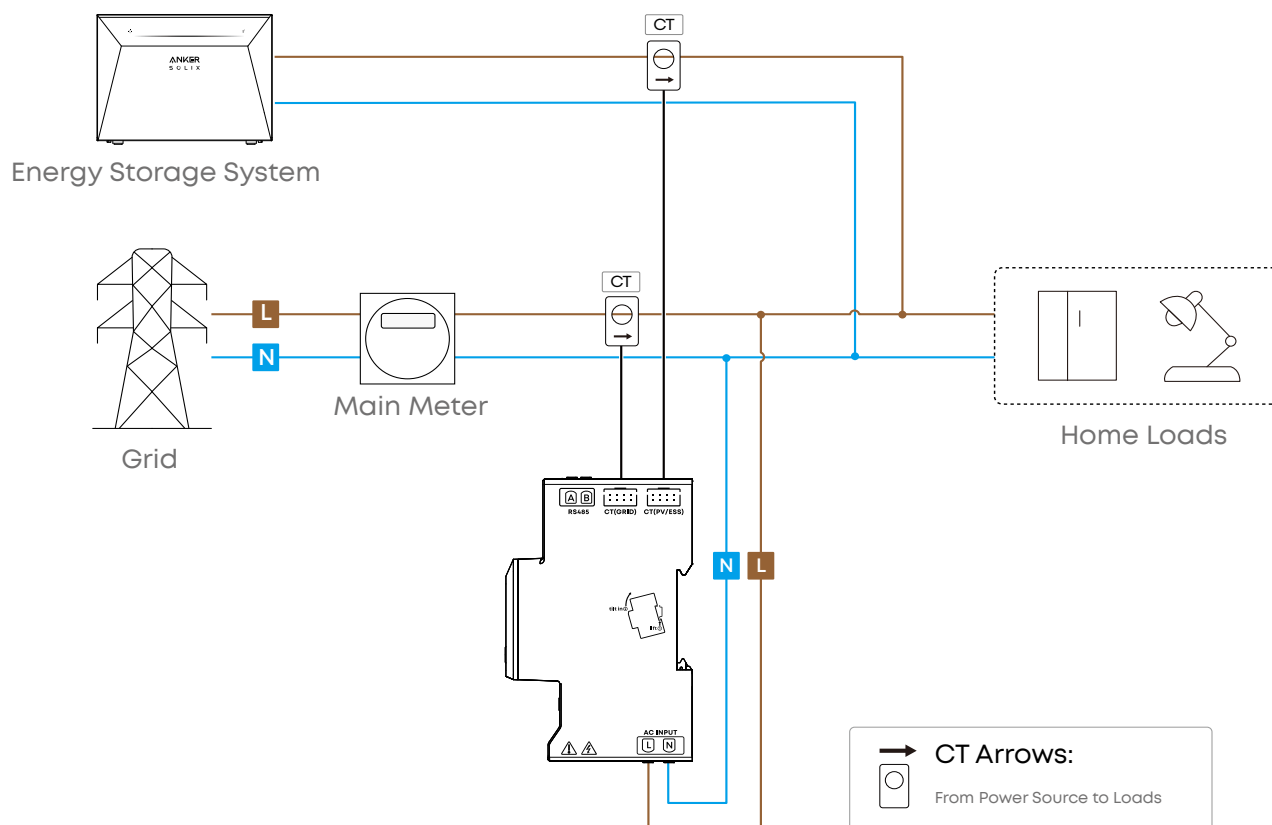
Single-Phase Grid System



Scenario 2: Smart Meter for New Energy Storage System Three-Phase Grid System

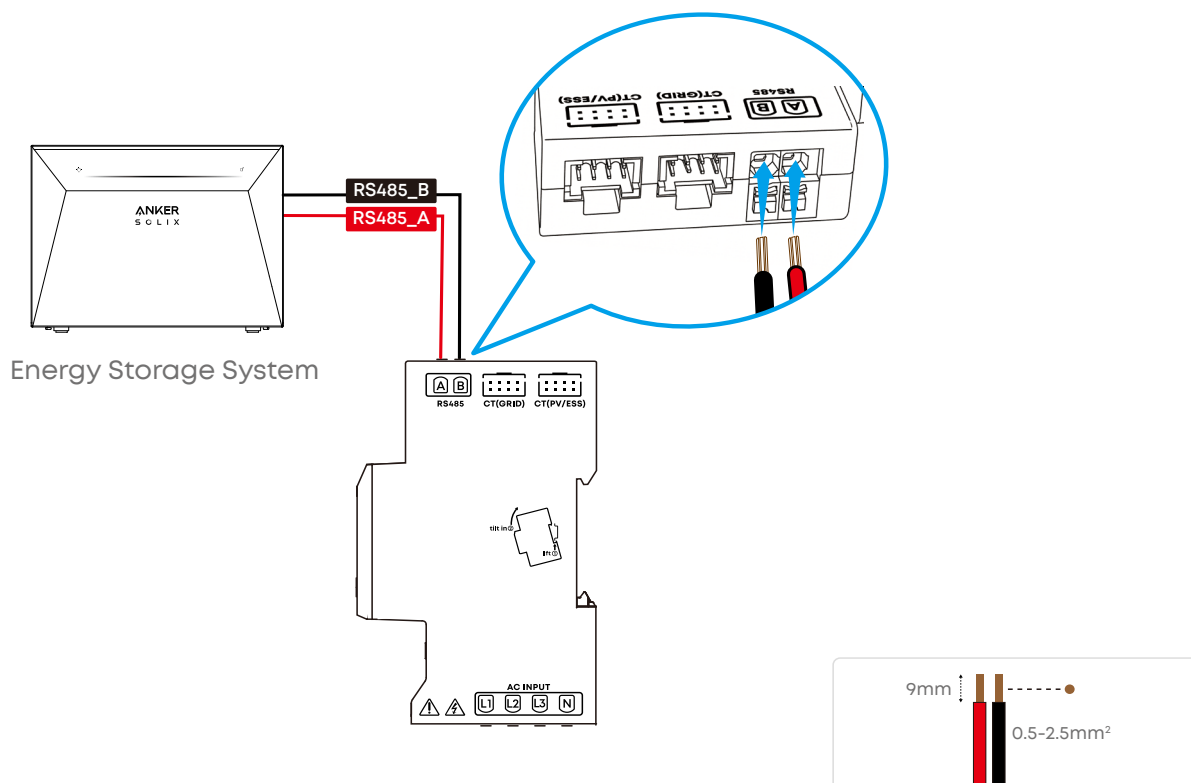


Single-Phase Grid System



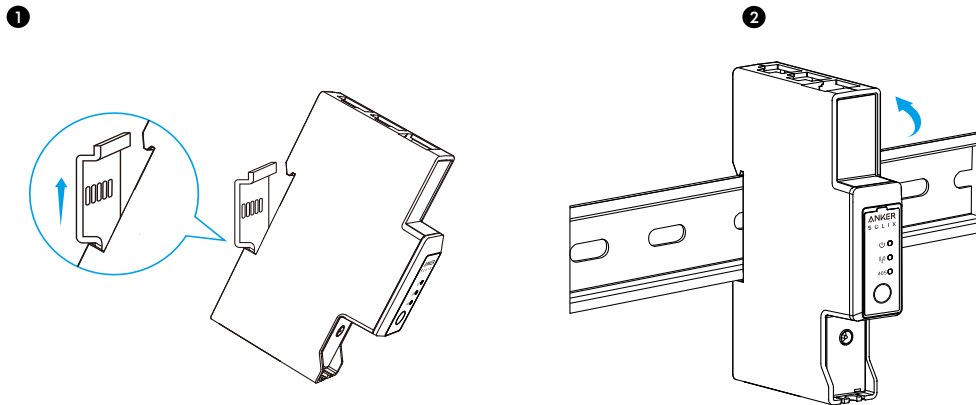
Connect the RS485 Cable (Optional)

If your energy storage system supports RS485, you can connect it to the meter via RS485 cable for a more stable connection and faster data response.

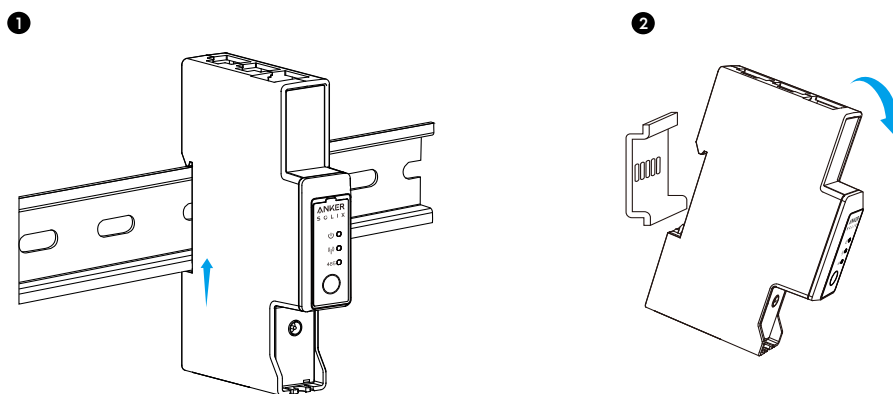


Mount the Smart Meter

1. After wiring, mount the Smart Meter onto the distribution box rail, ensuring it is securely fastened.

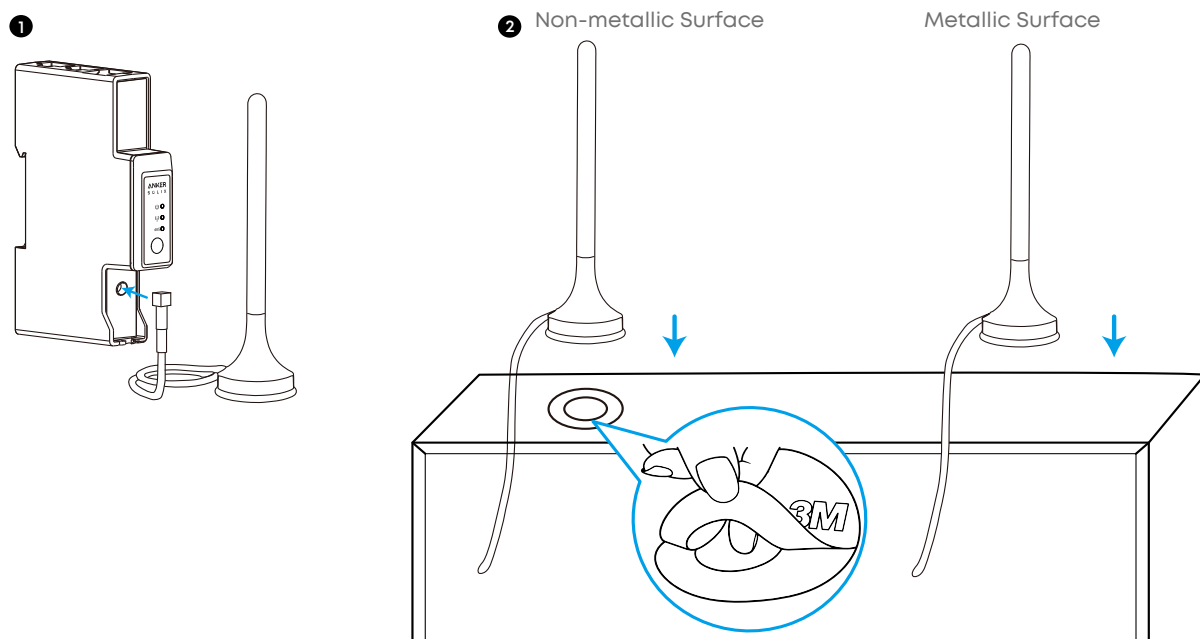


How to Unmount the Meter (Optional)



2. Plug in the antenna and then place the antenna on the distribution box.

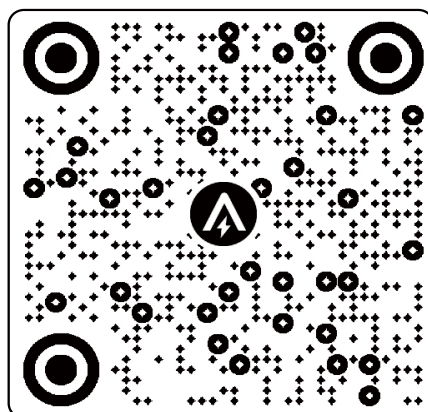
 Use the included 3M tape to mount the antenna to a non-metallic surface. Before applying the tape, confirm the mounting position and clean both the antenna base and distribution box surface. Once installed, do not remove and reapply the antenna.



Use the App

Download the Anker App

Download the Anker app from the App Store (iOS devices) or Google Play (Android devices), or by scanning the QR code.

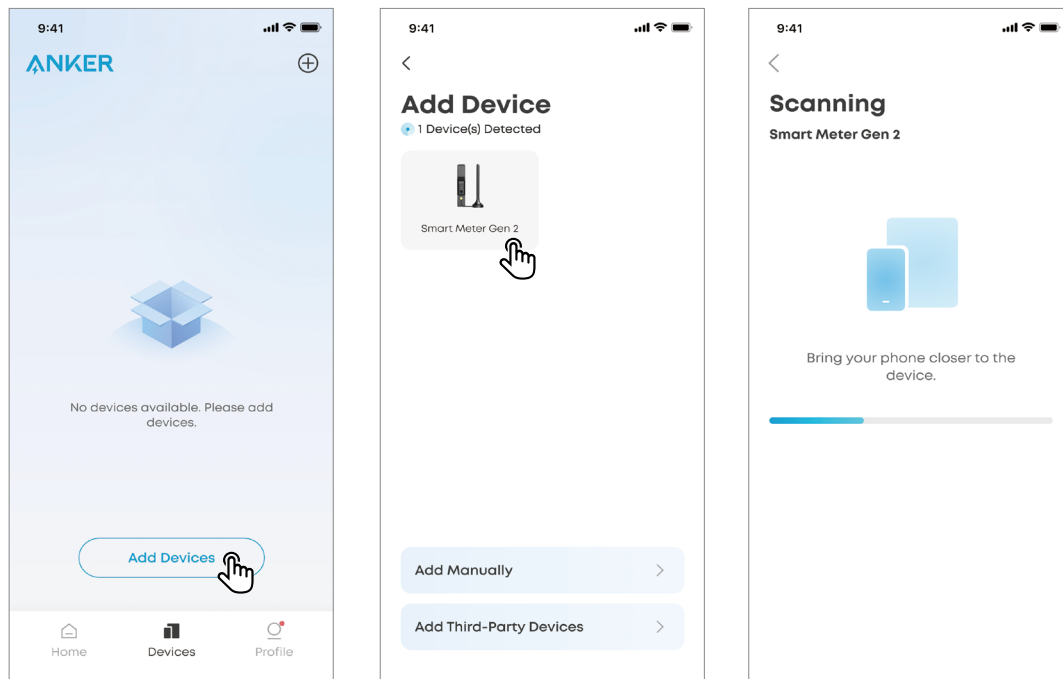


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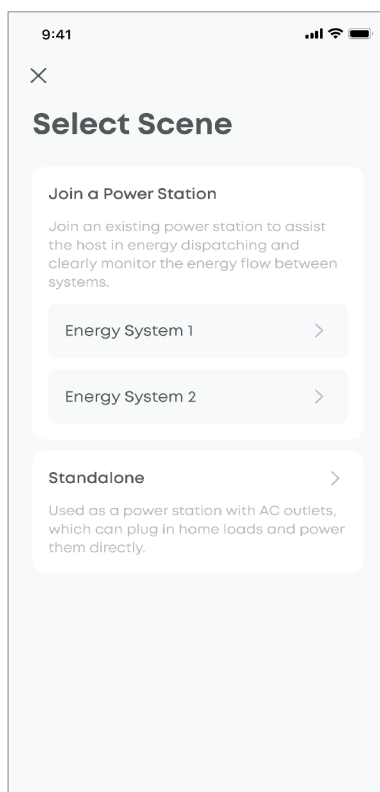
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Add the Smart Meter



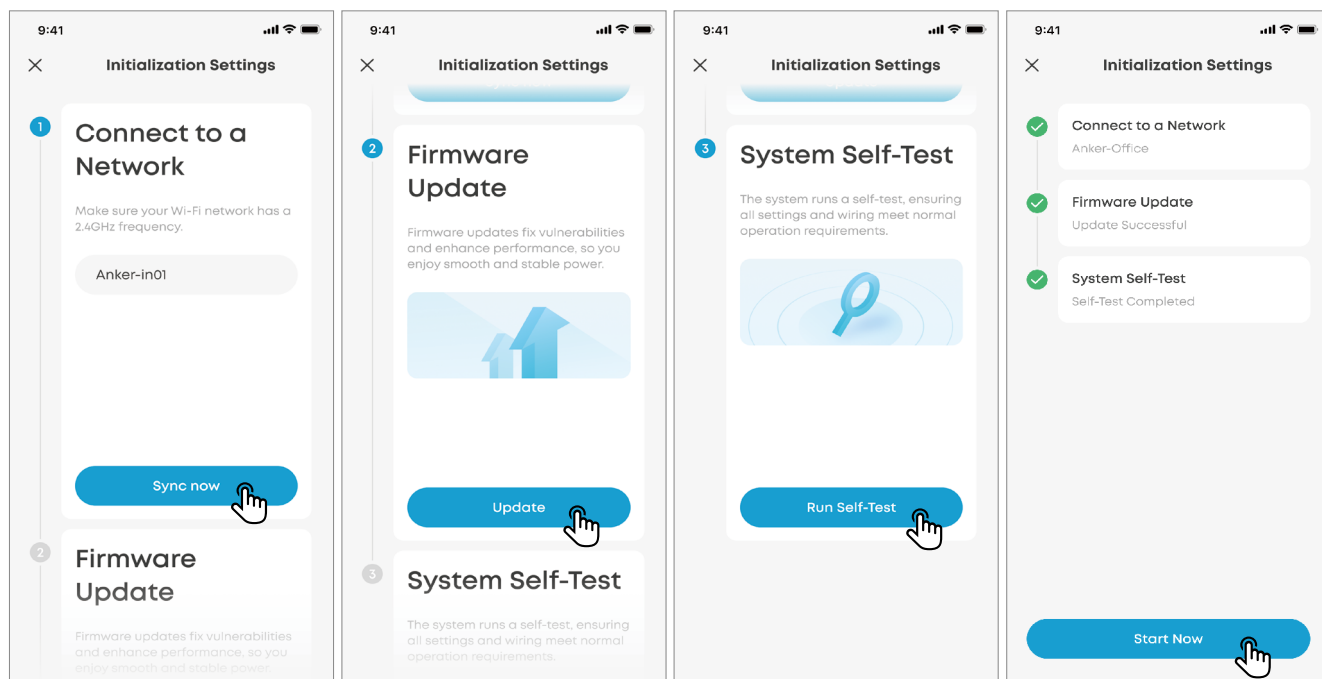
Select the Scene

Select **Join a Power Station** or **Use Independently** according to the actual application scenario of the meter.



Initialization Settings

Due to different meter usage scenarios, the initialization settings procedure may differ. Please refer to the in-app instructions to complete the initialization settings.



CT (PV / ESS) Port Settings

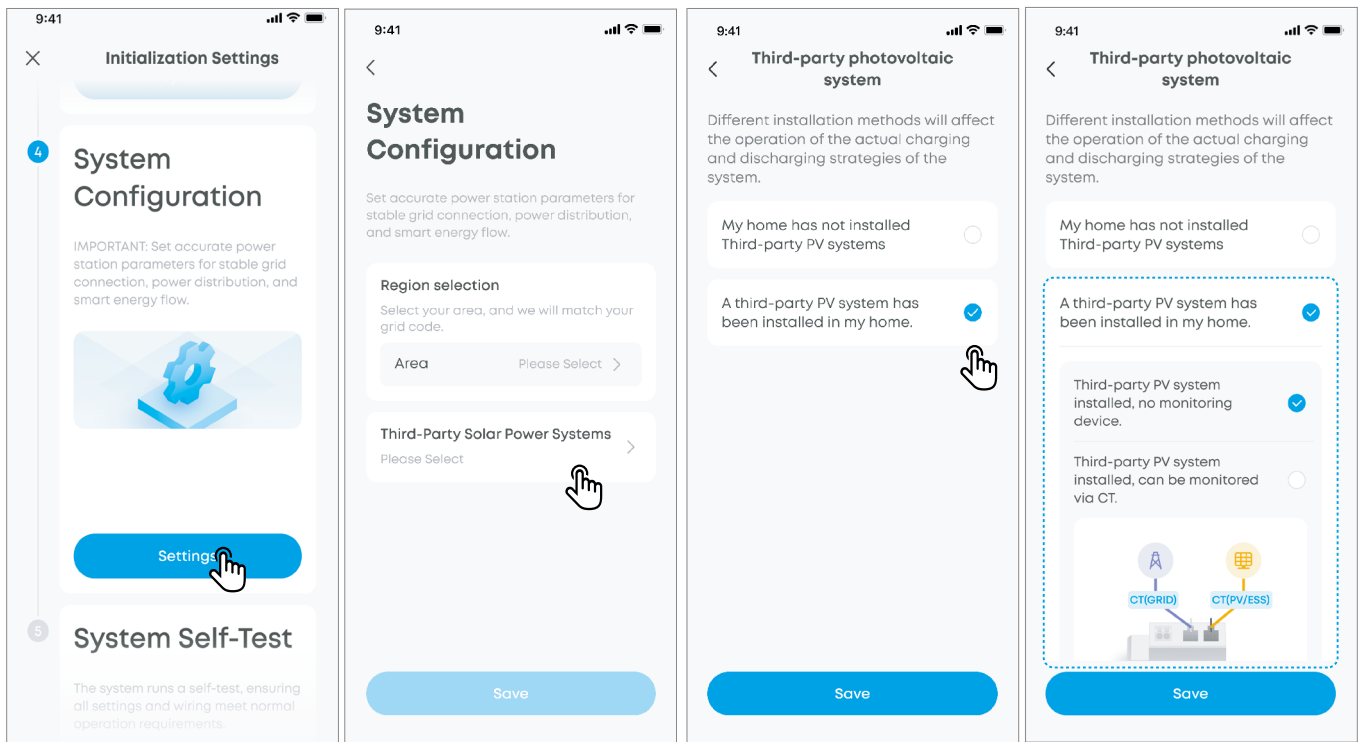
Monitor Third-Party PV System

Clamp the CT(s) onto the circuit of a third-party PV system to bring it into your Anker power station's energy monitoring and optimization.

How to enable:

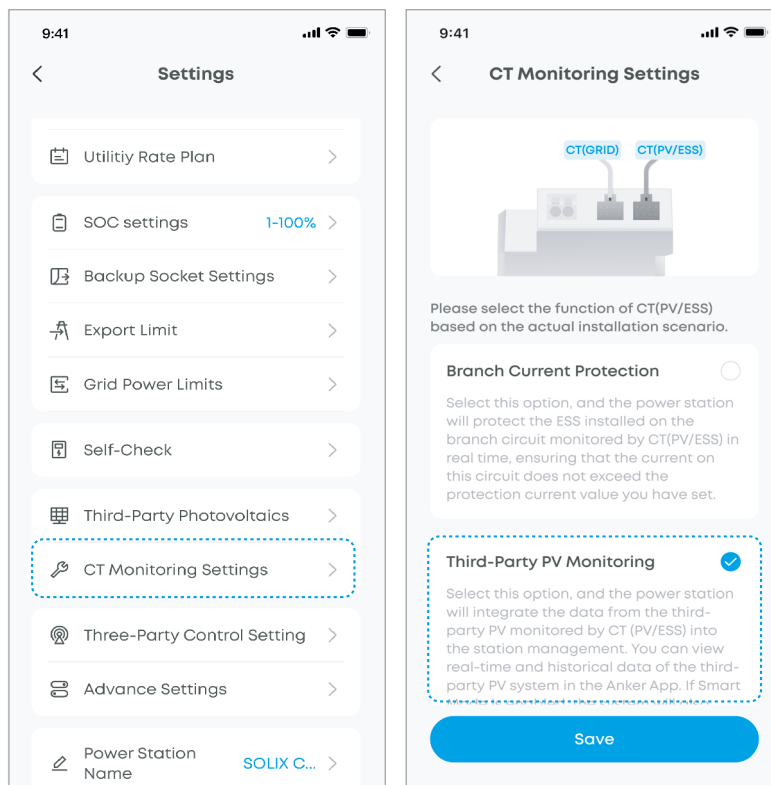
Option 1: Configure it during the initialization of power station

1. During **System Configuration**, select **Third-Party Solar Power Systems**.
2. Select **a third-party PV system has been installed in my home**.
3. Select **Third-party PV system installed, can be monitored via CT** and tap **Save**.



Option 2: Configure it in the power station settings

1. Go to **Settings** → **CT Monitoring Settings**.
2. Select **Third-party PV monitoring** and tap **Save**.

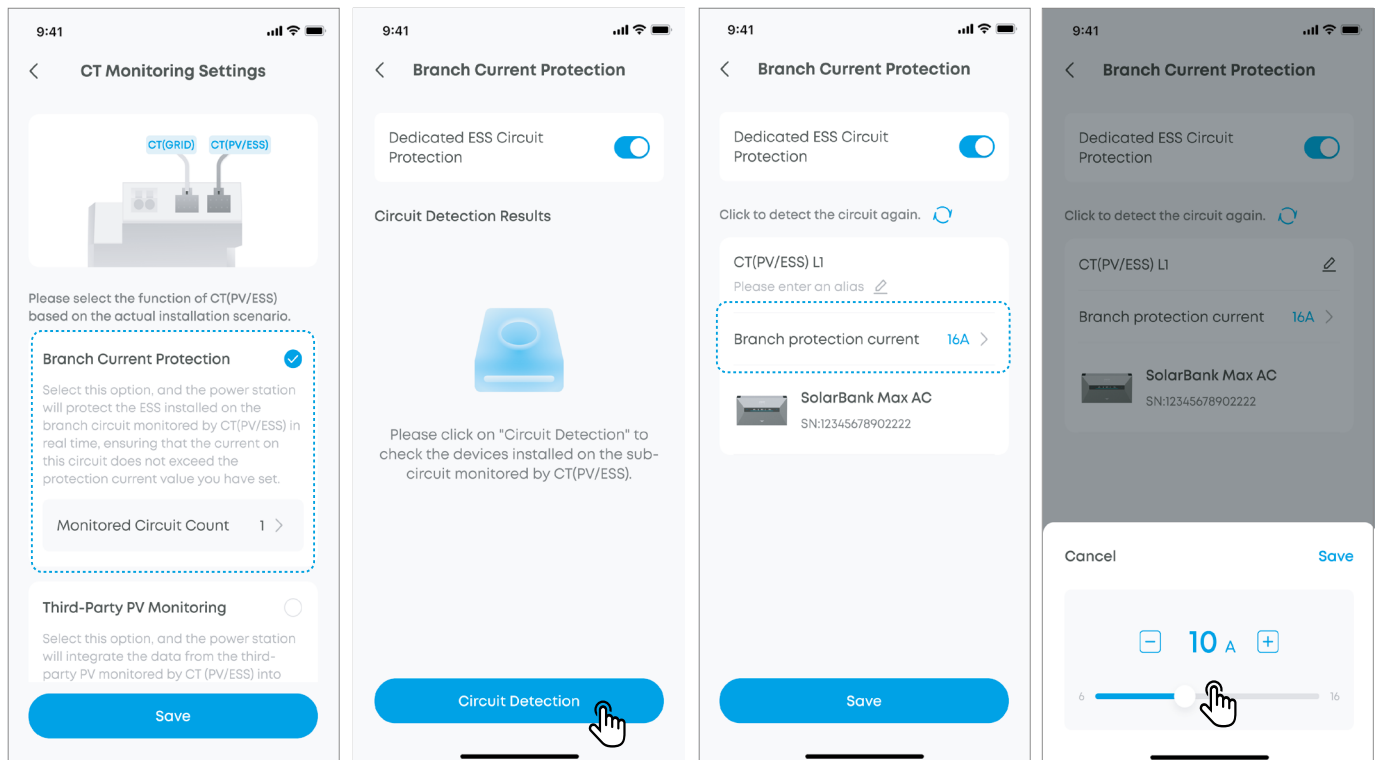


Monitor Energy Storage System

Clamp the CT(s) onto the circuit where your energy storage system (Solarbank) is connected to monitor and protect that branch from overcurrent.

How to enable:

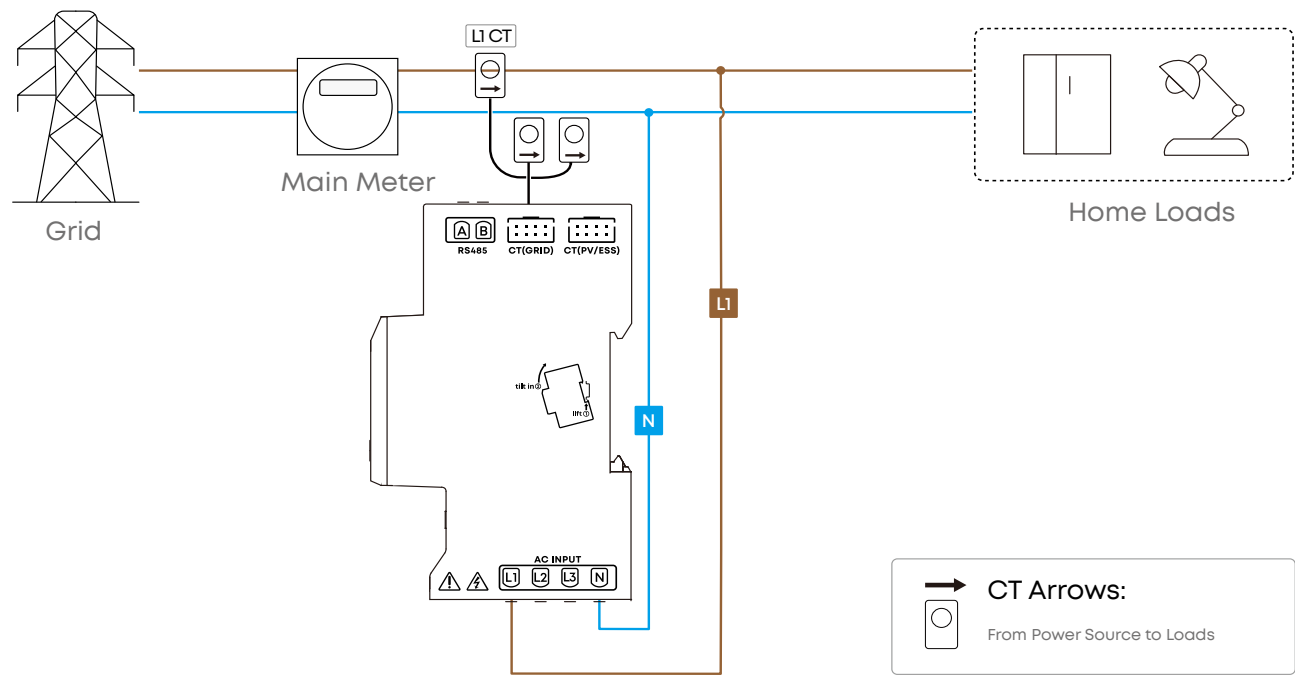
1. Go to **Settings** → **CT Monitoring Settings**.
2. Select **Branch protection current**.
3. Complete the circuit detection process.
4. Set the desired current protection threshold for that circuit.



Appendix 1: Wiring Diagrams for Special Scenarios

Special Scenario 1: Three-Phase Smart Meter for Single-Phase Grid System

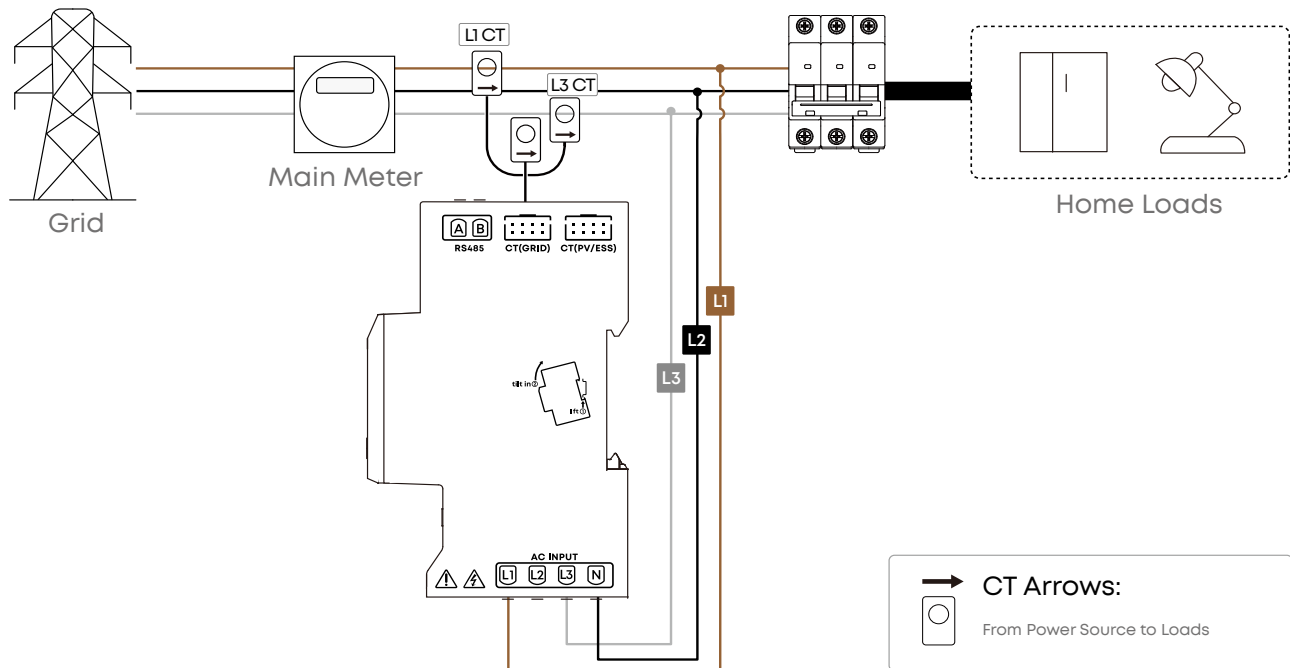
In this scenario, connect the grid's L wire to the meter's L1 terminal and snap CT1 (GRID) to the L wire. Otherwise, the meter may not function properly.



Special Scenario 2: Three-Phase Smart Meter for Three-Phase, Three-Wire (3P3W) System

For a three-phase meter used in a Three-Phase, Three-Wire (3P3W) System, connect the voltage wires as follows. Otherwise, the meter may not function properly.

Grid		Smart Meter	
Live Wire		AC Input Terminal	CT (Grid)
L1		L1 Terminal	CT1
L2		N Terminal	/
L3		L3 Terminal	CT3



Appendix 2: Auto-Correction Function for Meter Wiring Errors

Anker SOLIX Smart Meter Gen 2 supports automatic detection and correction of certain wiring errors, such as phase mismatches in voltage wires or CT installation directions. However, this function has certain limitations:

1. Phase Error Auto-Correction:

- ① For both single-phase and three-phase smart meters, the meter's N terminal must be correctly connected to the grid's N line; otherwise, phase error detection and correction will not work.
- ② For three-phase smart meters, ensure one CT on each live wire. The other two phases (not connected to the energy storage system) must have detectable power (>100 W). Otherwise, the meter may fail to identify phase errors, causing system self-testing failure or data errors.

2. Reverse Connection Auto-Correction:

For three-phase meters, all three CTs must be installed in the same direction (e.g., all CTs on L1/L2/L3 reversed) for automatic correction. If CTs are installed in different directions, automatic correction cannot be applied.

3. Scenarios not supporting Auto-Correction:

- ① The smart meter is paired with Anker SOLIX Solarbank 1, Solarbank 2 or Solarbank 3.
- ② The three-phase smart meter is used in a Three-Phase, Three-Wire (3P3W) System.
- ③ The CT (PV/ESS) port is used to monitor a third-party PV system.

Appendix 3: Specifications

Product Name	Anker SOLIX Smart Meter Gen 2 (Single-Phase)	Anker SOLIX Smart Meter Gen 2 (Three-Phase)
Model	AE1X0310	AE1X0311
Dimensions (H×W×D):	105*19*66.7 mm	105*19*66.7 mm
AC Rated Input	230Va.c., 50/60Hz, CT 40mA, 2W CAT III	3~230/400Va.c., 50/60Hz, CT 40mA, 2W CAT III
Frequency	50/60Hz	50/60Hz
Max Measurement per Channel	120A	120A
Power Consumption	< 2 W	< 2 W
Ammeters Accuracy	±1 % (1-120 A), ±2 % (<1 A)	±1 % (1-120 A), ±2 % (<1 A)
Connection	Bluetooth, 2.4GHz Wi-Fi, RS485	Bluetooth, 2.4GHz Wi-Fi, RS485
DIN Rail	35mm	35mm
Protection Rating	IP20(Indoors Only)	IP20(Indoors Only)
Operating Temperature	-25°C to 55°C	-25°C to 55°C
Max. altitude	2000m	2000m
Warranty	2 Years	2 Years
Lifespan	10 Years	10 Years
Compatible CT	CT 63A(ø 10mm) CT 120A(ø 16mm)	CT 63A(ø 10mm) CT 120A(ø 16mm)

Default Exposed Network Interfaces and Services

Bluetooth Low Energy (BLE) Status: When the equipment is not connected to a network, BLE broadcasting and BLE services are automatically enabled to provide Bluetooth network configuration capabilities.

Note: During the BLE configuration process, ensure your network environment is stable and follow the instructions to complete the setup.