

Solinteg Gen 2 Residential ESS Solutions

Hybrid Inverter: M2HT5-10K

AC Coupled Inverter: M2HT5-10K-AC

 www.solinteg.com

V1.0
Date: 09.04.2026



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SOLINTEG

01

Advantages

SOLINTEG

M2HT5-10K Key Advantages



Two Series Sharing a Unified Design

Perfect for Three Phase New Systems or Retrofit Upgrades



5-10 kW

Hybrid Inverter

M2HT-5/6/8/9.9/10K-30

MPPT

PCS

EMS

Meter



5-10 kW

AC Coupled Inverter

M2HT-5/6/8/9.9/10K-30-AC

MPPT

PCS

EMS

Meter

Ultra-high PV Input Current*

20A

Max. Charge/Discharge

30A

Simplify Installation with a Built-in Meter

Direct CT Support

CT Direction & Phase correction

Auto-adaptive

Superior Reliability for

Half-wave Loads

Seamless Smart Load/DG Management through

Triple-DO Ports

High-speed & Secure Data Transmission via

MQTT Integration

*Only for hybrid inverter.

Other Leading Advantages

Powerful

- ① 2 MPPTs design, 200% PV oversizing (for hybrid inverter)
- ② Max 200%@10s backup peak output power
- ③ Up to 10 units on-grid paralleling capability
- ④ 30A charge & discharge current
- ⑤ 110% unbalance output

Smart

- ① 5 working modes for both single & parallel systems
- ② ToU with 96-periods for peak-valley arbitrage
- ③ AI-powered PV generation prediction
- ④ Smart load/EV charger management
- ⑤ DG auto-control available

User Friendly

- ① Remote configuration & upgrade
- ② OLED display + 4 physical buttons
- ③ Fast commissioning through Bluetooth
- ④ Third-party EMS & BMS Compatibility
- ⑤ CT phase-sequence and direction self-adaptation

High Security

- ① <10ms auto on/off-grid switch
- ② Type II SPD on both AC & DC sides
- ③ IP66 for indoor & outdoor installation
- ④ Support the emergency stop function
- ⑤ 10+ protections safeguard the user & device



Tailored for Global Market Needs

Dynamic Pricing

Region: Europe

Benefit: Turn market volatility into electricity bill savings. (23 countries supported)

RCR + 14a EnWG

Region: Central Europe

Benefit: Ensure grid compliance. Allow remote power control from grid.

VPP-ready

Region: Australia/Europe

Benefit: Earn high VPP income from FCAS or get smart arbitrage.

DRED

Region: Australia

Benefit: Ensures grid compliance. Allow remote power control from grid.

Peaking Shaving

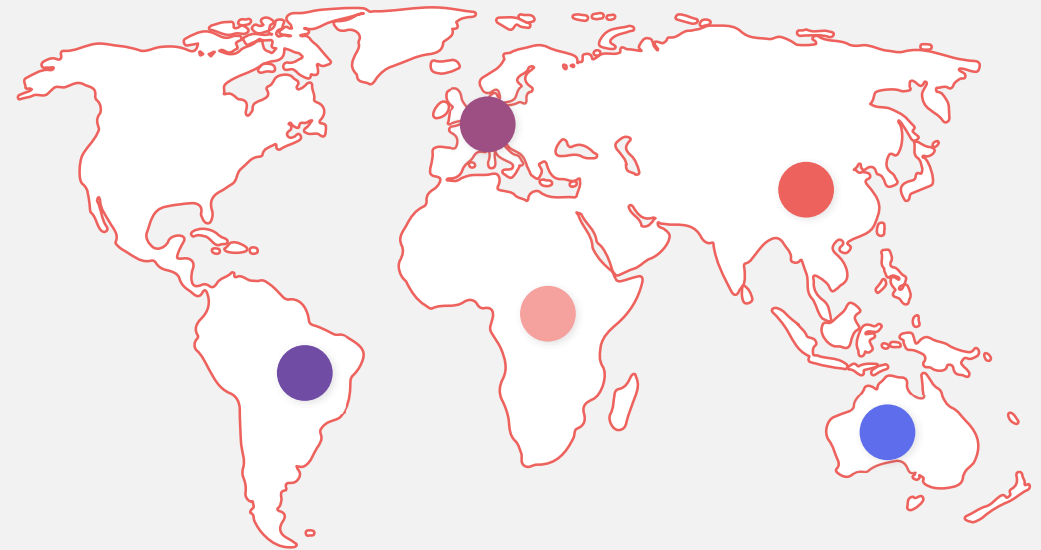
Region: Universal

Benefit: Limit peak power from the grid to save the peak tariff.

Emergency stop

Region: Universal

Benefit: Stop AC output quickly by pressing the button in an emergency.



Market-Specific Innovation & Compliance

*Availability of these features varies by country and inverter firmware version. Please consult our service team for details.

Significant Upgrades Compared with Gen1

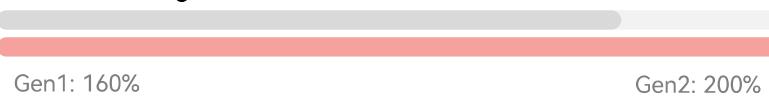


Higher Performance & Faster Returns

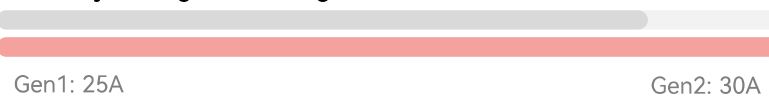
PV Input Current (A) **+33% Increase**



PV Oversizing Ratio (%) **+40% More Access**



Battery Charge/Discharge (A) **+20% Faster**



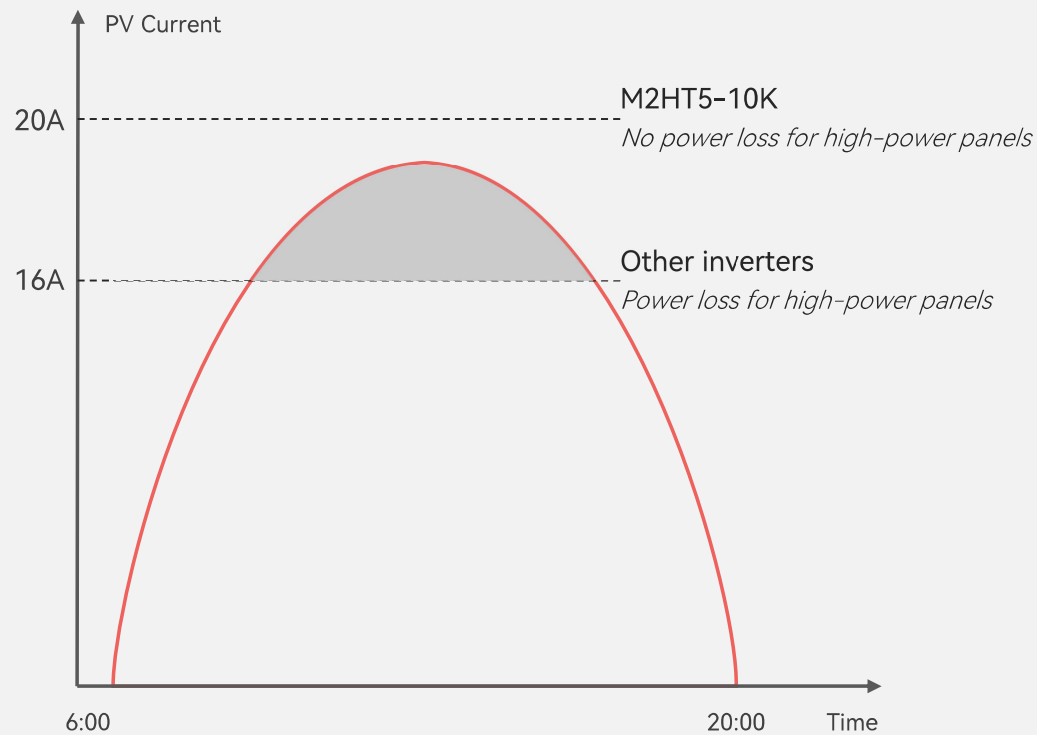
Superior User Experience

Feature	Gen1	Gen2 
Installation	Meter & CTs	CTs Only (Easier)
Configuration	Built-in WiFi	Bluetooth (Faster)
Half-wave Loads	Not Support	Support (Stronger)
IP Rating	IP65	IP66 (More resilient)
Operation	1 Button	4 Buttons (More convenient)
Communication	Modbus TCP	MQTT (More robust data transmission)

20A PV Input for Excellent Performance*

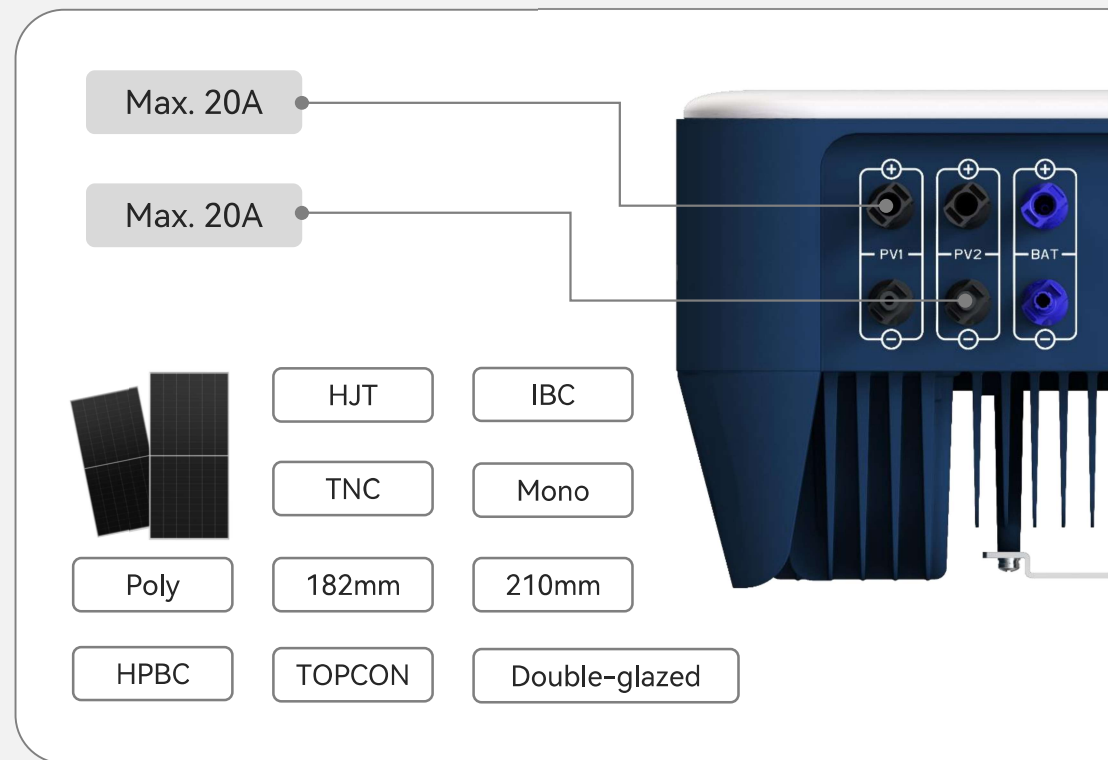


More Power Generation



*Hybrid inverters only.

Compatible with Future High-power Residential PV Panels



Direct CT Support



Secure Phase & Total Export Control

Strict export control to prevent fines, unexpected trips, or higher electricity rates. Compliance for every region.



Zero Extra Hardware Cost

Save hardware cost for the system by removing the smart meter and associated wiring accessories.



80% Faster Installation

Plug-and-play setup. No DIN-rail space issues or complex meter commissioning.

Simple Installation, Phase & Total Export Control

Redefining efficiency with no meter.

CT Phase-sequence and Direction Self-adaptation

Absolute Precision

100% accurate CT phase & direction detection

Intelligent Self-adaptation*

Automatic CT phase & direction calibration

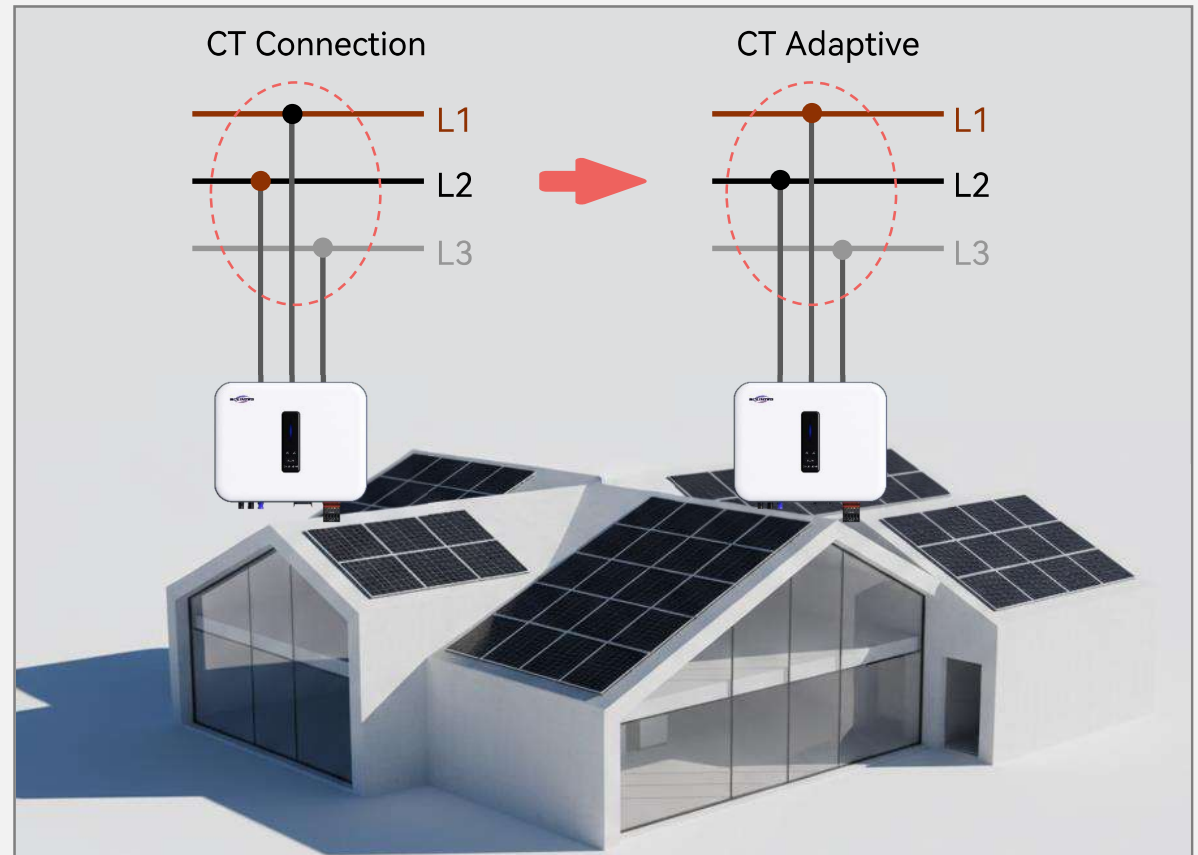
Significant Efficiency

20%-30% lower installation costs

Streamlined Maintenance-free

No field troubleshooting needed

*CT phase-sequence & direction adaptive function is currently in development and is scheduled for official release in Q3 2026.



Half-wave Loads Adaptability

Superior Appliance Compatibility

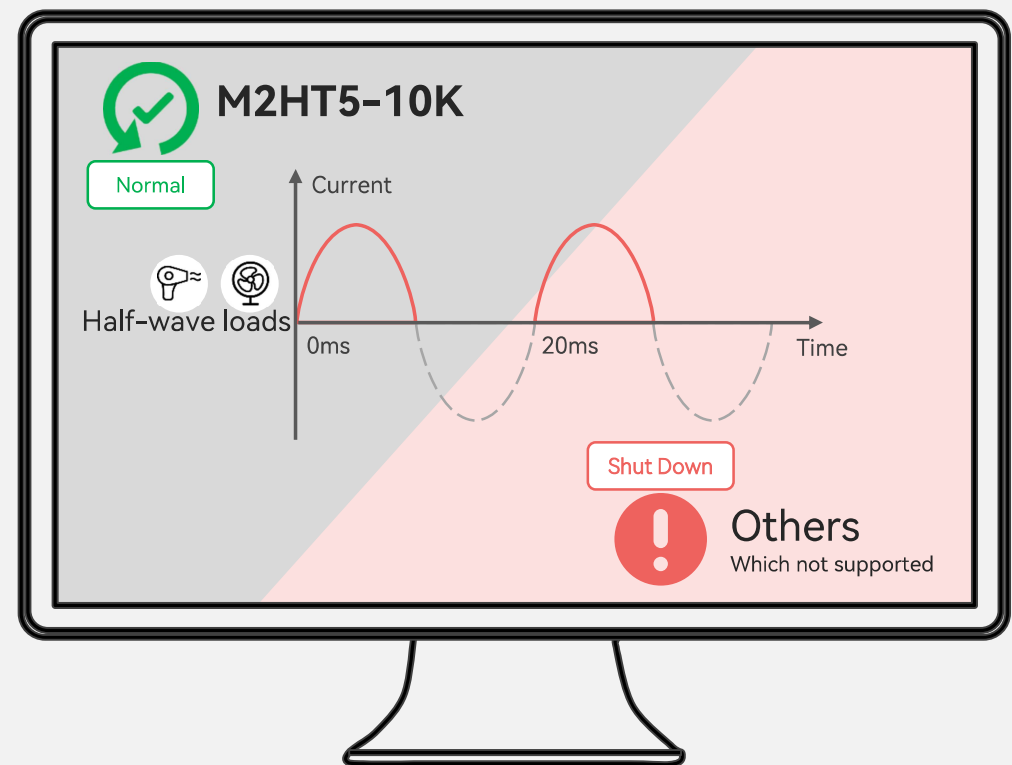
Handles half-wave loads (legacy hair dryers, heaters, and power tools) without triggering false protection or system shutdowns.

Zero Risk, Less Maintenance

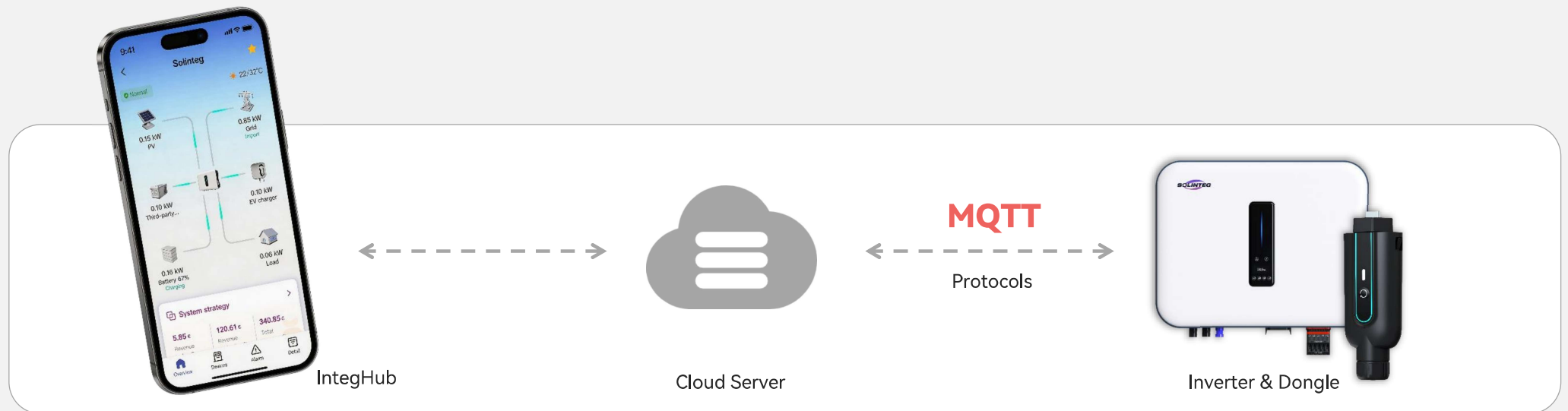
Protects sensitive home electronics by preventing waveform distortion. Drastically reduces after-sales service calls caused by load incompatibility.

Seamless Backup, No Compromises

Experience off-grid power that feels exactly like the grid. Reliable energy when you need it most, with zero trade-offs in performance.



MQTT: Faster, Safer & More Reliable Communication



Real-time Upload (3s)

Critical data refreshed every 3 seconds for precise management.



Ultra-fast Execution

Instant command response execution from cloud to device, such as ToU / power limit settings.



Robust Data Reliability

Maintains stable connection over 2G/3G, satellite, and unstable networks.



High Data Security

Native protocols safeguard data with uncompromised security.

Seamless Smart Load Management



Surplus Solar Utilization

Automatically activate large loads when PV production exceeds house demand. Save on electricity bills.

Load Shifting

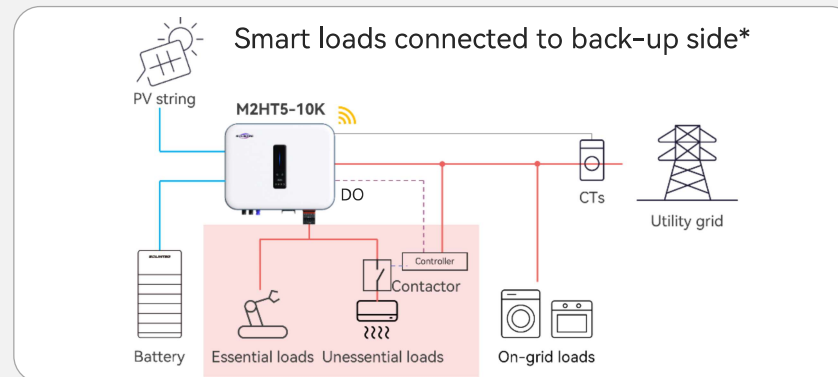
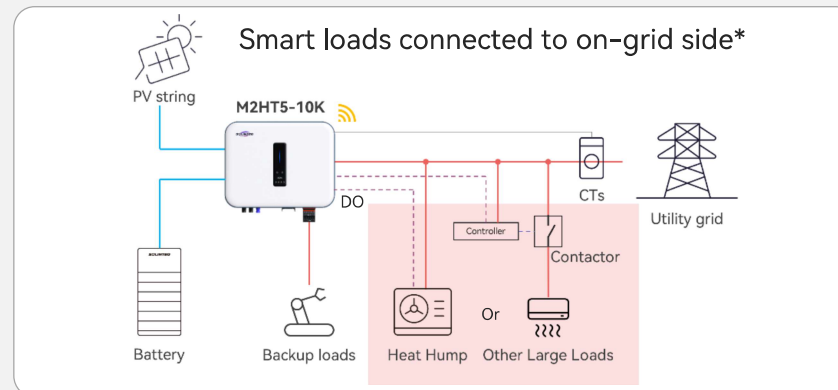
Trigger heavy loads during negative price or off-peak valley periods. Direct economic gain by time control.

Off-Grid SOC Guard

Smartly cut off unessential loads based on battery SOC. Ensures maximum uptime for essentials.

Automatic Backup Protection

Instant shutdown of heavy loads connected to back-up side upon grid failure. Protects system stability.



3 X Integrated DO Port

- DO 1/2: smart load management
- DO 1/2: generator control (DG)
- DO 3: reserved for future expansion

2 Connectivity Options for Smart Loads

- ① **SG-ready heat pump** - direct plug & play access
 - ② **Generic high loads** - smart controller* (from Solinteg) + contactor
- Supports 1 smart load channel (SG-ready or generic load) currently

* The smart controller for load management is currently under development by Solinteg.

02

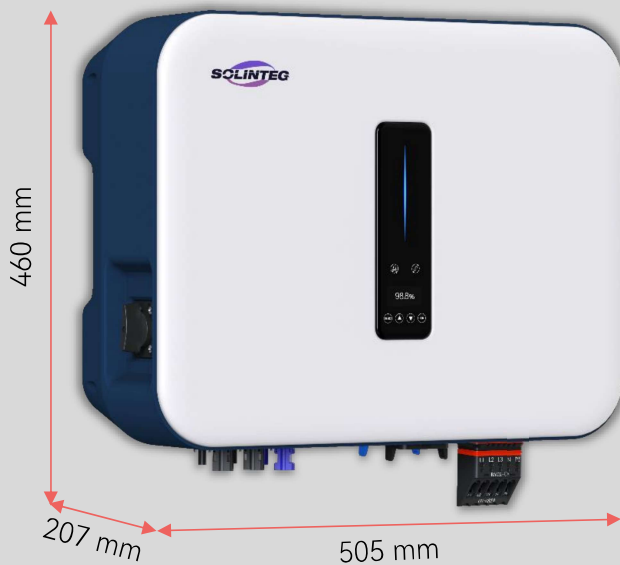
Parameters

SOLINTEG

Appearance & Dimension

Hybrid Inverter

M2HT-5/6/8/9.9/10K-30



Weight: 26.5 KG

AC Coupled Inverter

M2HT-5/6/8/9.9/10K-30-AC



Weight: 24 KG



Terminals

- [1] Battery Terminal**
For battery power connection
- [2] COM1 Port**
Comm. module connection port
- [3] COM2 Port**
Multi-functional comm. connector
- [4] COM3 Port**
Multi-functional comm. connector
- [5] AC Output Port**
For on-grid & back-up side connection

MPPT & PV Input Terminals (DC switch is at left side of inverter)



Parameters – PV Side



Model	M2HT-5K-30	M2HT-6K-30	M2HT-8K-30	M2HT-9.9K-30	M2HT-10K-30
PV Side					
Max. PV Array Power[kW]	10	12	16	20	20
Max. PV Input Voltage*[V]	1000				
Rated PV Input Voltage[V]	620				
Start-up Voltage[V]	135				
MPPT Operating Voltage Range * [V]	125-950*				
No. of MPP Trackers	2				
No. of Strings per MPPT	1/1				
Max. Input Current per MPPT[A]	20/20				
Max. Short-circuit Current per MPPT[A]	30/30				

200%
PV Oversizing

125-950V
Operating Voltage Range

20A
High PV Input Current

135V
Start-up Voltage

2 MPPTs
High PV Generation Eff.

Parameters – Battery Side



Model	M2HT-5K-30	M2HT-6K-30	M2HT-8K-30	M2HT-9.9K-30	M2HT-10K-30
	M2HT-5K-30-AC	M2HT-6K-30-AC	M2HT-8K-30-AC	M2HT-9.9K-30-AC	M2HT-10K-30-AC
Battery Side					
Battery Type	Lithium-ion				
Battery Voltage Range[V]	130-750				
No. of Battery Input	1				
Max. Charge/Discharge Current[A]	30/30				
Max. Charge/Discharge Power[kW]	7.5/5	9/6	12/8	14.9/9.9	15/10

130-750V

Wide Battery Voltage Range

3-12 Packs

Flexible Battery Connection

30A

Charge/Discharge Current

150%

Continuous Charging Power

Great Combination for Residential Storage



Enabling an Open
Energy Storage Ecosystem



 PYLONTECH

 SUNWODA
ENERGY

DYNESS

 SOLUNA
POWER DESIGNED FOR NIGHT AND DAY





 LITHIUMVALLEY

 shoto[®]
Stock Code: 06960.HK

 BETTENERGY

 SSLBAT[®]
Best Solution Lithium Battery





 BMZ.
The Innovation Group

 ZYC
ENERGY





 RAYSTECH
Your Trusted Solar Partner



 LEAPTON
SOLAR



*For more details, please refer to “Compatibility List of Solinteg”

Parameters – AC Side



Model	M2HT-5K-30	M2HT-6K-30	M2HT-8K-30	M2HT-9.9K-30	M2HT-10K-30
	M2HT-5K-30-AC	M2HT-6K-30-AC	M2HT-8K-30-AC	M2HT-9.9K-30-AC	M2HT-10K-30-AC
Grid Side (On-Grid)					
Rated Output Power [kW]	5	6	8	9.9	10
Max. Input Apparent Power[kVA]	10	12	12	14.9	15
Rated AC Voltage	3L/N/PE; 220/380V;230/400V;240/415V				
Rated AC Frequency[Hz]	50/60				
Power Factor	0.8 leading ...0.8 lagging				
Back-up Side (Off-Grid)					
Rated Output Power[kW]	5	6	8	9.9	10
Peak Output Apparent Power[kVA]	9.6 @10s	9.6 @10s	16@10s	16 @10s	16 @10s
On/Off-grid Switching Time	< 10ms				
Rated AC Voltage[V]	3L/N/PE; 220/380V;230/400V;240/415V				
Rated Output Frequency[Hz]	50/60				

Support up to 200% Grid Side AC Input Power

Support Back-up Side max. 200%@10s Peak AC Output Power

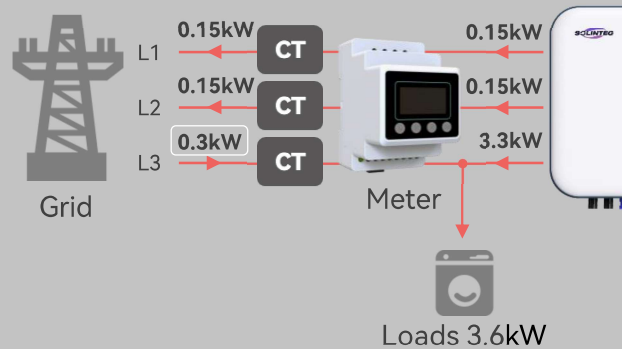
On/Off-grid Switching within 10ms

Support Generator Connection for 100% Input Power

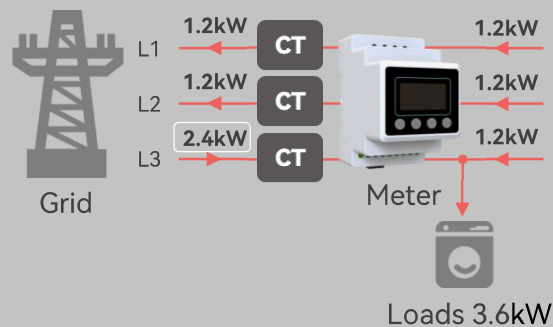
110% Unbalance Output

Other 10K

100% Phase Unbalanced output supported

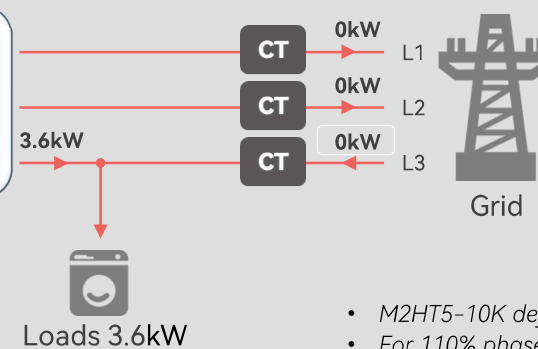


100% Phase Balanced output supported



M2HT 10K

110% Phase Unbalanced output supported*



Notice

- M2HT5-10K defaults to 100% phase unbalance.
- For 110% phase unbalance, the "Overload" setting must be enabled via IntegHub.



Bill Savings

Load-based power adjustment optimizes ROI.



Zero PV Waste

Minimizes PV waste under export limitations.



Smart Breaker Scaling

Accommodates high loads without upgrading breakers or increasing fixed monthly fees.

AC power setting

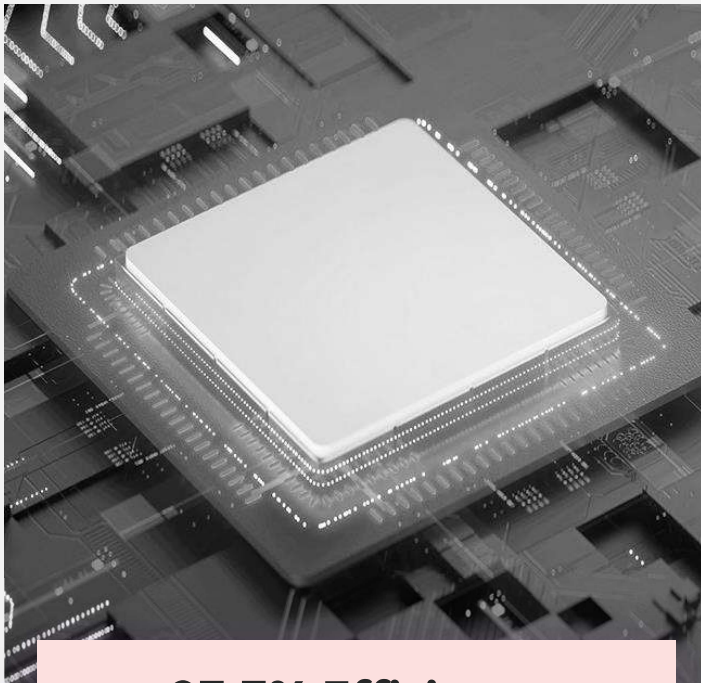
Rated
Max. output power = Rated output power

Overload
Max. output power > Rated output power

Underload
Max. output power < Rated output power



Superior manufacturing and design lead to high efficiency, high protection levels, and low noise



97.7% Efficiency
Industrial-leading



IP66
Fearless of outdoor installation



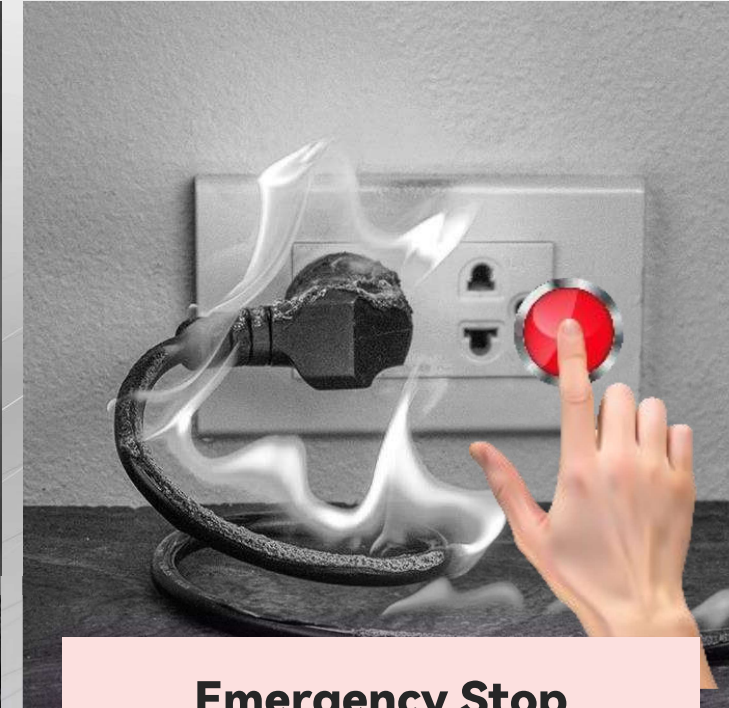
< 25dB Working Noise
Whisper-level presence



**< 10ms
On/Off-grid Switch**



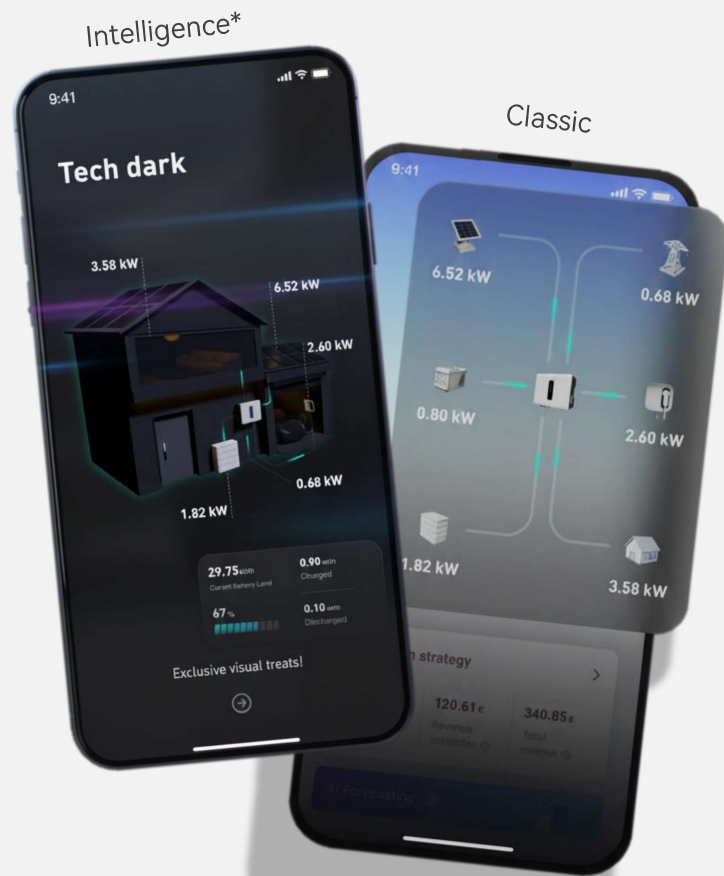
**Type2 SPD
In both DC&AC side**



**Emergency Stop
Shut down the AC Output
immediately**

**Never Fear Power Outages, Bad Weather and Emergencies
Stay Connected, Safe, and Secure**

Monitoring Platform & Built-in EMS



IntegHub - Dual APP experience

5 Pre-set Modes

General Mode

 *Maximize self-sufficiency*

Feed-in Mode

 *Grid feed-in priority*

ToU Mode

 *Peak-valley arbitrage, 96 time periods*

Back-up Mode

 *Continuous power supply when off-grid*

Off-grid Mode

 *Self-built microgrid system*

Master energy with 5 modes tailored to specific needs & grid

* The Intelligence version is currently available for end-user accounts; support for organizational accounts is under development.

All-scenario Peak Shaving

- **Bill optimization by reducing the peak shaving value**
- **All-mode integration seamlessly**
- **Customizable intervals with independent peak power**

Peak shaving power:

10kW -> 2.5kW

Saves:



Per month

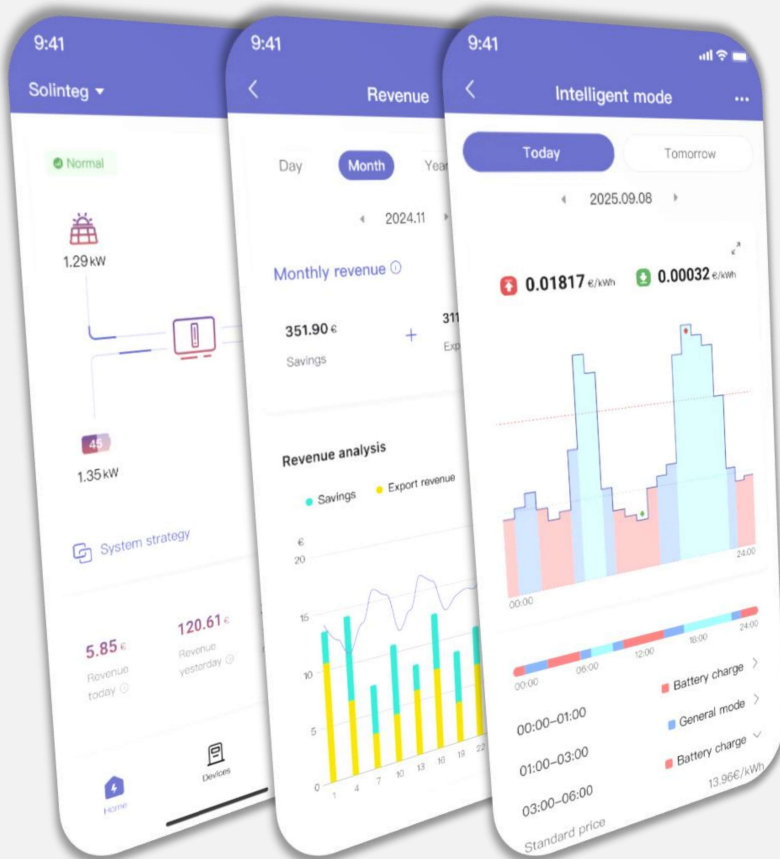
39.27€

Sample Charge Summary for Europe

Charge Description	Amount	Rate	Cost Before	Cost Now
Usage	300kWh	0.3€/kWh	90€	90€
Monthly Fee	1month	15€/month	15€	15€
Peak Capacity Charges	10kW	4€/kW	40€	10€
Environmental Levy		10%	14.5€	11.5€
VAT		19%	30.31€	24.04€
Total			189.81€	150.54€



Intelligent Dynamic Pricing for Arbitrage



23 Countries Covered

3 Platforms Integrated



Intelligent Dynamic Pricing for Arbitrage



Master the Volatility, Maximize the Arbitrage



Zero-Touch

100% automated energy optimization

Local Focus

Local currency & easy operation

Cost Cut

Significantly lower electricity bills

Generate returns from energy storage arbitrage

Advanced Technology

15/60min dynamic precision available

*Availability of the feature varies by country. Please consult service team for details.

AI Power Generation Forecasting

Up to 14-day Prediction

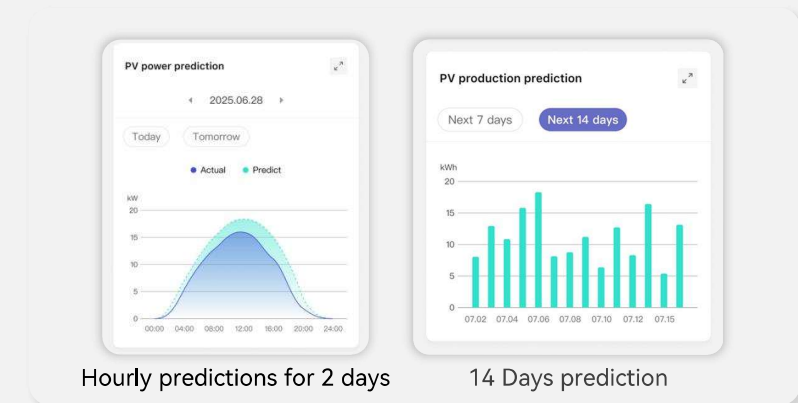
It can predict hourly generation data for today and tomorrow, as well as daily generation data for the next 14 days.

Advanced Technology Based on AI

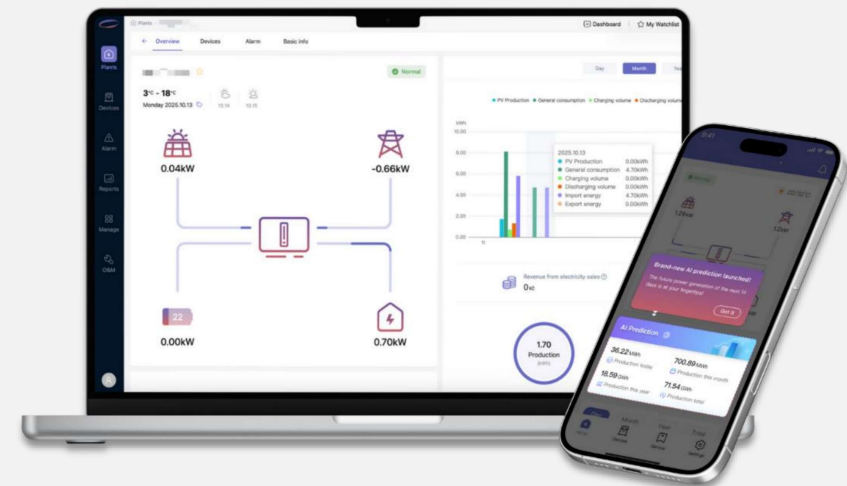
AI-powered technology, combined with weather data and the power plant's historical data, makes future power generation at your fingertips.

Empowering the Future

With power generation prediction, future energy management will be more intelligent and cost-effective.



Generation Forecasting



03

Application Scenarios

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Application Scenarios for M2HT5-10K(-AC)



1. New installation
2. AC-coupled retrofit
3. DG integration
4. On/Off-grid parallel

Versatile application scenarios

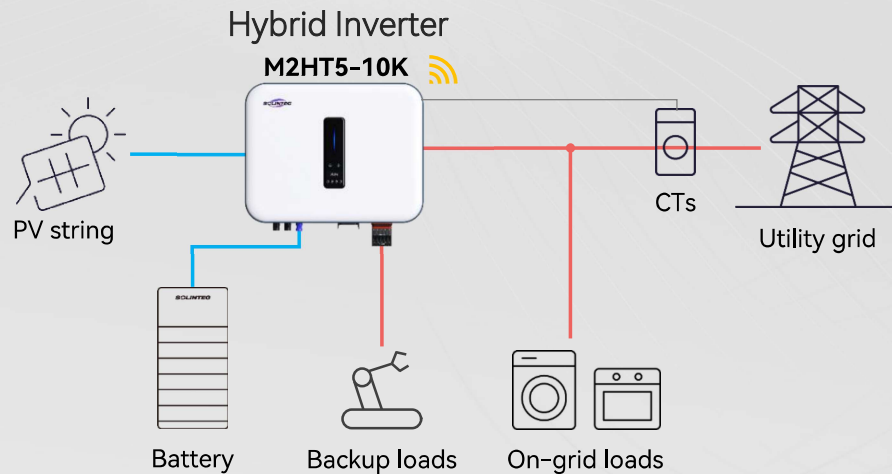
1. Maximize self-sufficiency
2. Grid feed-in priority
3. Peak shaving
4. ToU price arbitrage
5. Dynamic pricing
6. VPP integration
7. External EMS dispatching
8. Smart load management
9. Unstable grid operation
10. Microgrid operation

Energy management scenarios



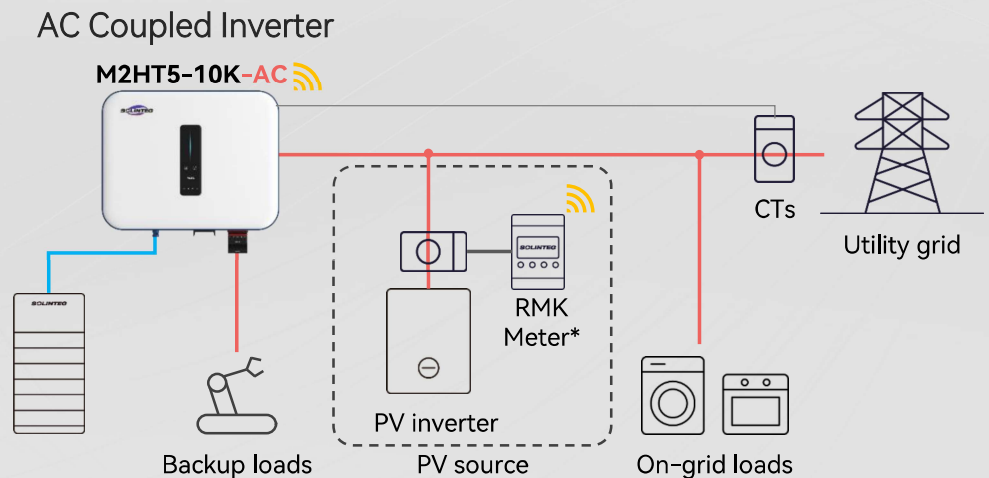
Versatile Application Scenarios

1 New installation



- Built-in 5 work modes
- Support dynamic pricing & VPP
- 24/7 monitoring
- Power export limitation

2 AC-coupled retrofit



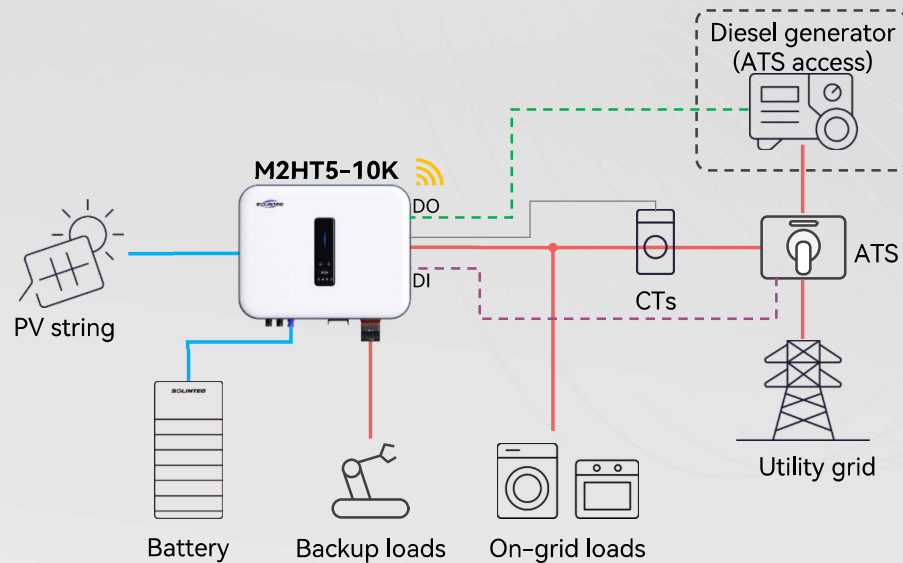
- Built-in 5 work modes
- Support dynamic pricing & VPP
- 24/7 monitoring by adding an RMK/RMK meter

* To achieve 24/7 system monitoring in AC-coupled scenarios, an RMK or RMM meter is required. When using an RMM, it must communicate with the inverter via RS485.

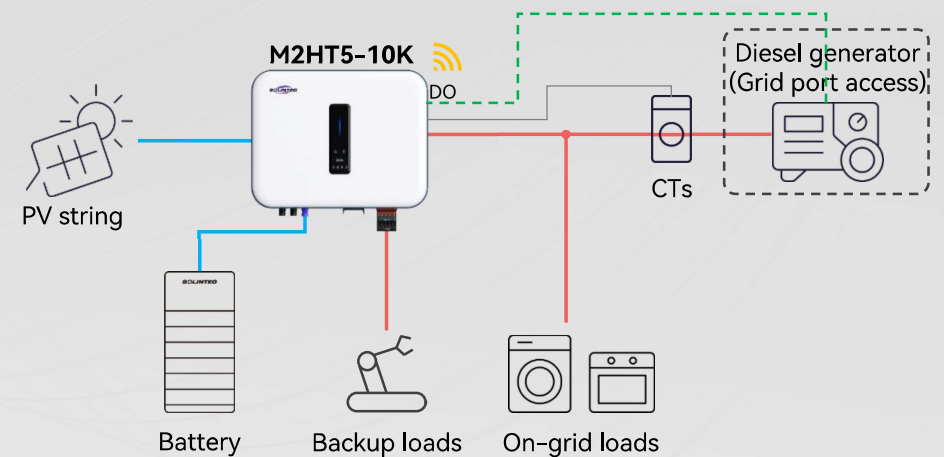
Versatile Application Scenarios

3 Diesel generator integration

DG solution for unstable grid scenarios



DG solution for off-grid scenarios



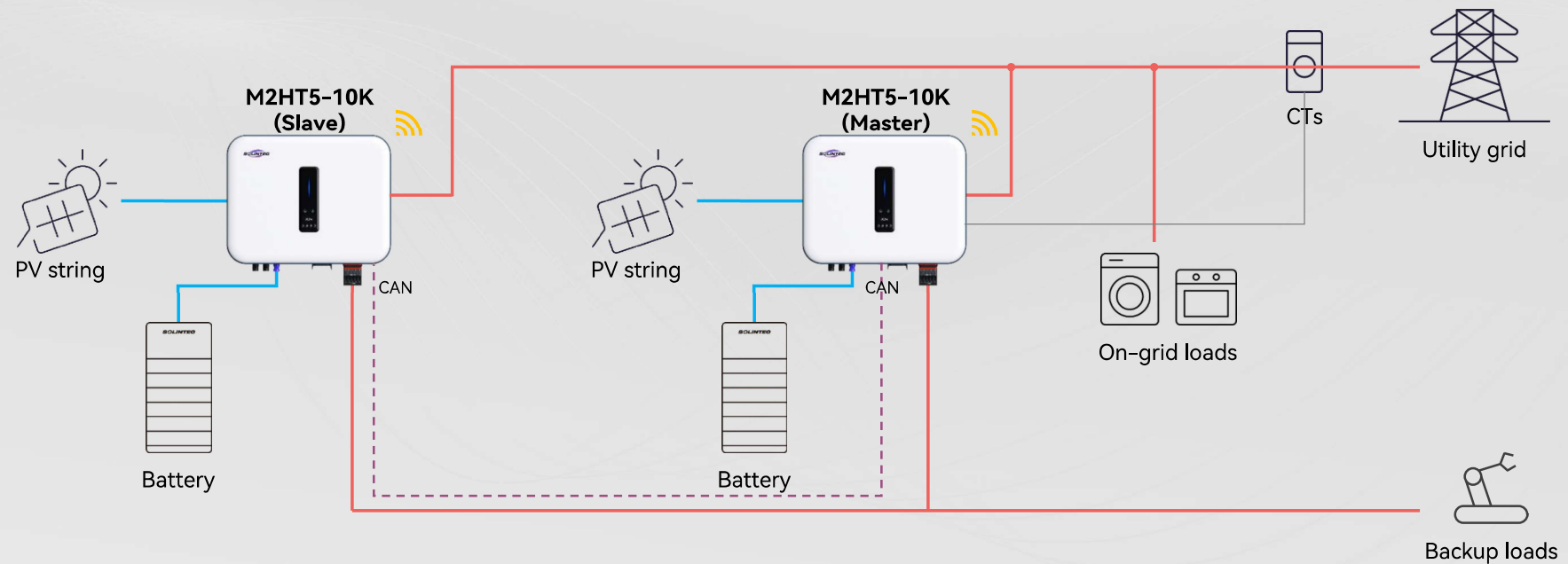
Benefits

- Seamless integration of **new or existing DG**
- Intelligent automatic **start/stop control for DG**
- **Supports DG-powered load supply and battery charging**
- **Prevents reverse power flow to DG**

*The DG solution is currently in development and is scheduled for official release in Q3 2026.

Versatile Application Scenarios

4 On/Off-grid parallel

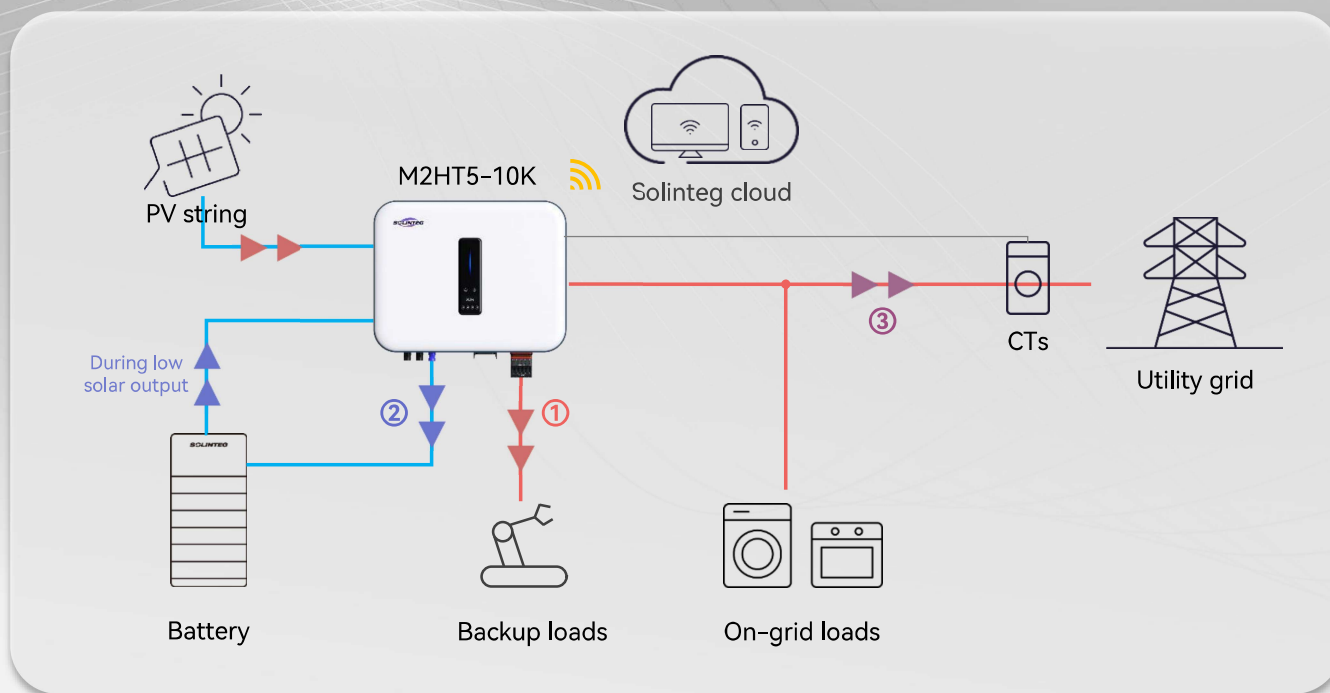


Benefits

- Perfect for **up to 20kW residential project**
- Enhanced backup power for **larger home loads**
- Suitable for **on-grid/off-grid/unstable grid scenarios**
- Built-in **5 work modes** for system-level use

Energy Management Scenarios

Scenario 1: Maximize self-sufficiency



Work mode selected:

- General mode

Benefits:

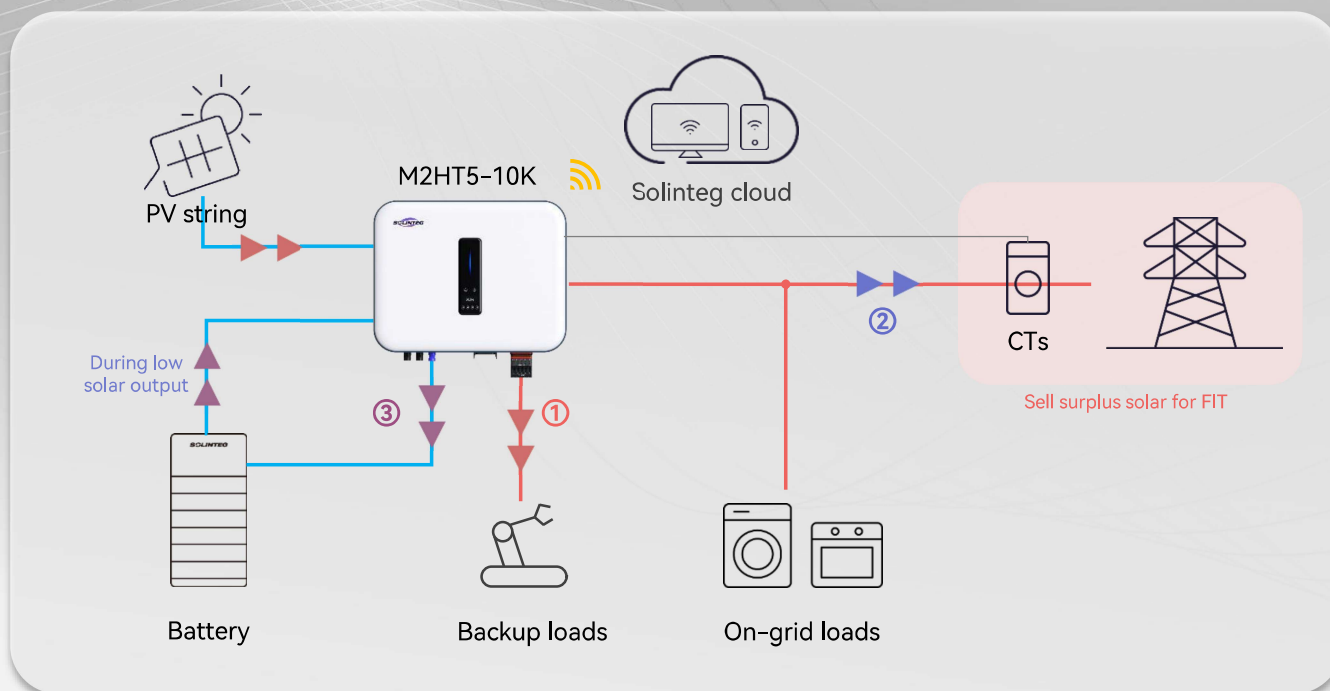
- Maximize PV usage and reduce grid reliance.
- Cut electricity bills by storing excess solar power for when you need it.

Power dispatch:

- When PV is sufficient,
Priority: loads > battery > grid(if permitted)
- When PV is not sufficient
Priority: battery discharge > grid supply

Energy Management Scenarios

Scenario 2: Grid feed-in priority



Work mode selected:

- Feed-in mode

Benefits:

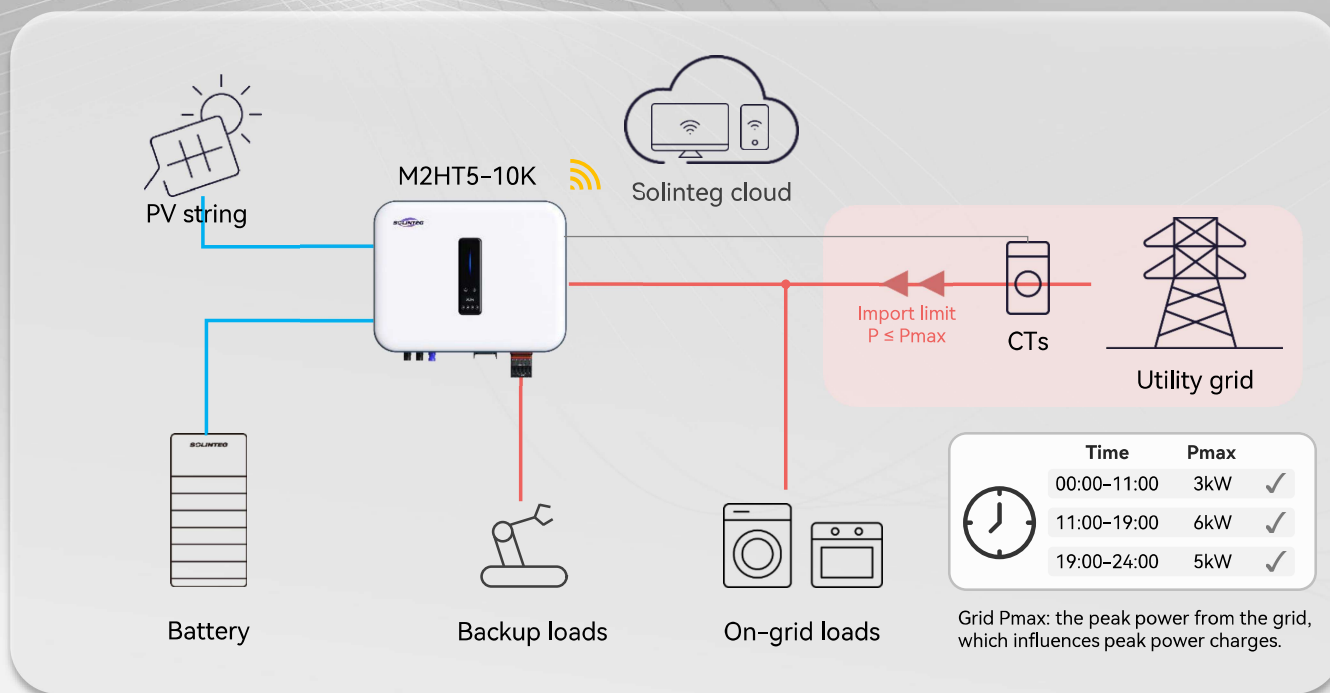
- Prioritize grid exports to capitalize on high feed-in tariffs (FIT) and accelerate ROI.
- Minimize solar energy waste by shifting charging to peak hours with %Pn export limits.

Power dispatch:

- When PV is sufficient,
Priority: loads > grid > battery
- When PV is not sufficient
Priority: battery discharge > grid supply

Energy Management Scenarios

Scenario 3: Peak shaving



Function settings:

- Turn on the “Peak shaving control” function

Benefits:

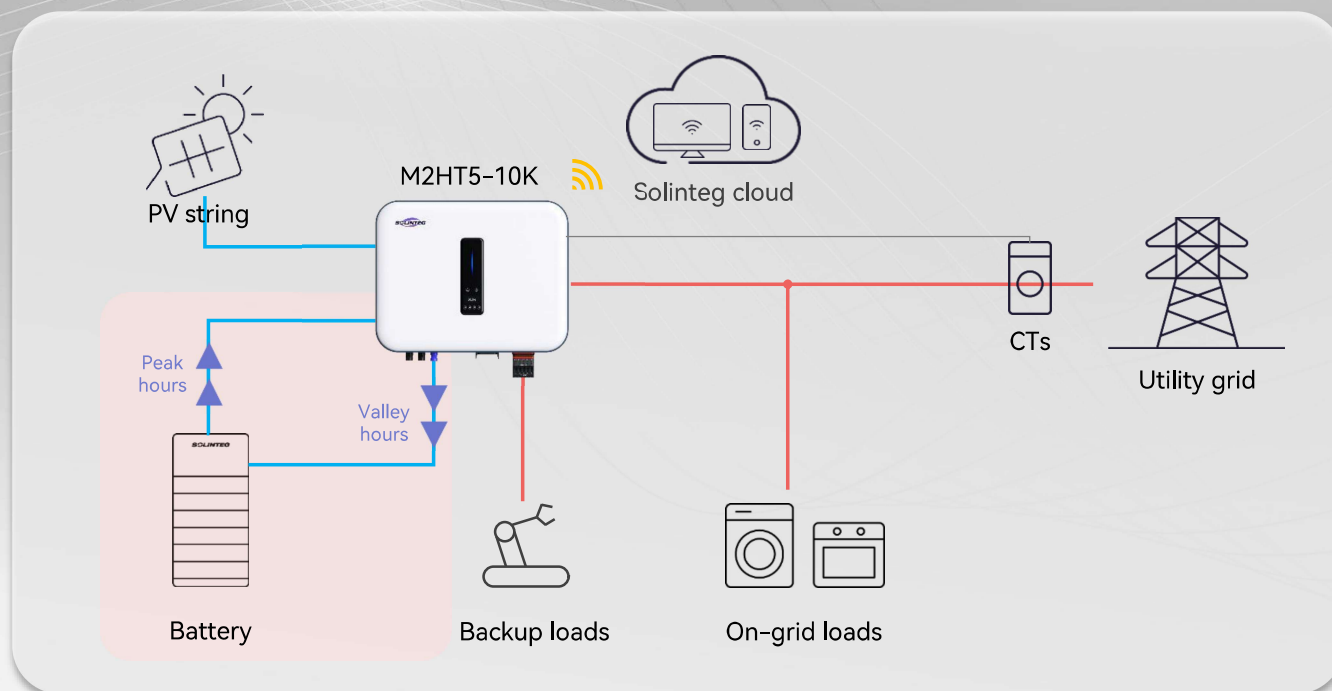
- Reduce peak power charges through smart usage control.
- Support setting custom peak power limits for different time slots.
- Available across all work modes.

Power dispatch:

- When Load < PV + Grid Pmax
Power dispatch: PV + grid -> loads + battery
- When Load > PV + Grid Pmax
Priority: PV + grid + battery -> loads

Energy Management Scenarios

Scenario 4: ToU price arbitrage



Work mode selected:

- ToU mode

Benefits:

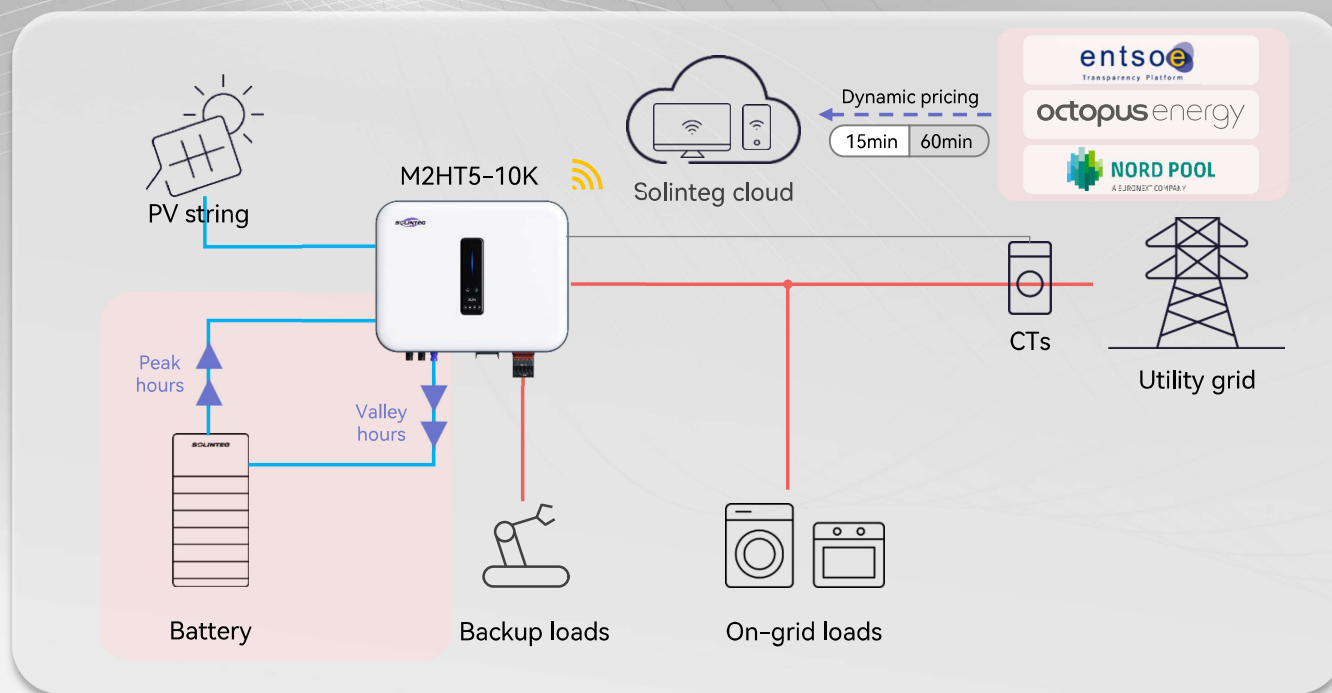
- Capture arbitrage from peak/off-peak pricing
- Up to 24 time slots enable multiple daily arbitrage cycles.

6 sub-modes for flexible use:

- General mode
- Feed-in mode
- Peak shifting
- Battery charge mode
- PV charging
- Battery discharge mode

Energy Management Scenarios

Scenario 5: Dynamic pricing



System strategy:

- Intelligent mode

Benefits:

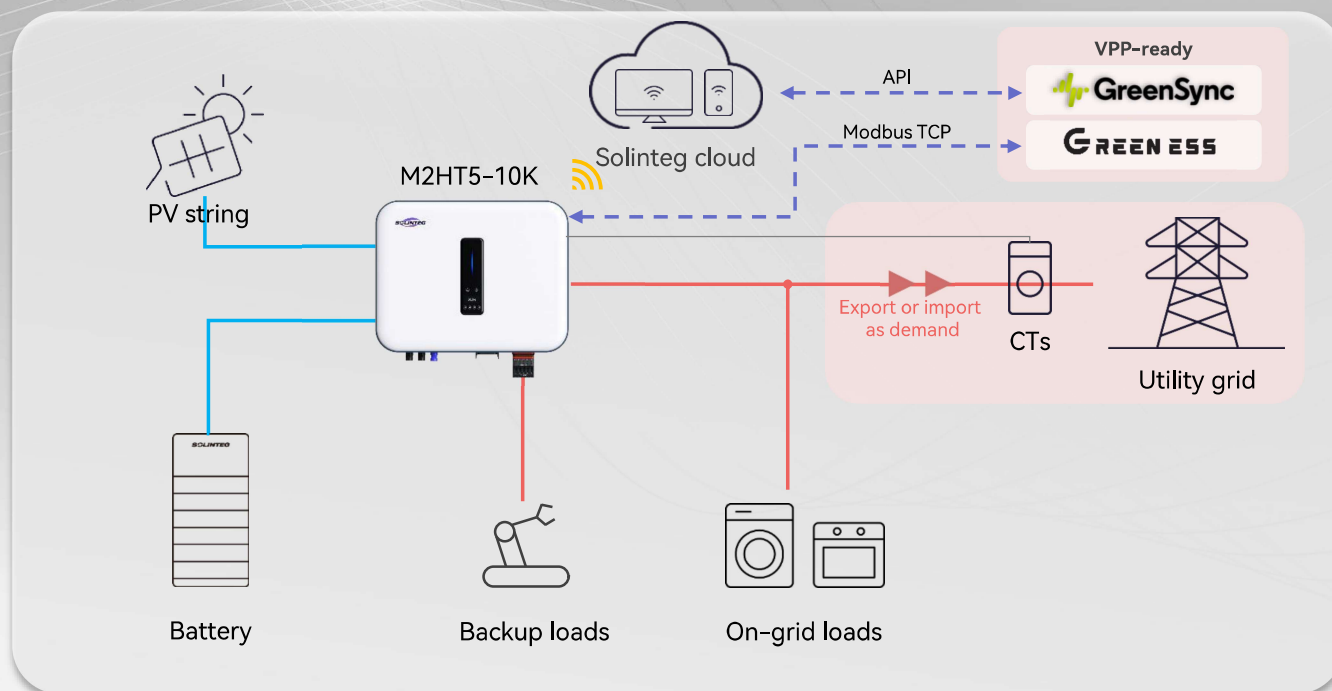
- Effortless energy management by automatic updating.
- Reduce energy costs by smart charging and discharging according to your habits.
- Support local currency settlement

6 sub-modes for automatic use:

- General mode
- Feed-in mode
- Peak shifting
- Battery charge mode
- PV charging
- Battery discharge mode

Energy Management Scenarios

Scenario 6: VPP integration



Benefits:

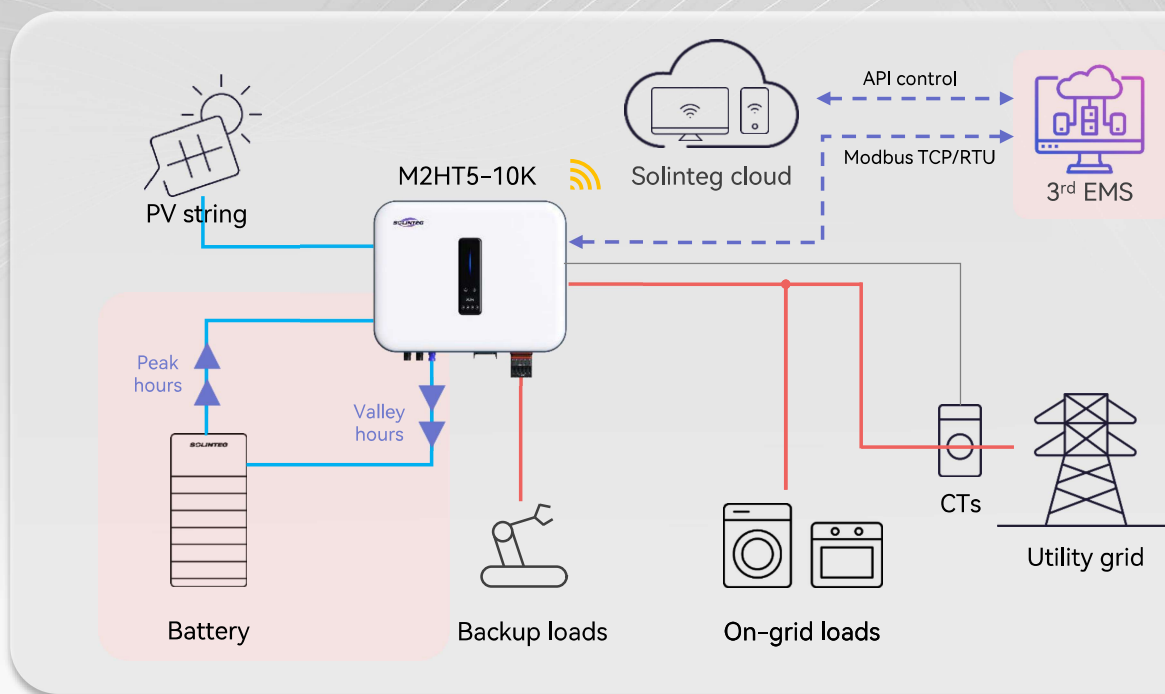
- High VPP income
Earn income from battery discharge during peak events or frequency control (FCAS).
- Upfront hardware discounts
Receive subsidies on storage installation costs from VPP providers.
- Smart arbitrage
Automatically export energy during high-price spikes for profit.

Energy Management Scenarios

Scenario 7: External EMS dispatching

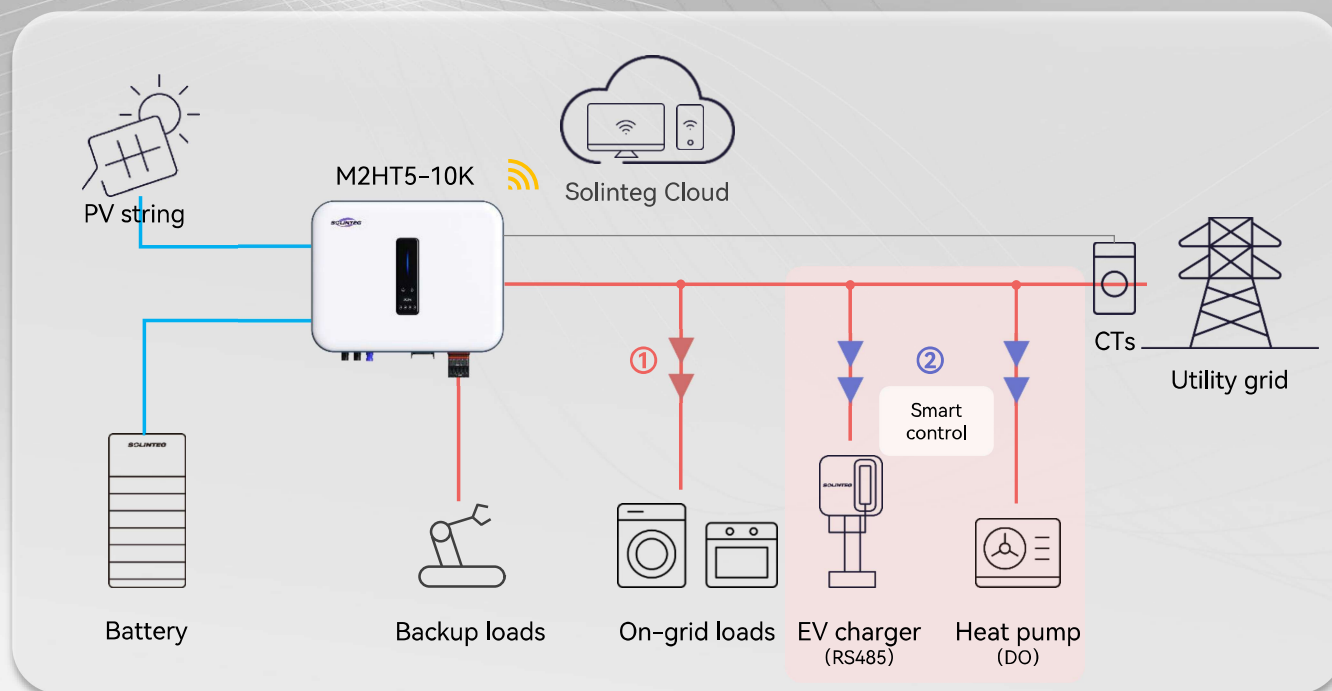
Benefits:

- 3rd EMS integration maximizes inverter value through AI optimization, seamless multi-device orchestration, and VPP readiness, boosting both efficiency and ROI



Energy Management Scenarios

Scenario 8: Smart load management



SG ready heat pump control:

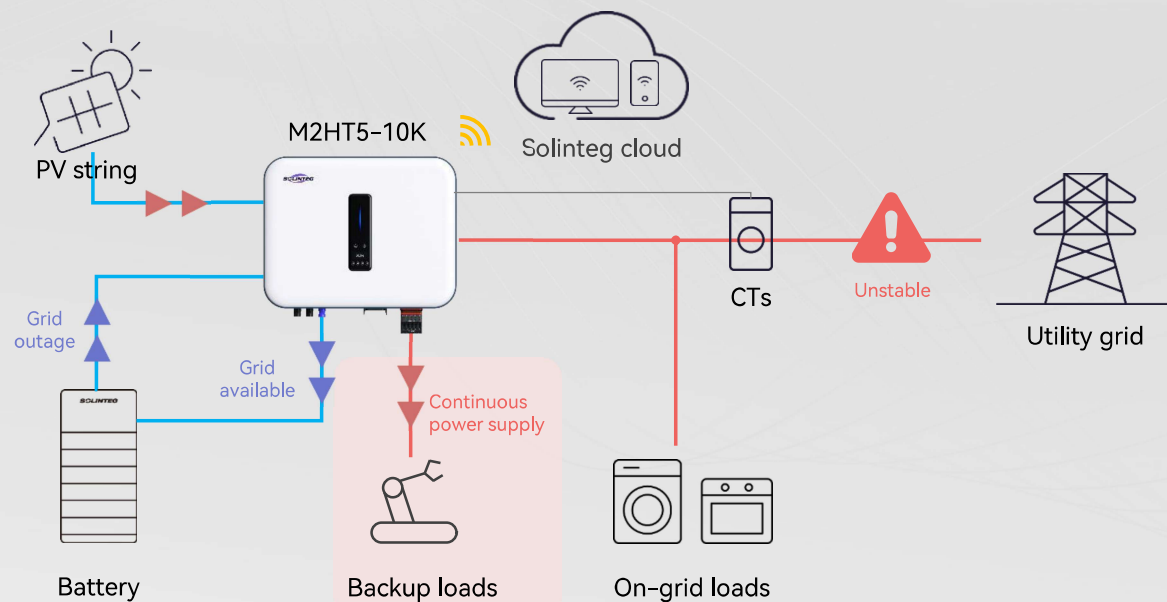
- Flexible control modes to suit any situation.
- Surplus PV utilization, dramatically reducing the consumption of high-cost grid electricity.
- Habit-adaptive timing, ensuring comfort without the need for constant adjustments.

Solinteg EV charger control:

- Green mode: maximum PV usage to achieve zero running cost.
- Commute mode: balance of cost and readiness by optimizing daily charging.

Energy Management Scenarios

Scenario 9: Unstable grid operation



Work mode selected:

- Backup mode

Benefits:

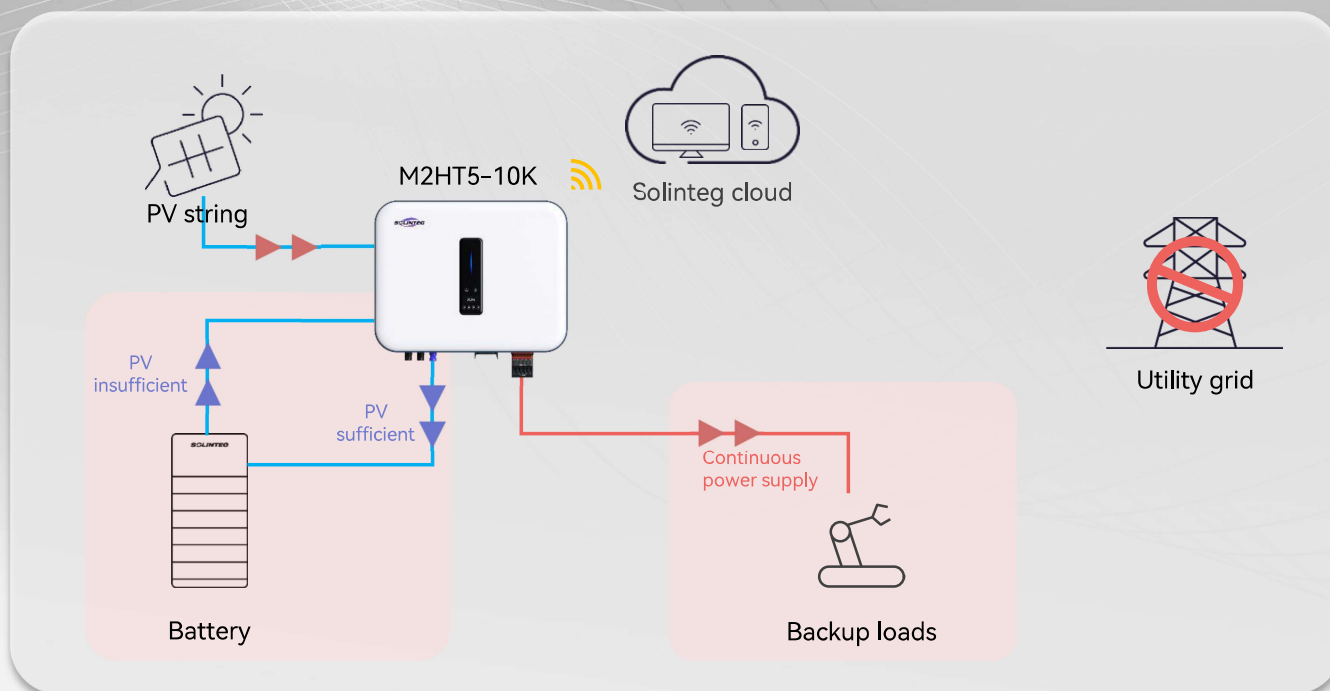
- Continuous power supply during grid outages.
- Prevents financial losses for businesses that rely on continuous power.

Power dispatch:

- When the grid is available, Battery charges until full (No discharge).
- When the grid fails, Battery discharges jointly with PV to supply backup loads continuously.

Energy Management Scenarios

Scenario 10: Microgrid operation



Work mode selected:

- Off-grid mode

Benefits:

- Complete energy independence. 100% self-sufficiency, no reliance on grids.

Power dispatch:

- When PV is sufficient, Battery charges until full (No discharge).
- When PV is insufficient, Battery discharges jointly with PV to supply backup loads continuously.

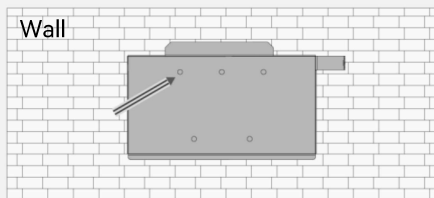
04

Installation

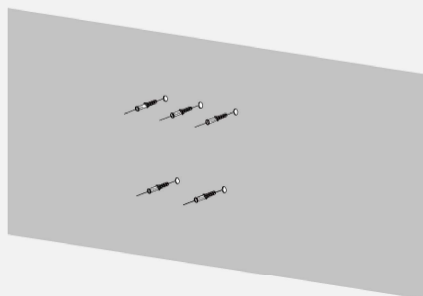
SOLINTEG

Mounting the Inverter

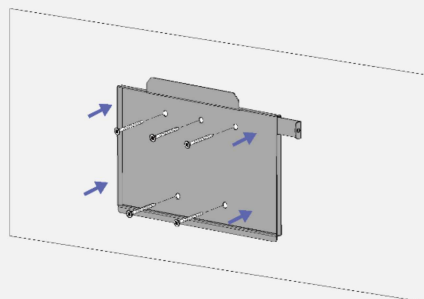
① Bracket installation



1. Level bracket and mark holes.

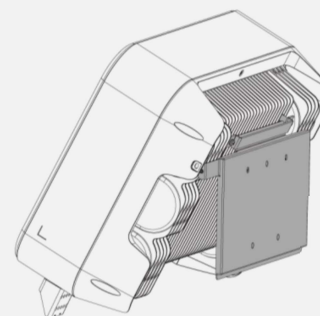


2. Drill, clean, and insert expansion plugs.



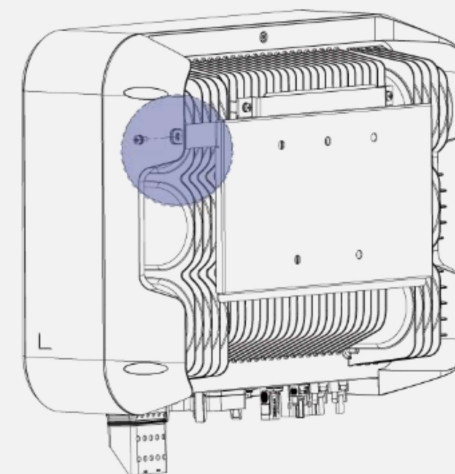
3. Screw bracket to wall.

② Inverter mounting



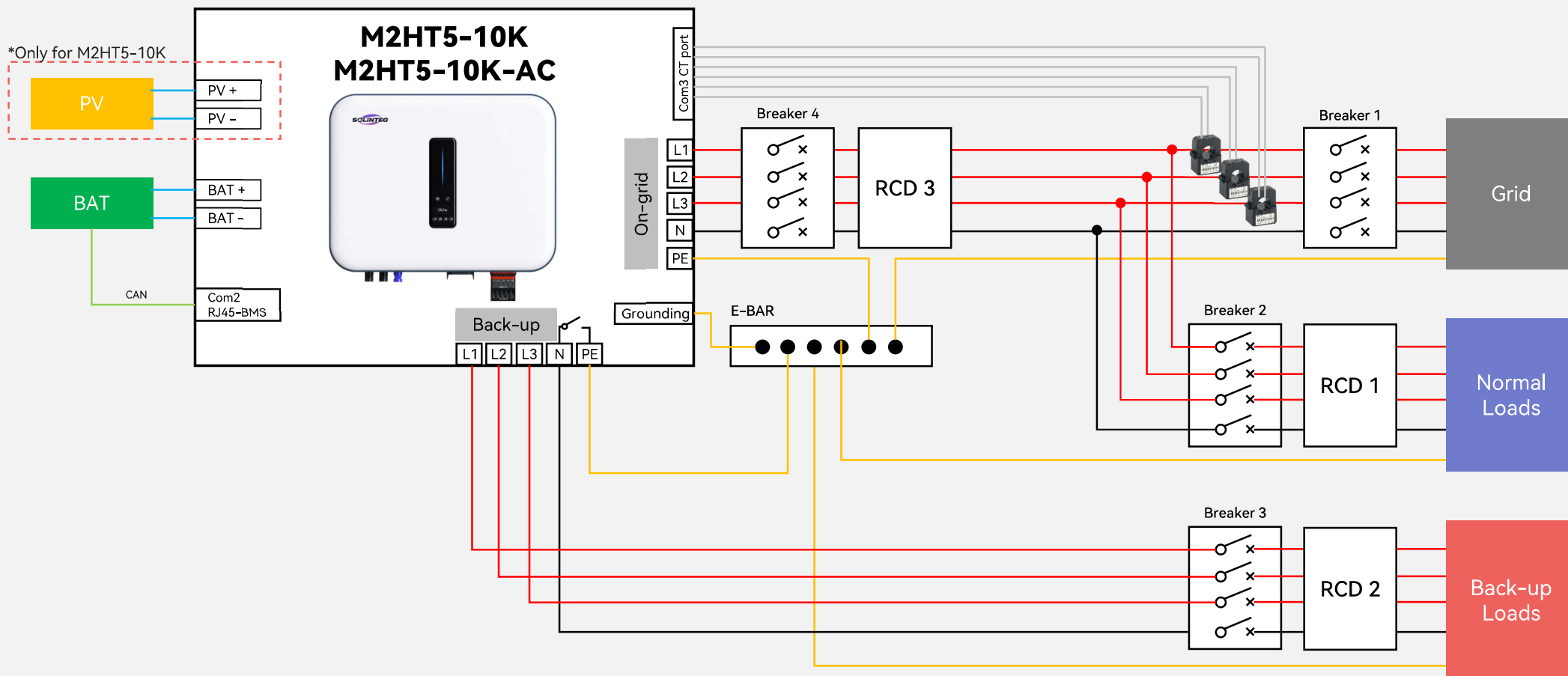
1. Mount inverter onto the bracket, aligning the rear tracks.

2. Fasten with screws
(Recommended torque: $1.5 \pm 0.15 \text{ N} \cdot \text{m}$).



Wiring Diagram

*This diagram is an example without special requirements on electrical wiring connections.
The neutral line of the AC supply can be isolated or switched. Applicable to most countries.

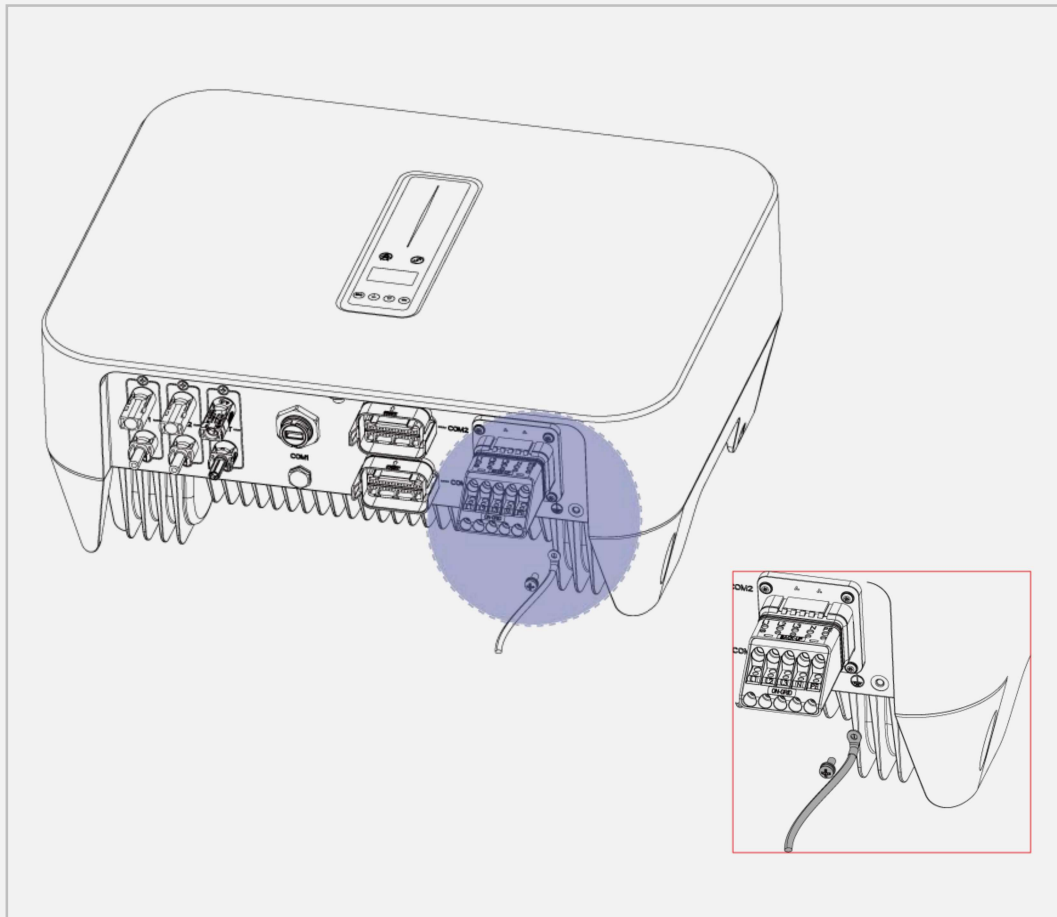


Breaker & RCD Standard

Ensure breaker and RCD selection complies with the recommended table, site conditions, and all applicable local regulations.

	M2HT-5K(-AC)	M2HT-6K(-AC)	M2HT-8K(-AC)	M2HT-9.9K(-AC)	M2HT-10K(-AC)
Breaker 1	Depends on household loads and inverter capacity				
Breaker 2	Depends on normal loads				
Breaker 3	20A			25A	
Breaker 4	20A	25A		32A	
RCD 1	30mA type A (Comply with local regulation)				
RCD 2	30mA type A (Comply with local regulation)				
RCD 3	The inverter is equipped with a residual current monitoring unit (RCMU), which will immediately disconnect from the grid upon detecting a fault current exceeding the threshold. If an additional standalone residual current device (RCD) is installed, a Type A RCD is recommended, with a tripping current of 100 mA.				

Electrical Connection - Grounding

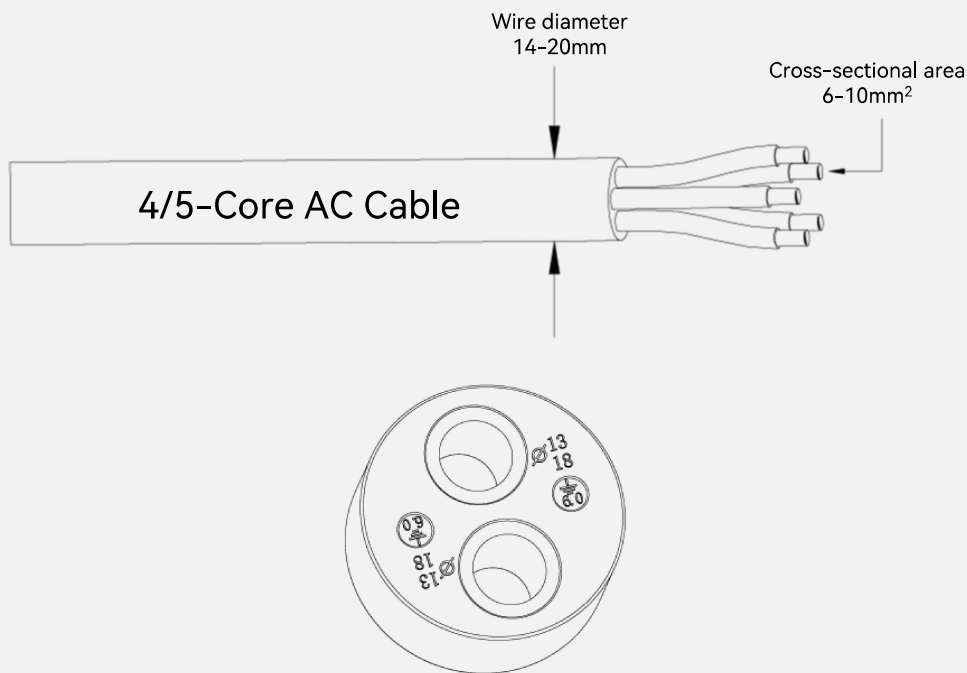


Ground terminal connection steps:

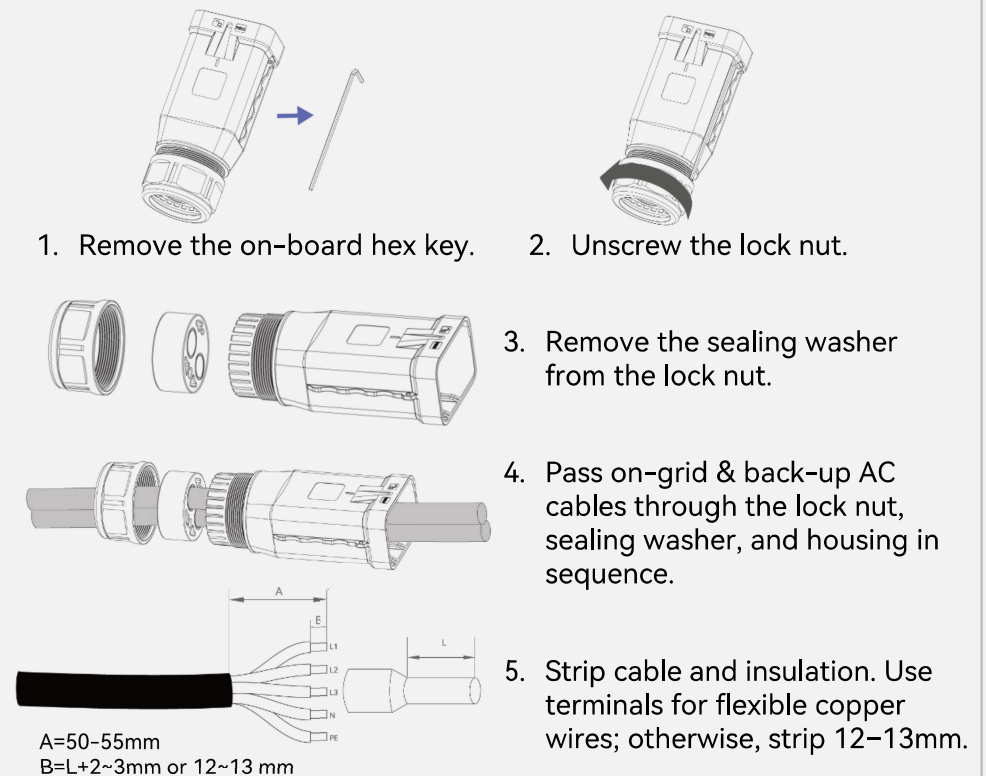
1. The external grounding terminal is located at the lower right side of the inverter
2. Use a crimping plier to crimp the PE conductor into the OT terminal. Then, use a screwdriver to secure the OT terminal onto the inverter's external grounding bolt.
3. Connect the other end of the PE conductor to the grounding copper bus bar.

Electrical Connection – AC Side

① Cable preparation for on-grid / back-up sides

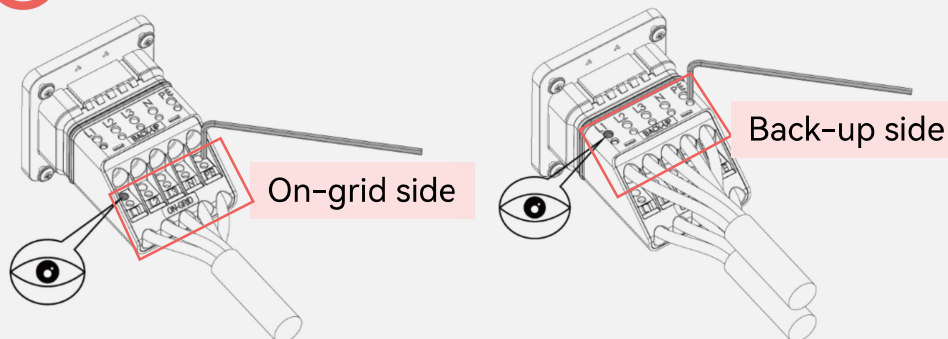


② Wiring procedure

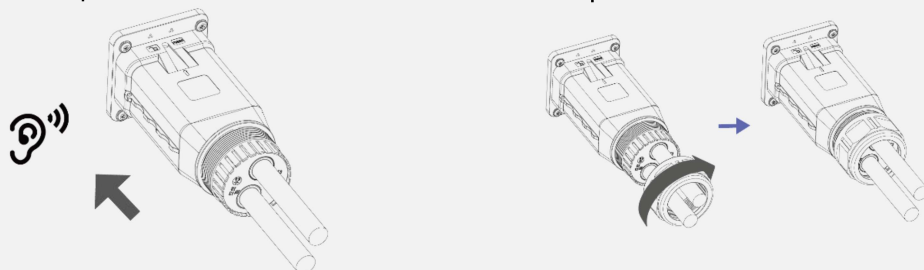


Electrical Connection – AC Side

② Wiring procedure

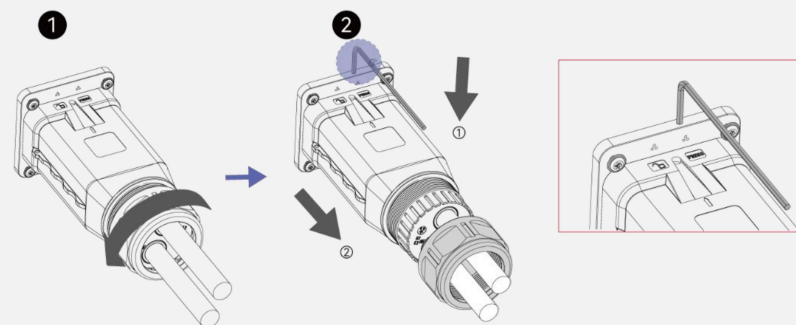


6. Insert cable into **on-grid terminal**. Check alignment through window. Torque screws to $2.0 \pm 0.1 \text{ N} \cdot \text{m}$.
7. Insert cable into **back-up terminal**. Check alignment through window. Torque screws to $2.0 \pm 0.1 \text{ N} \cdot \text{m}$.



8. Plug the connector into the inverter port until a "click" sound is heard.
9. Use an open-end wrench to tighten the nut and complete the installation.

③ Disassembly steps



1. Rotate the nut in the reverse direction.
2. Use the built-in wrench to press the unlock position, and hold the connector to pull it backward to complete the removal.

Electrical Connection – PV String

①

Name	Outside diameter	Conductor cross-section
PV Cable	5.9-8.8 mm	4 mm ² (12AWG) or 6mm ² (10WAG)

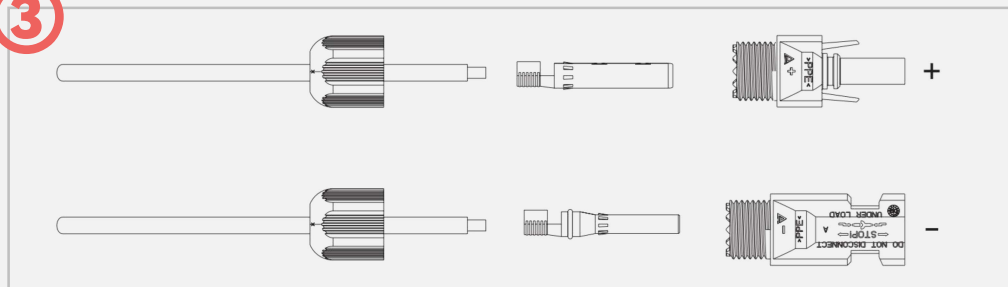
1. Select the appropriate cable based on specifications

②



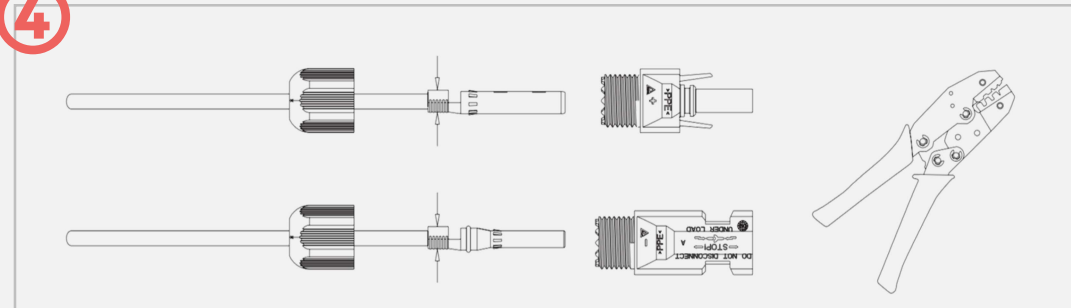
2. Peel off the DC cable insulation sleeve for 7 mm.

③



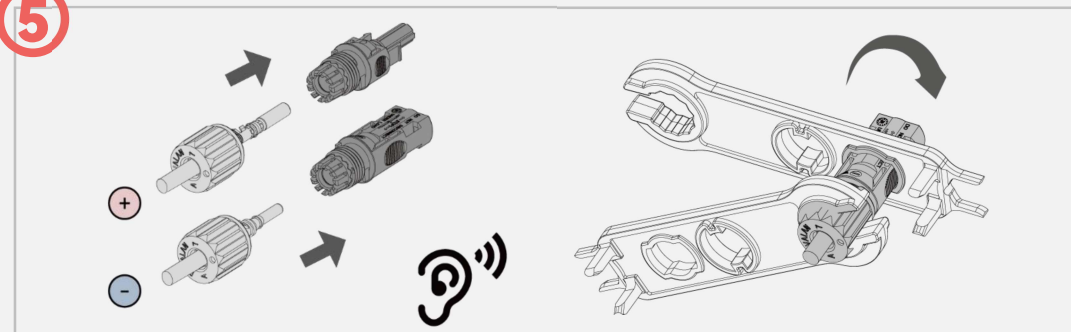
3. Disassemble the PV connector in the accessory bag.

④



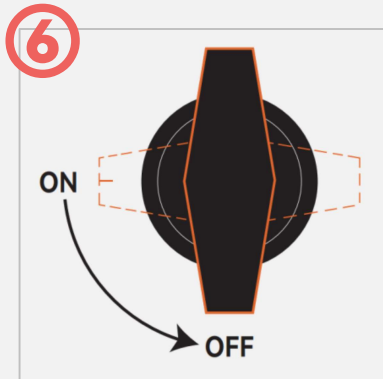
4. Insert the DC cable through the DC connector nut into the metal terminal and press the terminal with a professional crimping plier.

⑤

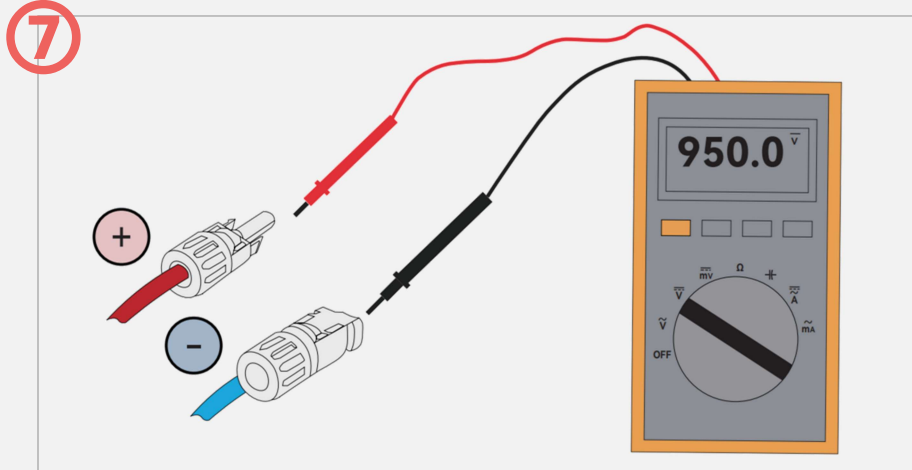


5. Insert the positive and negative cables into the corresponding positive and negative connectors, pull back the DC cable to ensure that the terminal is tightly attached in the connector. To ensure proper sealing of the terminal, use an open-end wrench to securely tighten the nut to the end.

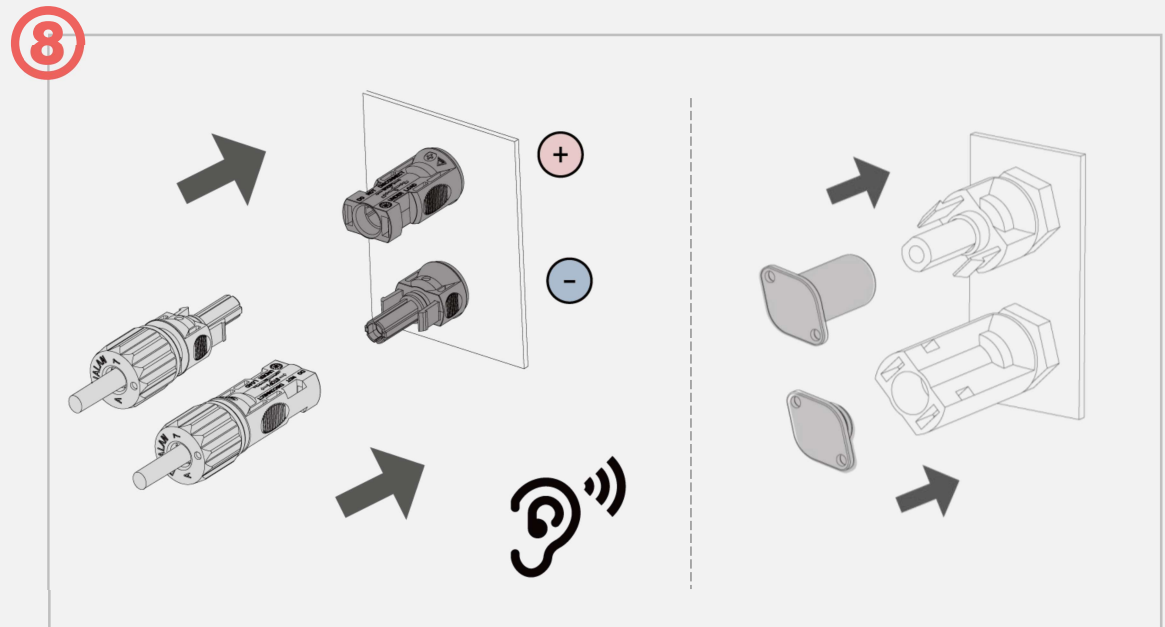
Electrical Connection – PV String



6. Rotate the DC switch to "OFF" position.



7. Check whether the cable polarity of the PV string is correct. The maximum input voltage for the PV is 950V.



8. Insert the positive and negative connectors into the inverter DC input terminals respectively, a click sound should be heard if the terminals are well connected. (Seal the unused PV terminals with the terminal caps.)

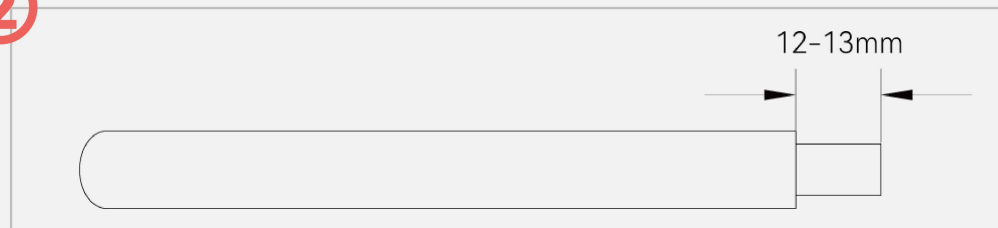
Electrical Connection – Battery

①

Name	Outside diameter	Conductor cross-section
BAT Cable	5.9–8.8 mm	6 mm ²

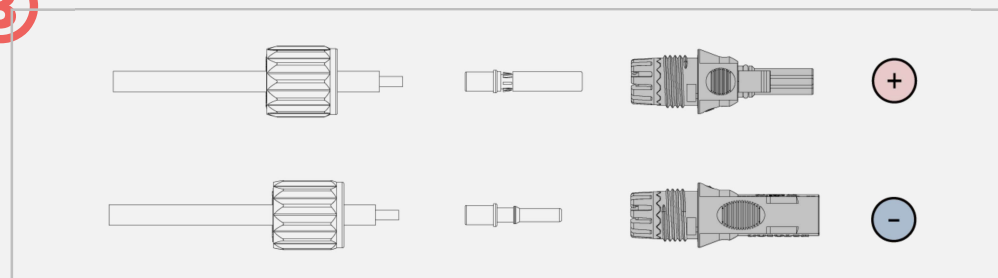
1. Select the appropriate cable based on specifications

②



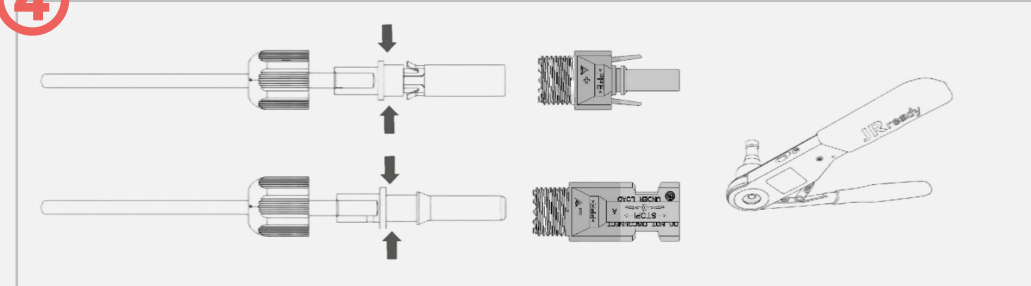
2. Peel off the DC cable insulation sleeve for 12–13 mm.

③



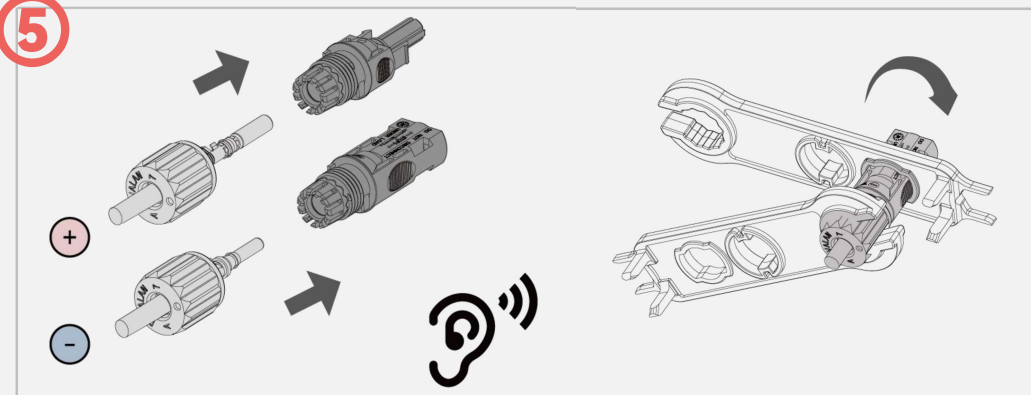
3. Disassemble the battery connector in the accessory bag.

④



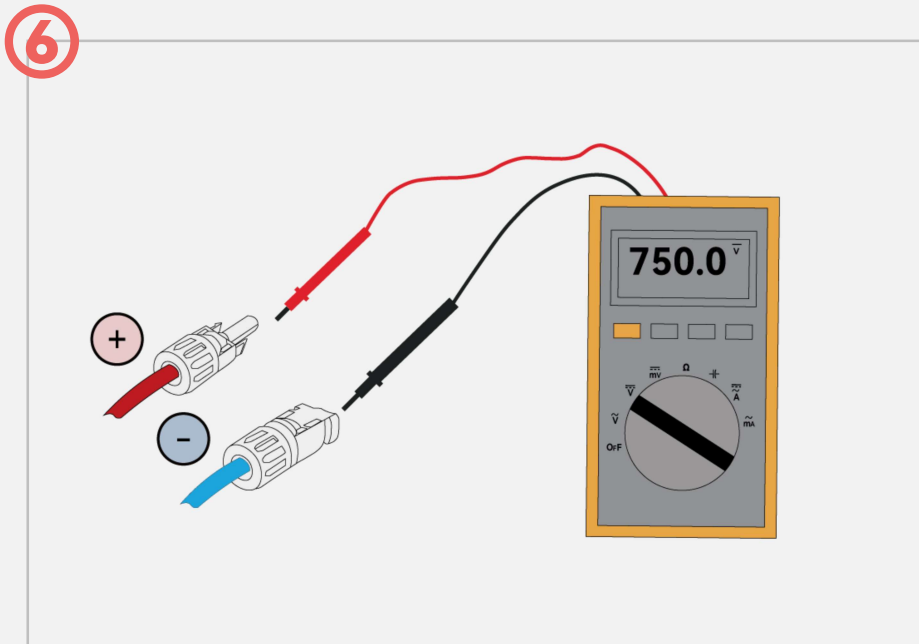
4. Insert the battery cable through the battery connector nut into the metal terminal and press the terminal with a professional crimping tool. Pull back the cable with some power to check if the terminal is well connected to the cable.

⑤

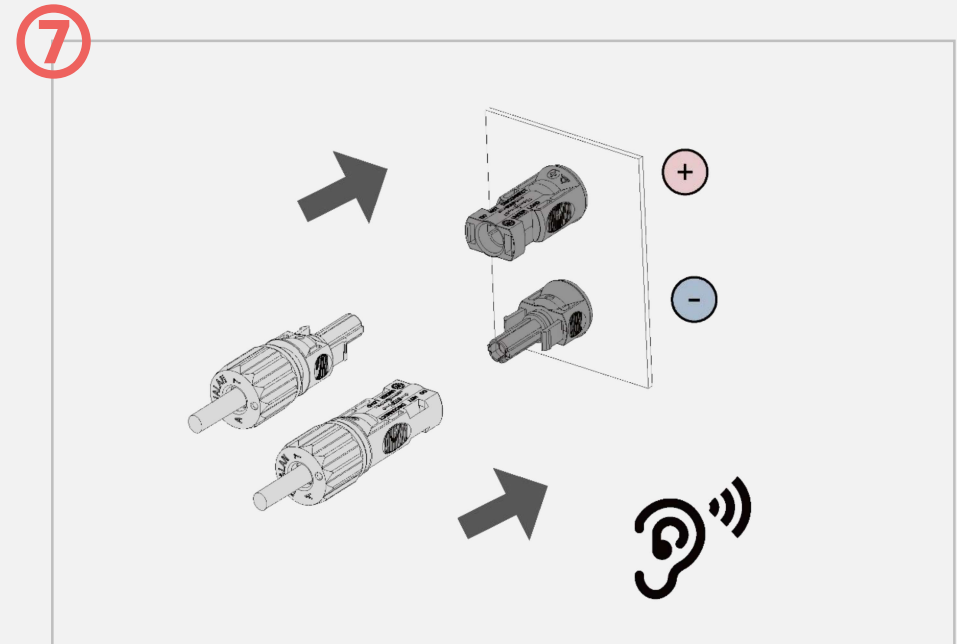


5. Insert +/- cables into corresponding connectors. Tug back to confirm a secure connection. To ensure proper sealing of the terminal, use an open-end wrench to securely tighten the nut to the end.

Electrical Connection – Battery



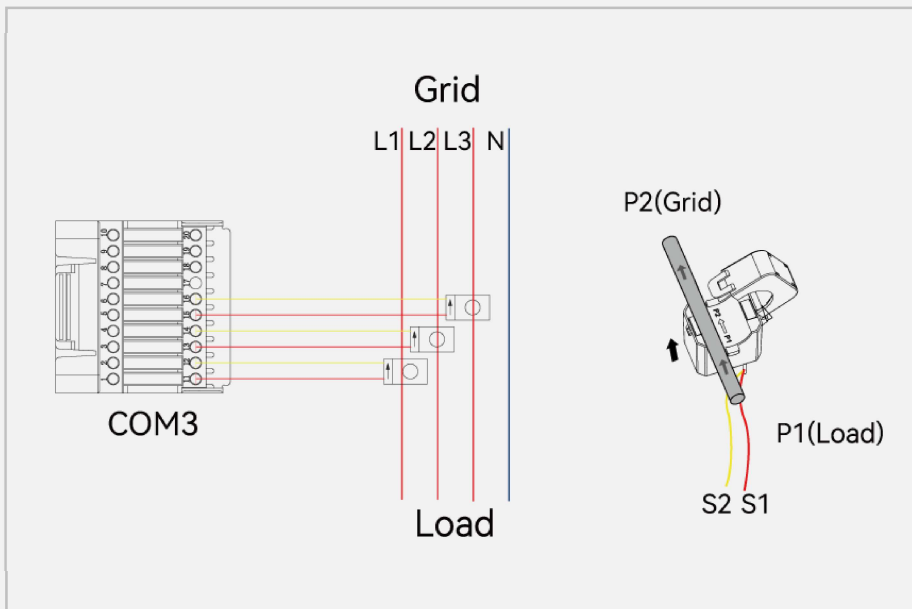
6. Check whether the cable polarity of the battery is correct. The maximum input voltage for the battery is 750V. Exceeding 750V will result in inverter damage.



7. Insert the positive and negative connectors into the inverter battery input terminals respectively, a click sound should be heard if the terminals are well connected.

Meter & CT Connection

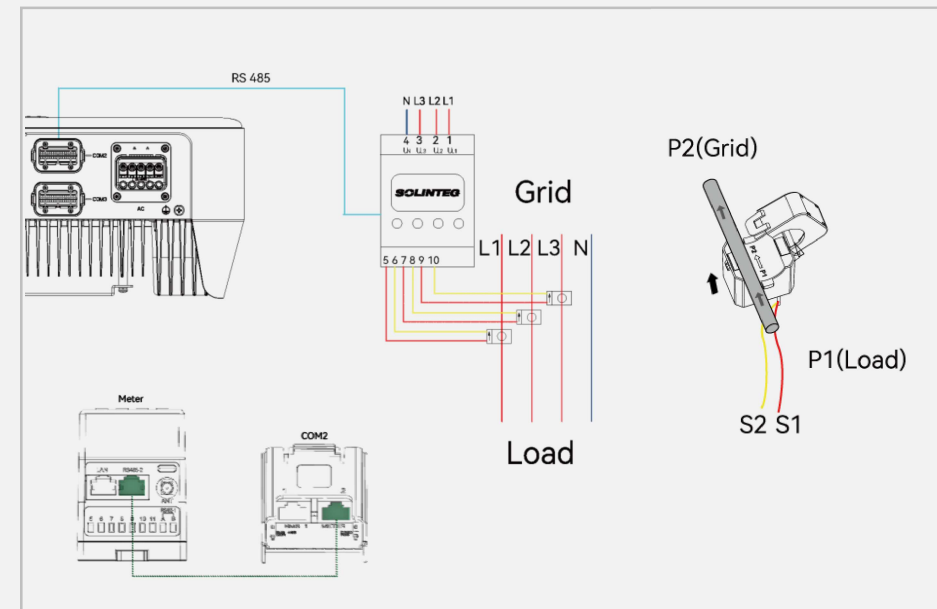
Method 1 : Use CT directly



Note:

1. **Default Component:** 3 CTs are included by default.
2. **Installation:** Follow the arrow marking (P1 Load → P2 Grid).
3. **Compatibility:** Use only Solinteg-provided **100mA output CTs** for direct inverter connection.
4. **Setup:** Set the CT ratio on the inverter.

Method 2 : Use Meter & CT



Note:

1. **Component:** If a meter connection configuration is required, the Solinteg RMM series meter must be ordered separately.
2. **Installation:** Install the CT pointing from P1 (Load) to P2 (Grid) and ensure an AC-side circuit breaker/fuse is installed for the meter.
3. **Configuration:** Set the CT ratio directly on the meter.

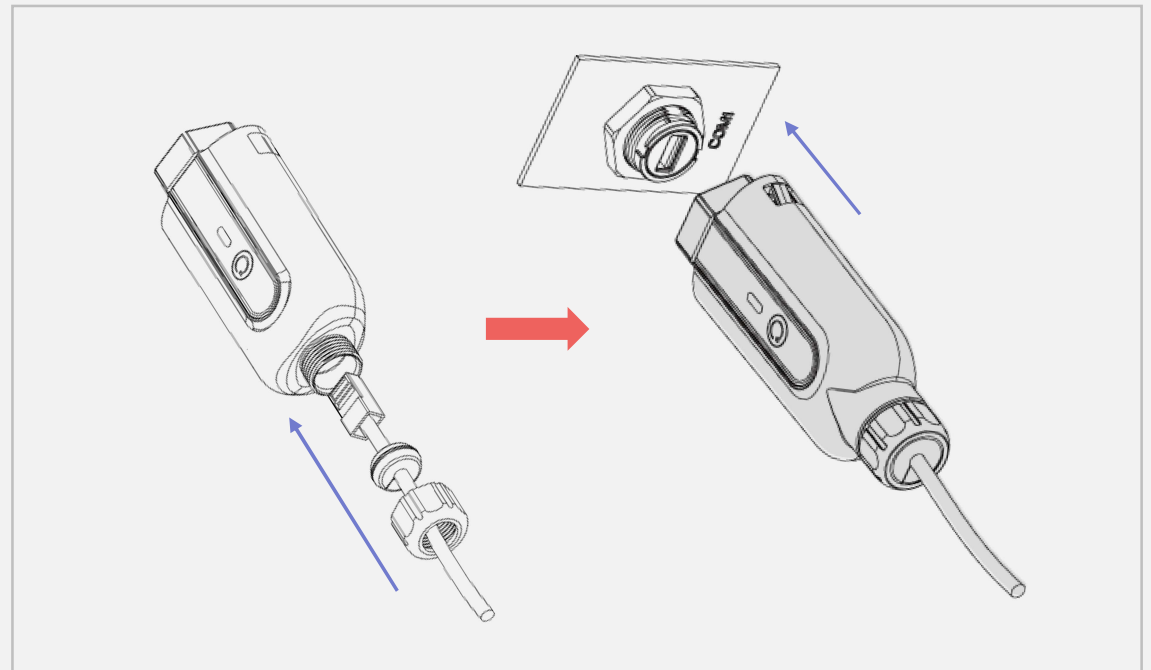
Communication Connection

I. Communication Module Connection

Step 1: Connect the network cable to the communication module (required for LAN connection).

Step 2: Unscrew and remove the protective cover from the COM1 port.

Step 3: Insert the communication module into the COM1 port until fully seated. Rotate the nut clockwise until an audible "click" confirms a secure connection.

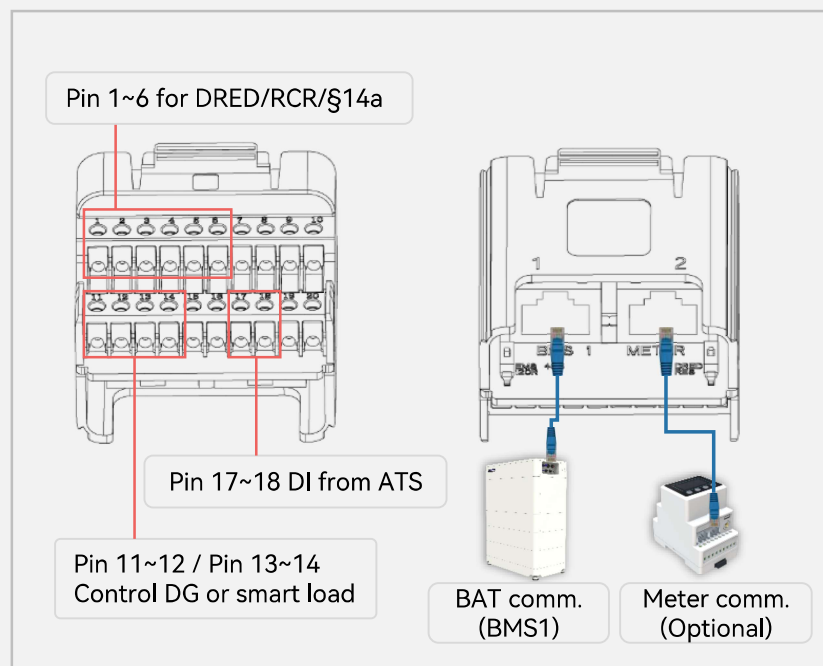


Communication Connection

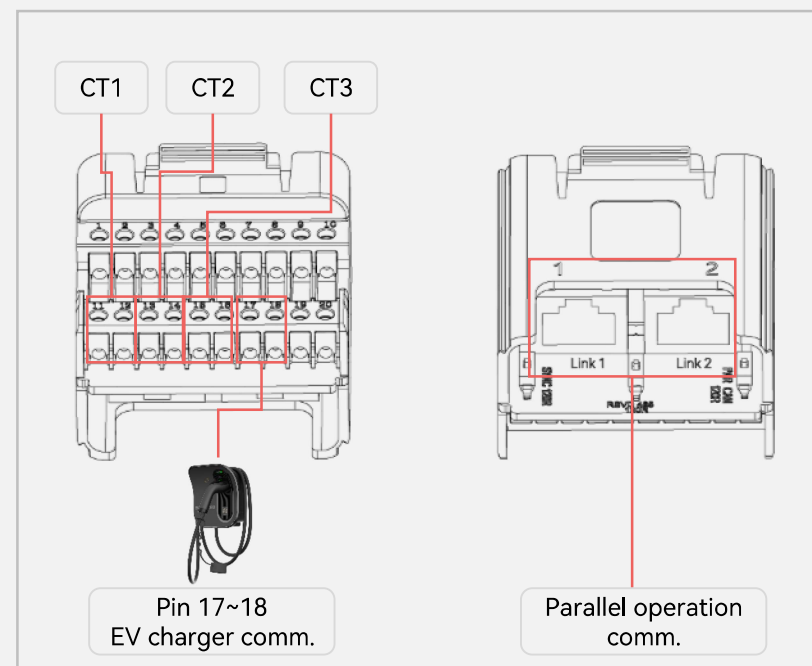
II. Multifunction Port Connection

External devices can be controlled or connected to the inverter through its Multifunction COM2 and COM3 ports.

COM2 port function



COM3 port function

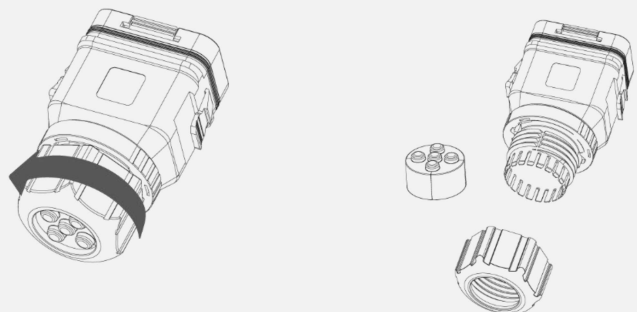


Communication Connection

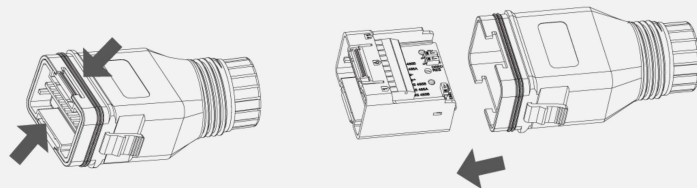
II. Multifunction Port Connection

① Split Multi-Function Connector

1. Unscrew the swivel nut from the connector.
2. Remove the seal and thread the cable through the gland.

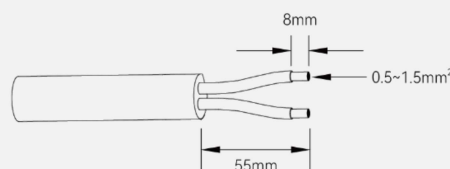


3. Take out the terminal block.

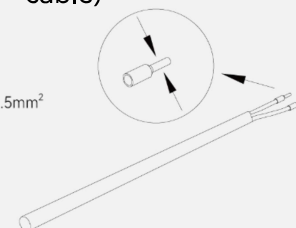


② Terminal Block Wiring

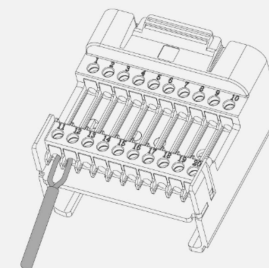
1. Prepare the cable



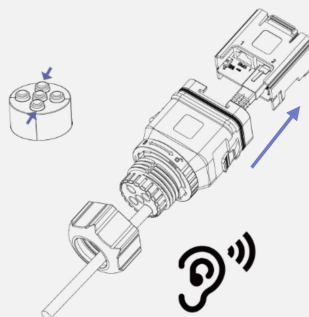
2. Wire termination (optional for multi-strand copper cable)



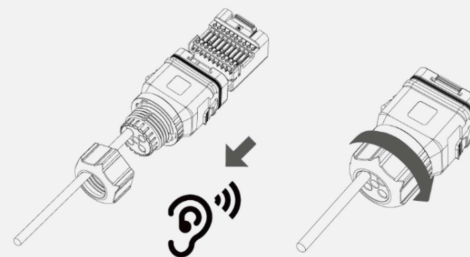
3. Secure connections (1.2+/-0.1N·m)



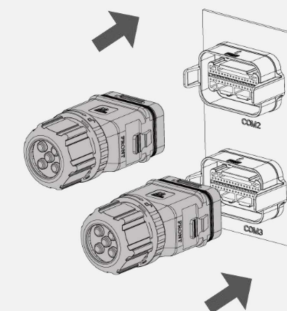
4. RJ45 assembly



5. Insert the terminal block into the connector.



6. Plug the COM2 and COM3 connectors into their respective inverter ports.

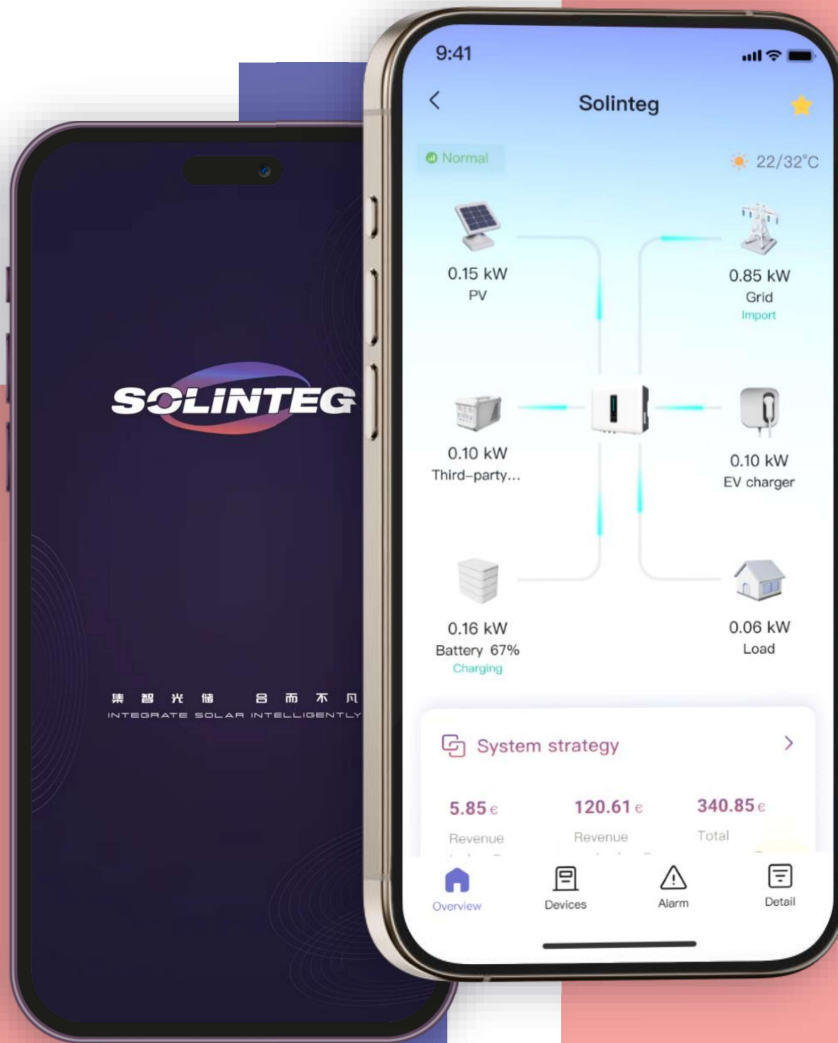


05

Commissioning

SOLINTEG

I. App Download

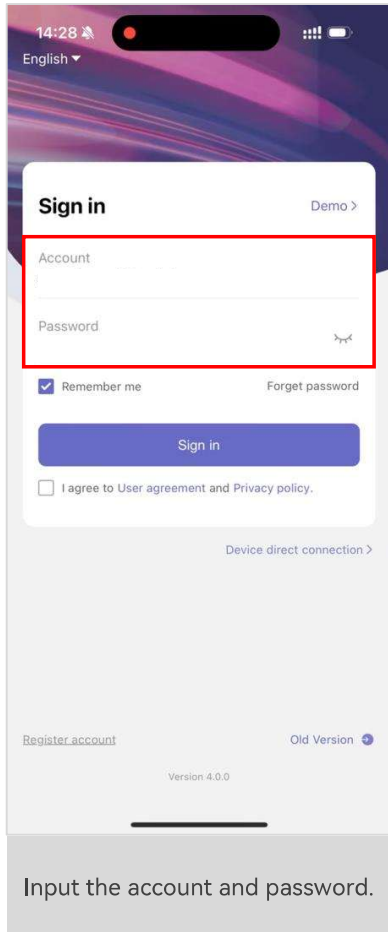


SOLINTEG

Monitoring App - IntegHub



II. Create a New Plant



14:28 English

Sign in Demo >

Account

Password

☒ Remember me Forget password

Sign in

☐ I agree to User agreement and Privacy policy.

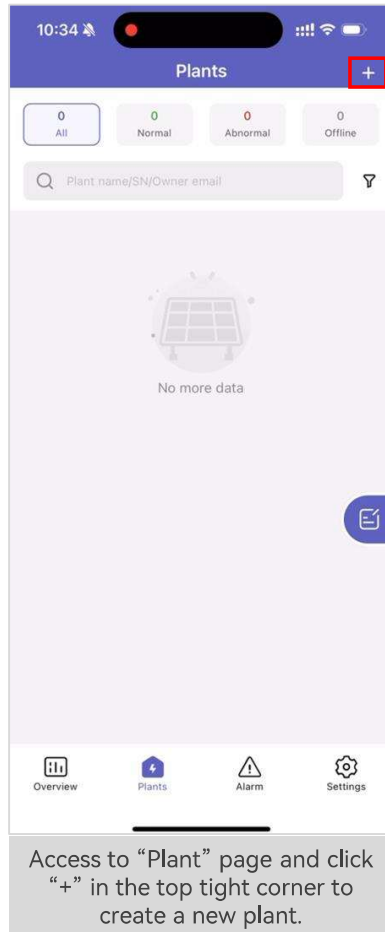
Device direct connection >

Register account Old Version

Version 4.0.0

Input the account and password.

*Organization account can be requested from Solinteg after-sales team.



10:34

Plants +

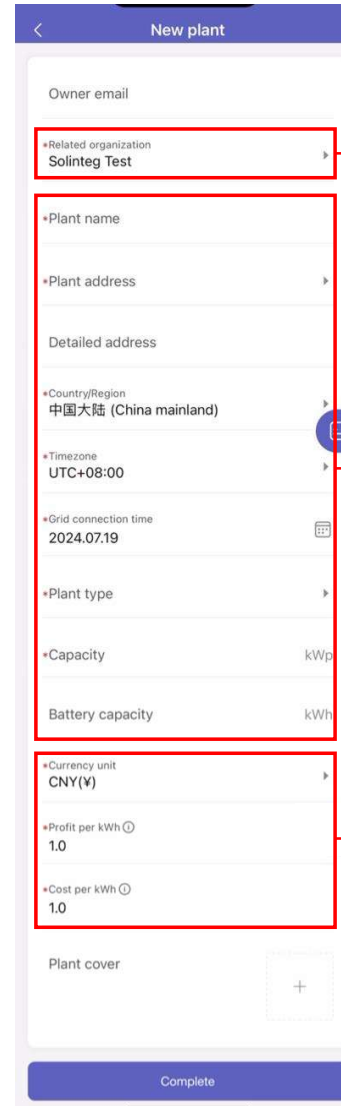
0 All 0 Normal 0 Abnormal 0 Offline

Plant name/SN/Owner email

No more data

Overview Plants Alarm Settings

Access to "Plant" page and click "+" in the top tight corner to create a new plant.



< New plant

Owner email

*Related organization Solinteg Test

*Plant name

*Plant address

Detailed address

*Country/Region 中国大陆 (China mainland)

*Timezone UTC+08:00

*Grid connection time 2024.07.19

*Plant type

*Capacity kWp

Battery capacity kWh

*Currency unit CNY(¥)

*Profit per kWh 1.0

*Cost per kWh 1.0

Plant cover +

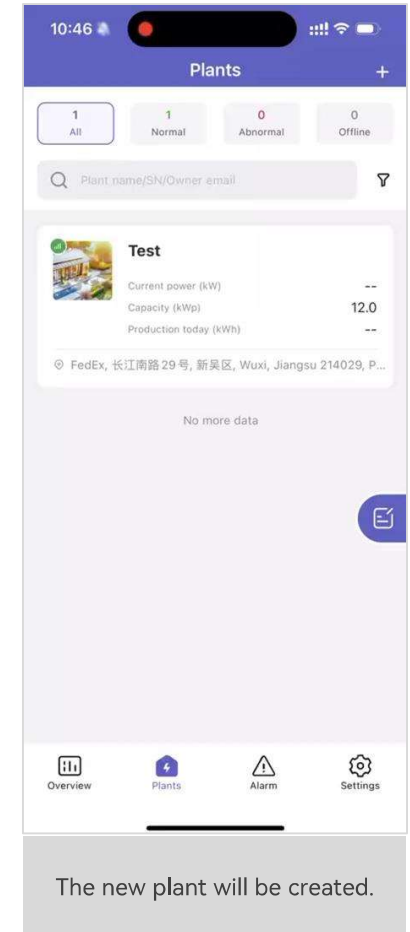
Complete

Select the organization to which the plant belongs.

Basic information of plant.

For calculating the revenue.

Complete the required information, with an asterisk (*) indicating mandatory fields.



10:46

Plants +

1 All 1 Normal 0 Abnormal 0 Offline

Plant name/SN/Owner email

Test

Current power (kW) --

Capacity (kWp) 12.0

Production today (kWh) --

FedEx, 长江南路29号, 新吴区, Wuxi, Jiangsu 214029, P...

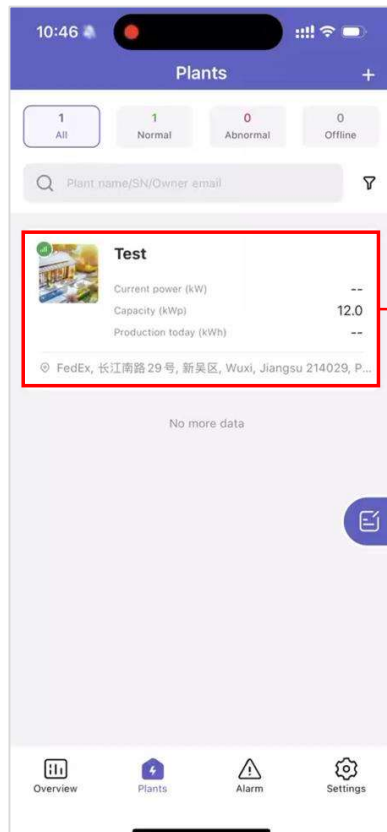
No more data

Overview Plants Alarm Settings

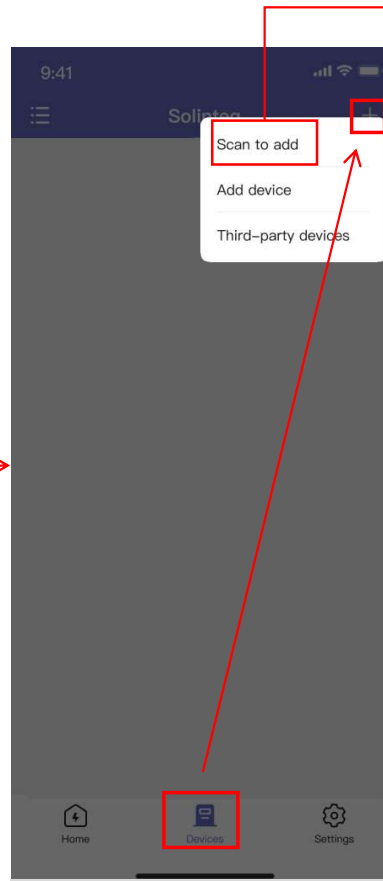
The new plant will be created.

III. Add the Device

Method 1: Scan to add



Click the plant that was just created.



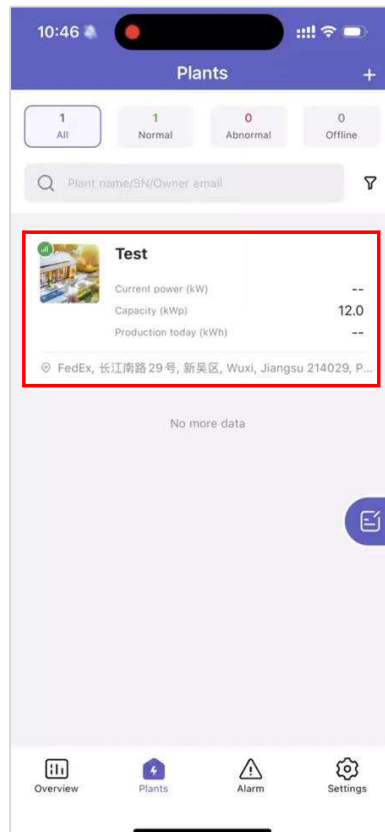
Click "Devices" in the bottom, and click the "+" button in the top right corner.



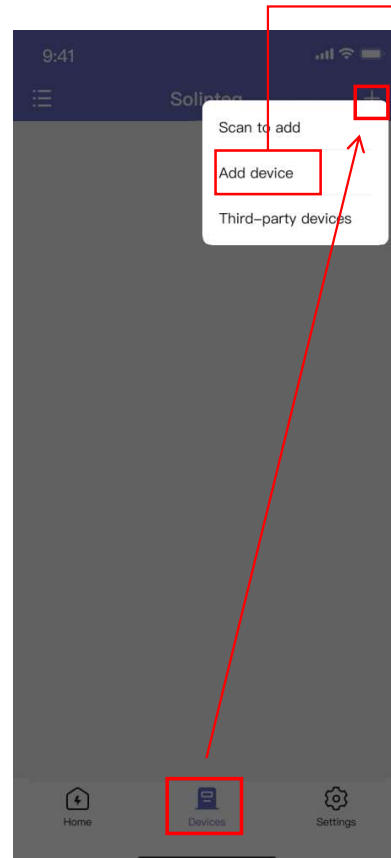
Select the "Scan to add" and scan the QR code or barcode of inverter.

III. Add the Device

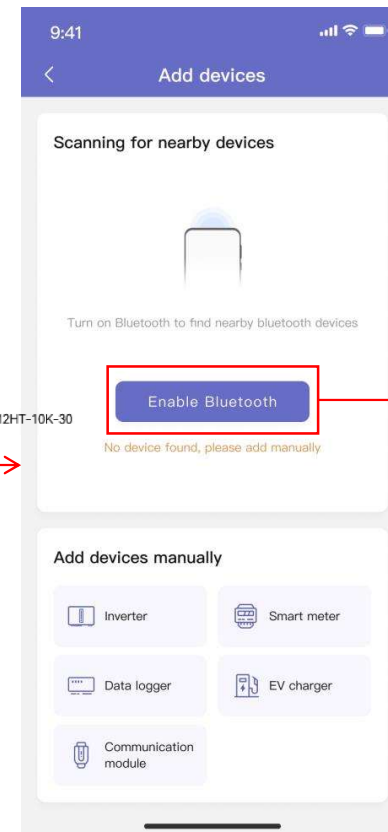
Method 2: Bluetooth connection



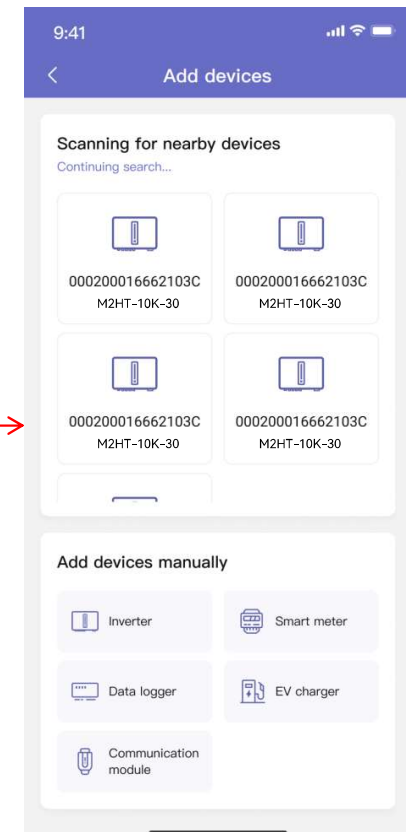
Skip the "Direct Connection", create a new plant and click the plant.



Click "Devices" in the bottom, click the "+" button in the top right corner, and then click "Add device".



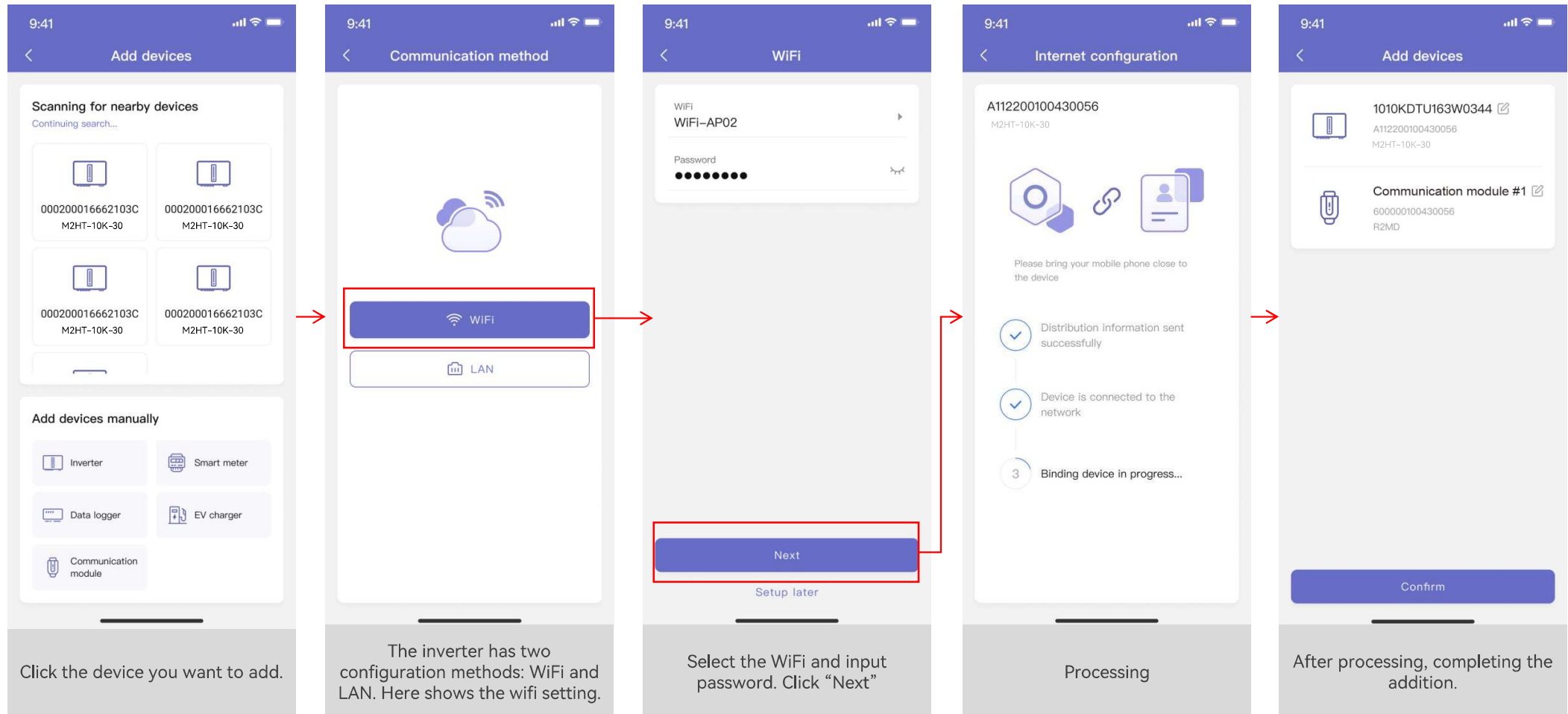
Click "Enable Bluetooth"



The nearby devices will be found.

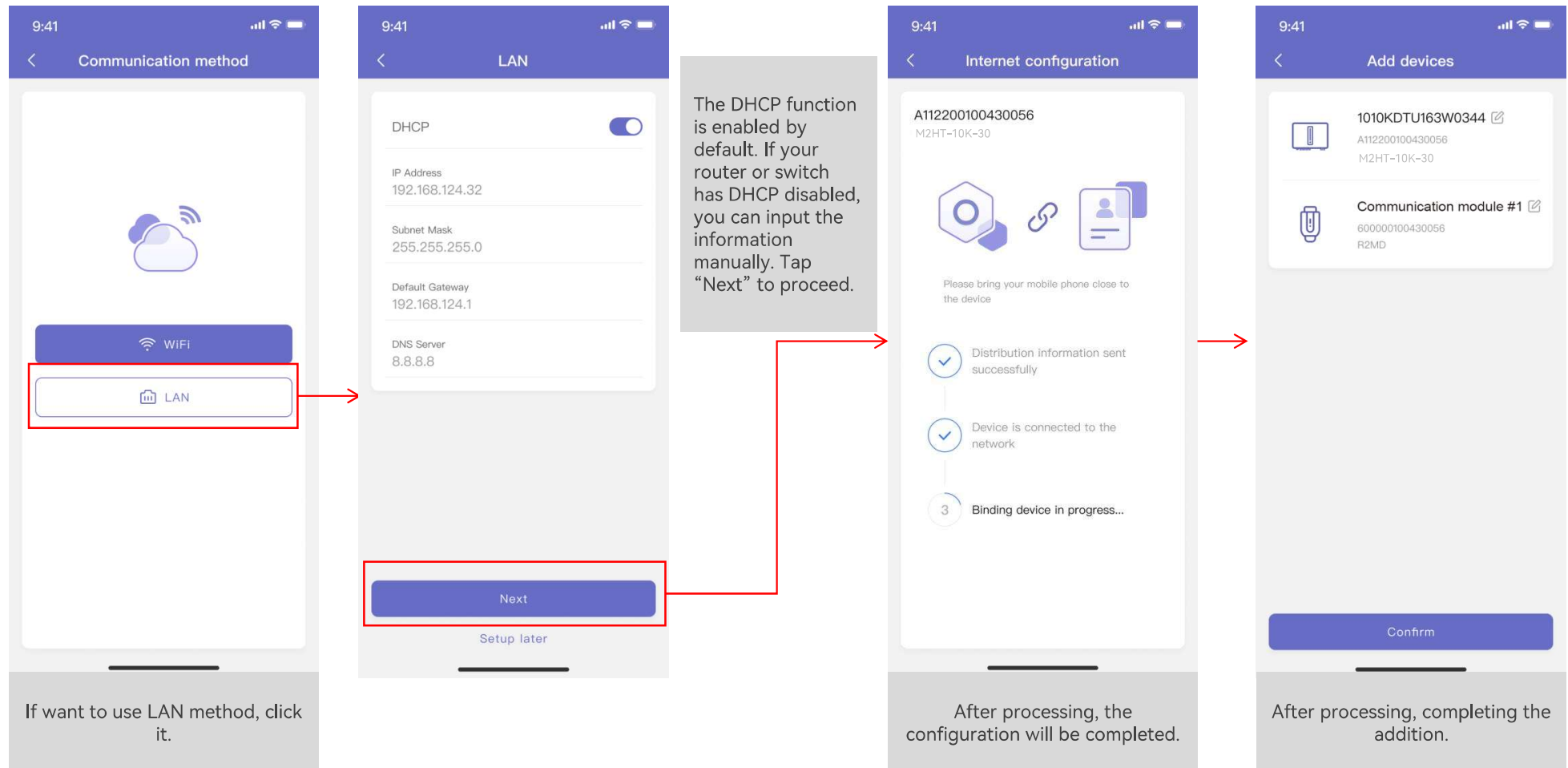
IV. Configure the Network

Method 1: Wi-Fi setting

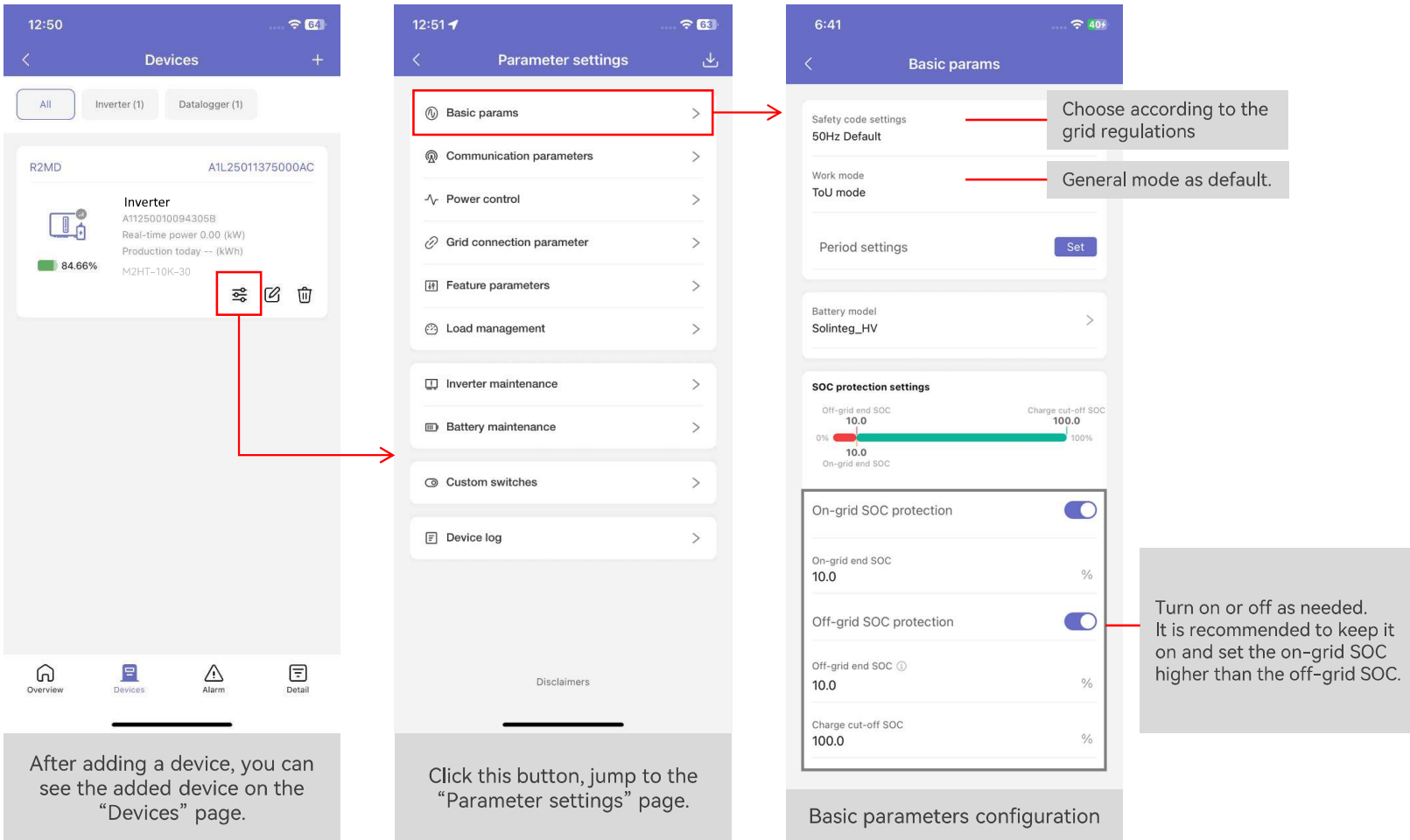


IV. Configure the Network

Method 2: LAN setting



V. Inverter Configuration



12:50

Devices

All Inverter (1) Datalogger (1)

R2MD A1L25011375000AC

Inverter
A112500100943058
Real-time power 0.00 (kW)
Production today -- (kWh)
84.66%
M2HT-10K-30

12:51

Parameter settings

Basic params
Communication parameters
Power control
Grid connection parameter
Feature parameters
Load management
Inverter maintenance
Battery maintenance
Custom switches
Device log

6:41

Basic params

Safety code settings
50Hz Default

Work mode
ToU mode

Period settings Set

Battery model
Solinteg_HV

SOC protection settings

Off-grid end SOC 10.0 Charge cut-off SOC 100.0

On-grid end SOC 10.0

On-grid SOC protection

On-grid end SOC 10.0 %

Off-grid SOC protection

Off-grid end SOC 10.0 %

Charge cut-off SOC 100.0 %

Choose according to the grid regulations

General mode as default.

Set

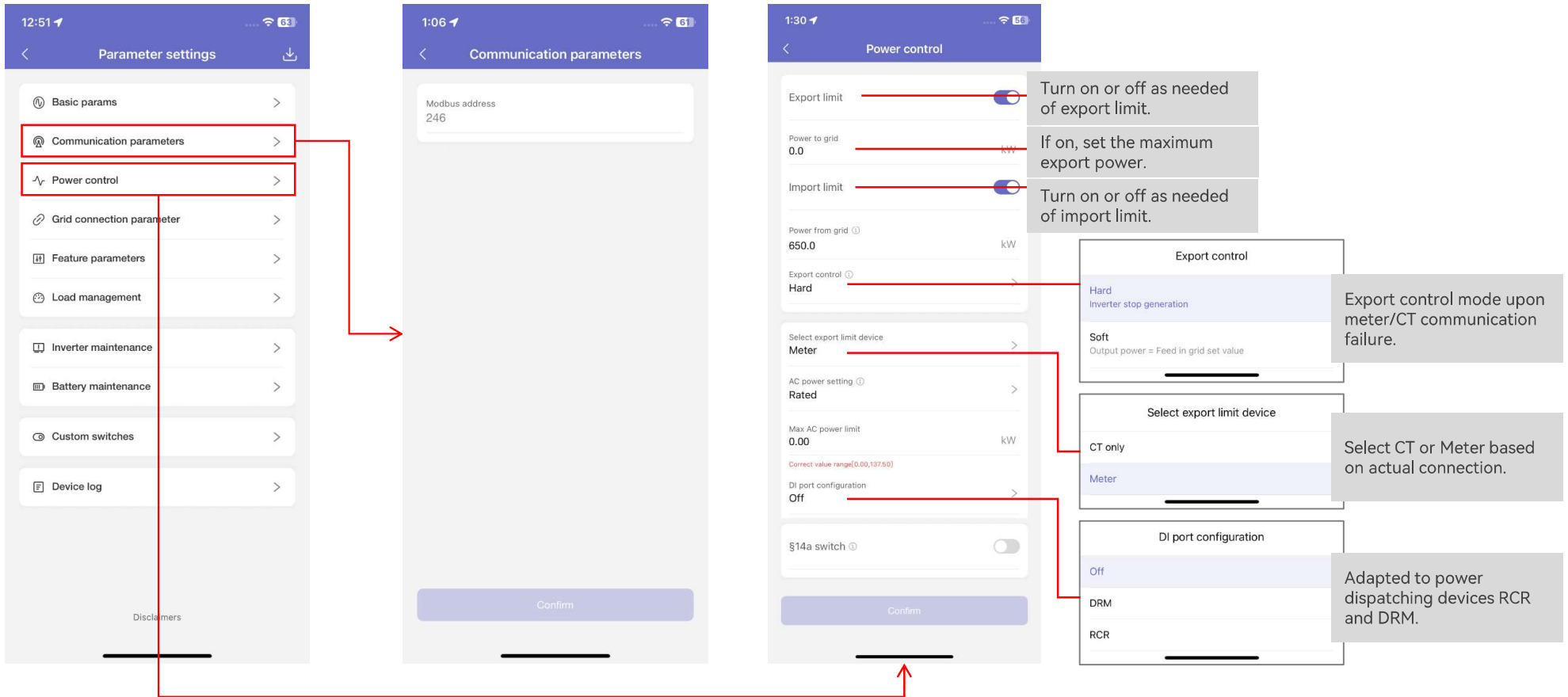
Turn on or off as needed. It is recommended to keep it on and set the on-grid SOC higher than the off-grid SOC.

After adding a device, you can see the added device on the "Devices" page.

Click this button, jump to the "Parameter settings" page.

Basic parameters configuration

V. Inverter Configuration



Parameter settings

- Basic params
- Communication parameters**
- Power control**
- Grid connection parameter
- Feature parameters
- Load management
- Inverter maintenance
- Battery maintenance
- Custom switches
- Device log

Disclaimers

Communication parameters

Modbus address
246

Confirm

Power control

Export limit ☒ Turn on or off as needed of export limit.

Power to grid
0.0 kW If on, set the maximum export power.

Import limit ☒ Turn on or off as needed of import limit.

Power from grid
650.0 kW

Export control ☒ Hard
Inverter stop generation

Select export limit device
Meter

AC power setting
Rated

Max AC power limit
0.00 kW
Correct value range[0.00,137.50]

DI port configuration
Off

§14a switch ☐

Confirm

Export control

- Hard
Inverter stop generation
- Soft
Output power = Feed in grid set value

Export control mode upon meter/CT communication failure.

Select export limit device

- CT only
- Meter

Select CT or Meter based on actual connection.

DI port configuration

- Off
- DRM
- RCR

Adapted to power dispatching devices RCR and DRM.

V. Inverter Configuration

12:51

Parameter settings

Basic params

Communication parameters

Power control

Grid connection parameter

Feature parameters

Load management

Inverter maintenance

Battery maintenance

Custom switches

Device log

Disclaimers

6:42

Feature parameters

Multiple inverter role
Independent

CommsWatchDog

On/Off-grid switch

MPPT parallel connection

Unbalanced output

Off-grid overload reconnection delay
30 s

Off-grid voltage setting
230.0 V

N-PE check

Emergency shutdown mode
Off

Grid phase sequence settings
Auto adaption

Confirm

Not recommended to change.

Select "Independent" in single inverter application, select "Mater" or "Slave" in parallel system.

Enable: Stop on EMS communication loss. Disable: Continue running on EMS communication loss.

If turn on, the inverter can realize auto switch between on-grid and off-grid when grid fail or recover.

Turn on or off as needed.

Default to open to enable phase unbalanced output on the on-grid side

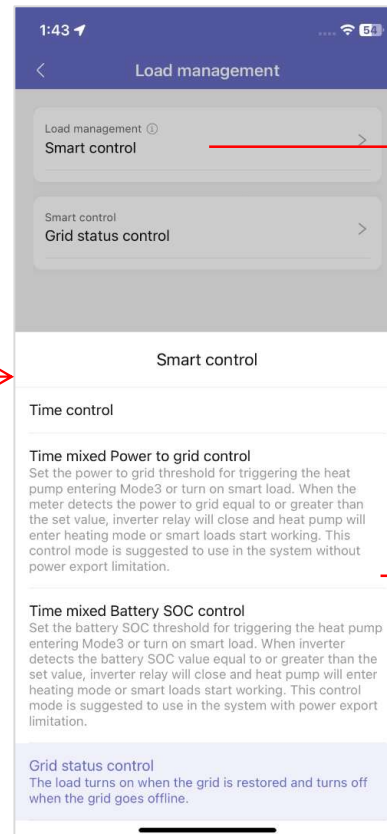
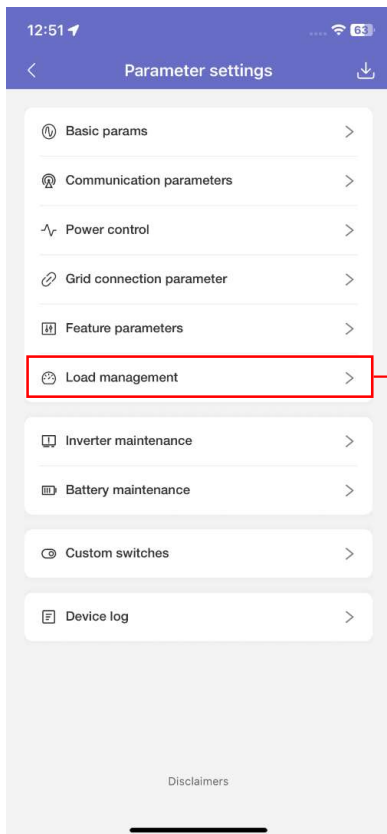
If there are no special requirements, you can save the default settings

Set grid phase sequence: Auto adaptation, positive sequence, or negative sequence

Disclaimers

Confirm

V. Inverter Configuration



“Turn off” by default. “Manual mode” and “Smart mode” can be used in different situations to increase the utilization rate of green power.

Under "Smart Control," choose from four modes: Time control, Time-mixed grid export, Time-mixed SOC, or Grid status control

THANK YOU

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