

Solinteg Residential Battery Introduction

E2BA-B10K3

 www.solinteg.com

V1.0
Date: 03.06.2026



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SOLINTEG

01

Advantages

SOLINTEG

Core Advantages of E2BA-B10K3

Heavy on Power, Smart on Movement and Installation

Innovative Split-Pack Architecture

Effortlessly Paralleling via Y-Connectors

Box-Free 20.72 kWh Expansion

Winter-ready Charging via Intelligent Self-heating

Built-in Battery Heating

Ultimate Peace of Mind for Home Energy

5-Layer Safety Protection

Max 10.36kW Powers Heavy Loads & Maximizes Arbitrage

Continuous 1C Charge / Discharge

E2BA-B10K3

High Voltage Battery

10.36kWh

| **LiFePO₄**

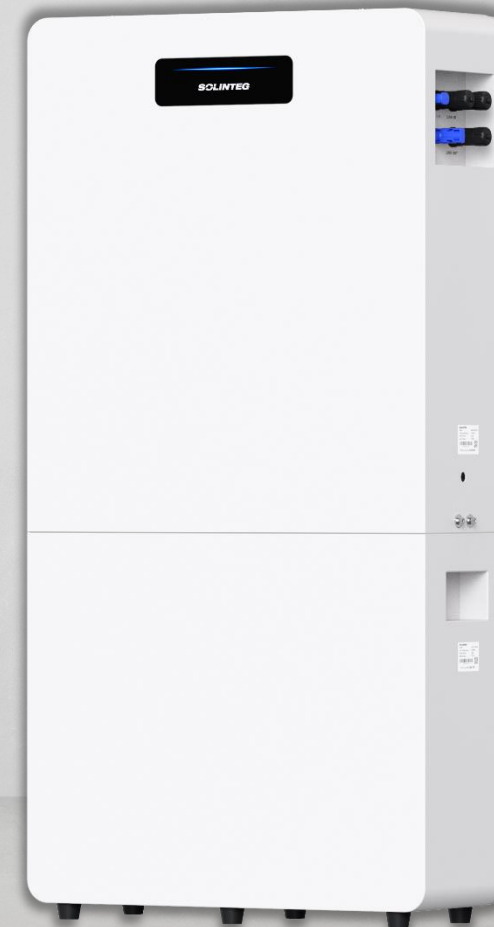
| **30Ah**

| **345.6V**

| **10.36kWh**

| **90% DOD**

| **IP65**



Other Leading Advantages



Superior Performance

- 10.36kWh per cluster
- 90% depth of discharge
- Full-power 1C charge/discharge
- Scalable up to 20.72 kWh via Y connectors
- High voltage, high efficiency



Easy Installation and O & M

- Stacked dual-module structure
- Lighter weight for easy handling
- Plug-and-play design for instant setup
- Remote OTA upgrade
- Remote fault diagnosis and maintenance



Ultimate Safety & Durability

- 5-layer battery safety protection
- Cold-resistant: built-in self-heating
- Rugged design: IP65 water & dust proof
- 10-year warranty



Unified Solinteg Ecosystem

Effortless integration

- Native compatibility: seamlessly pairs with Solinteg hybrid inverters
- Rapid setup: true plug-and-play experience

One-stop service

- One contact for all support
- One App to manage the entire energy
- One-click diagnosis: instantly identify system issues
- Whole system OTA upgrade

Comprehensive solutions

VPP-ready

15min Dynamic pricing

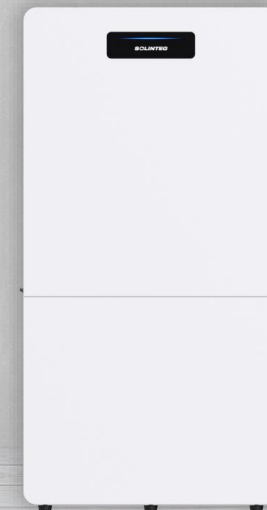
Peak shaving

RCR + 14a EnWG

DRED

Peak-valley arbitrage

Ideal for new and retrofit projects



Effortless and Flexible Installation

Advanced AB-Pack Split Architecture

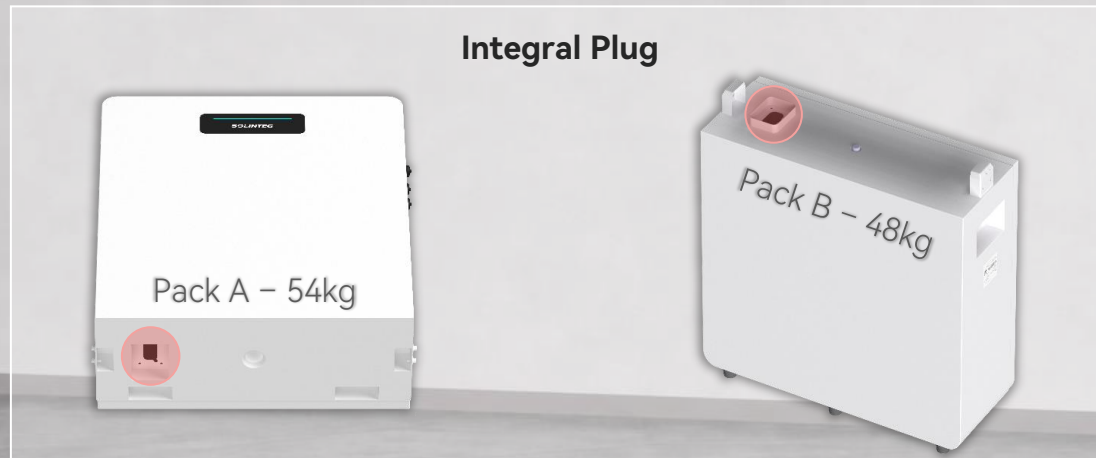
Divides system weight into two lightweight modules for effortless two-person handling.

Effortless Plug-and-Play Stacking

Integrated quick-connectors eliminate internal wiring, slashing installation time.

Dual-Mount Methods for Flexibility

Engineered for maximum site flexibility, seamlessly supporting both floor-standing and wall-mounted setups.



Floor Mounting



Wall Mounting



Dual Cluster in Parallel for 20kWh Capacity

Scalable Investment

Start with 10kWh and easily double to 20.72kWh as family energy needs grow.

Box-Free Expansion

Effortlessly parallel dual clusters via Y connectors with zero combiner box cost.

Dynamic Battery Clusters Paralleling

Automatically completes paralleling configuration via background pairing and remote APP verification to eliminate on-site waiting.

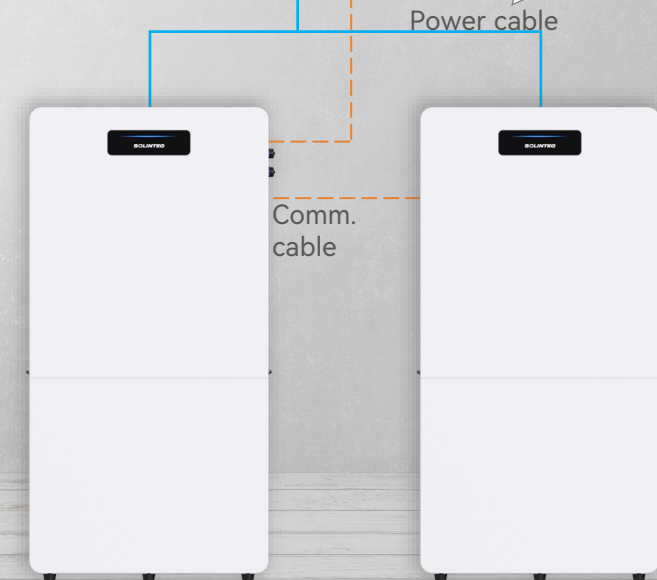
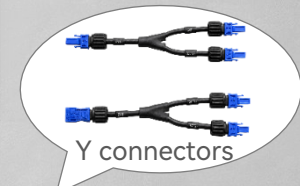
High Spatial Flexibility

Deploy side-by-side / back-to-back to fit any narrow garage or basement corner.



20.72kWh Solution

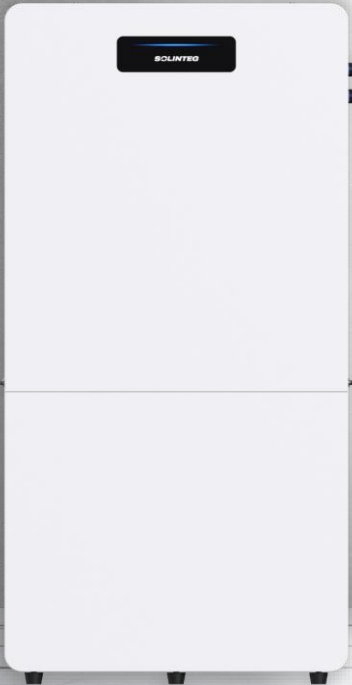
3~8kW (1-P)
4~20kW (3-P)



Engineered to Lead Every Shape

Whether compared by form factor, weight distribution, or installation speed, our modular architecture sets the new industry standard.

Solinteg
E2BA-B10K3



Reduced Labor & Box-Free

- **Around 50kg Split Pack** | 1~2 workers installation
- **Box-Free Parallel** | Y connectors for easy expansion
- **$\geq 100\text{kg}$ Heavy Unit** | 3~4 workers + crane required
- **Junction-Box Parallel** | Complex drilling & mounting

10kWh
All-in-One Battery



Less Assembly & Wiring

- **1-Point Quick Plug** | Time-saving installation
- **All-in-one Design** | No risk of pack SOC imbalance
- **5+ Tedious Points** | More installation steps
- **4-Pack Structure** | High risk of pack SOC imbalance

10kWh
Stacked Battery



Higher Round-trip Efficiency

- **$\geq 95\%$ RTE** | High-voltage, higher efficiency
- **1-Point Quick Plug** | Minimizes installation time
- **$< 90\%$ RTE** | Low-voltage, severe energy loss.
- **5+ Plug & Wiring** | Multiplies stacking & wiring time

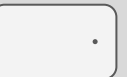
10kWh
Low Voltage Battery



O&M Reliability

- **Larger Capacity** | Prolongs back-up duration
- **Dynamic Clustering** | Install and go, the system clusters automatically.
- **Small Capacity** | Restricts back-up duration
- **Static Clustering** | On-site operation mandatory for all initial/reconnection clustering.

5.12kWh
All-in-One Battery



Ultimate Safety with 5 Layers Protection



Integrated Fire Control

Built-in aerosol fire extinguisher releases aerosol cloud in 2s to rapidly absorb heat and curb the fire's spread.

Insulation Protection

High temperature-resistant insulation pads around the battery module for all-around insulating protection.

Over-temperature Protection

With 12 temperature sensors monitoring battery temperature constantly and accurately, managing energy efficiently and providing early warning for potential risks.

Active Pressure Release Protection

The pressure compensation valve balances internal pressure and prevents moisture ingress, while providing emergency venting during thermal runaway.

Electrical Performance Protection

Fully safeguards the system by continuously monitoring and mitigating over-charge, over-discharge, and over-current risks at the cell level.



Master the Cold – Intelligent Self-Heating



Industrial Pain Point

When Using Batteries in Cold Winter

Narrow Charge/Discharge Temp Range

Frozen electrolytes stop power intake, rendering the system useless in sub-zero cold.

Rapid SOC Drop

Low temperatures trigger false readings and rapid depletion, thereby making some storage space "unusable."

Permanent Over-discharge

Deep power drain in winter can "kill" cells, making them impossible to wake up or recharge.

Power Derating

Frigid temperatures limit output, failing to support high-power appliances when needed.



Solinteg Solution

Intelligent Low-Temp Self-Heating

Wider Temp Range

Warms cells to optimal levels, ensures full power intake even in extreme sub-zero cold.

Stable SOC Accuracy

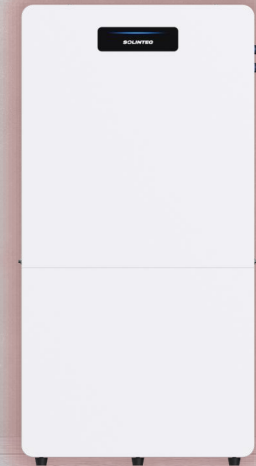
Self-heating prevents voltage dips & false readings, ensuring precise, reliable capacity.

Over-discharge Protection

Prevents deep power drain, shielding cells from permanent winter damage.

Full Power Output

Maintains peak discharge in cold, supporting high-power appliances year-round.



FEARLESS IN EXTREME COLD

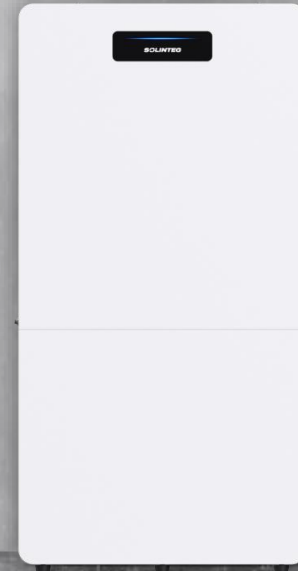
Reliable Outdoor Performance with IP65

Indoor & Outdoor Versatility

Flexible placement allows seamless mounting indoors in utility rooms or garages, or outdoors on exterior walls to save valuable living space.

Certified IP65 Shield

Completely sealed enclosure offers absolute dust-tight protection and reliable water resistance, preventing internal condensation.



02

Parameters

SOLINTEG

Appearance



Pack A - 54kg

Pack B - 48kg

Total Weight: 102kg



Intuitive Indicator

Normal		Master / Independent battery operates properly
		Slave battery works normal
Abnormal		Battery abnormal startup
		Self-testing
		Sleep mode
		Slave battery offline
Fault		Battery fault
Upgrade		Updating firmware

Terminals



- [1] Power Button & Power Indicator**
Control the start/stop of the battery system.
Green = ON, Off = OFF.

- [4] Inverter COM Port**
CAN port for communication between the
battery and the inverter.

- [2] DC Switch (Self-Lock)**
Turn on/off the power circuit.

- [5] Link In & Link Out Port**
Battery parallel communication.

- [3] Power Connection Terminal**
Positive and negative terminals, which are
used to connect the inverter.

- [6] PE Connection Terminal**
Connect to the ground bar.

Ergonomic Design and Installation

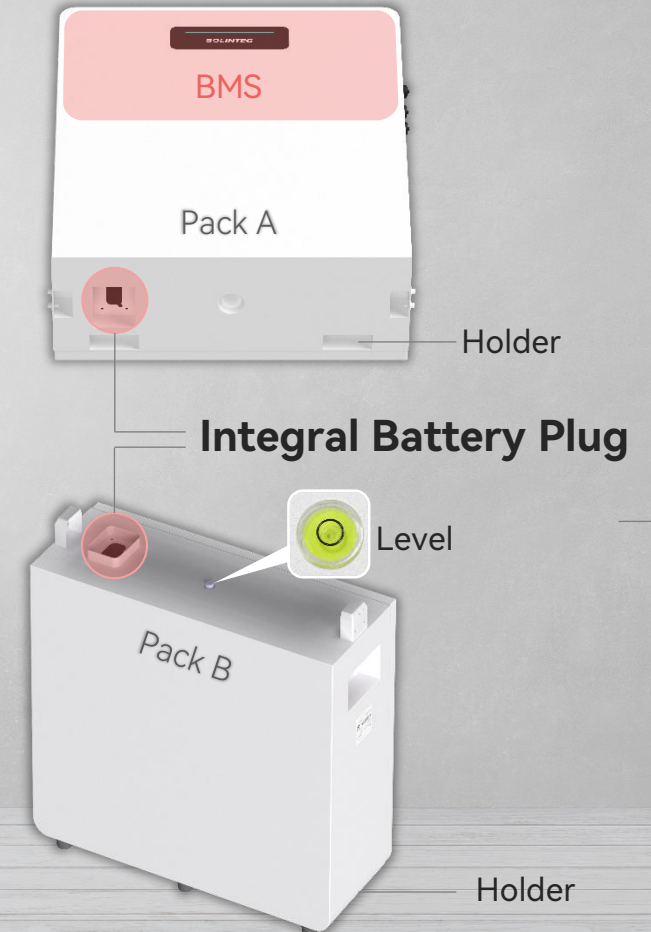
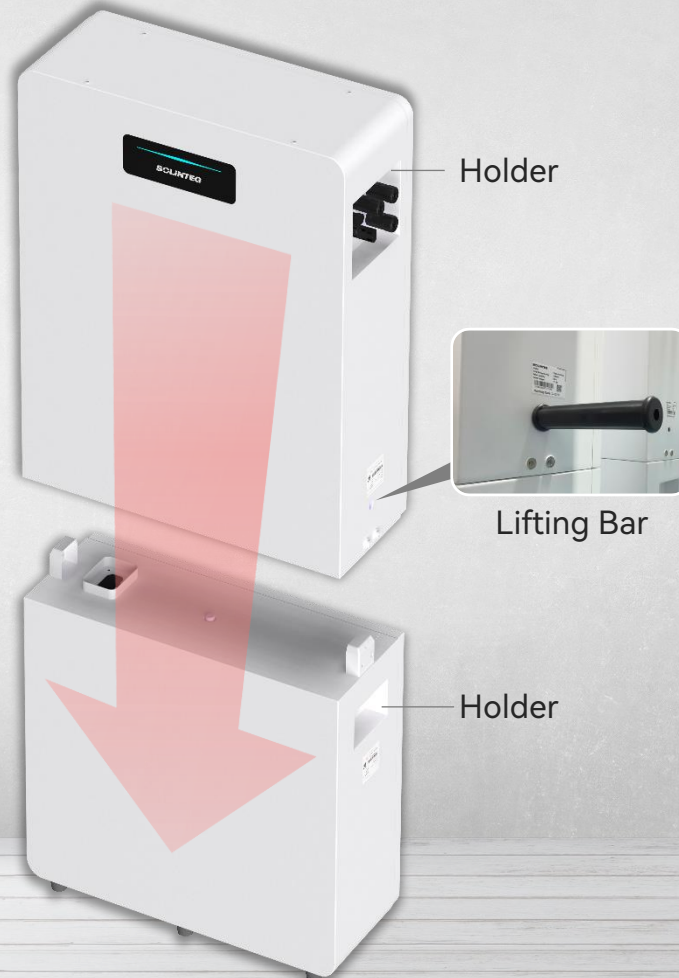
EASY CARRY

PLUG & PLAY

LESS WEIGHT

ZERO CRANE

FAST INSTALLATION



Key Parameters

Battery Model		E2BA-B10K3
Battery Type / Cell Capacity (Ah)	LiFePO ₄ / 30	Cylindrical battery cells.
Nominal Energy (kWh)	10.36	The nominal storage energy of the battery pack.
Depth of Discharge	90%	90% DOD means the usable energy is 9.32kWh.
Operating Voltage Range (V)	270~394.2 (rated 345.6)	Operating voltage range that can be compatible with all the Solinteg residential hybrid inverter.
Max. Charge/Discharge Current (A)	30	1C full charge and discharge within 1 hour.
Scalability	1~2	Up to 2 clusters in parallel to reach a total capacity of 20.72kWh.
Compatible Inverters		
Solinteg Gen1 Hybrid Inverter	MHS 3-8K-30, MHT 4-12K-25, MHT 10-20K-40	
Solinteg Gen2 Hybrid Inverter	M2HS 3-6K-30, M2HT 5-10K-30(-AC)	These two inverter series are the best match.
Solinteg New Inverter (Coming Soon)	M2HS 5-12K-50, M2HT 10-30K-80	

Key Parameters

General Data		
Ingress Protection	IP65	IP65 water & dust proof for both indoor and outdoor use.
Installation Method	Floor stacked / Wall-mounted	
Operating Temperature Range (°C)	-20~55°C (Charging: -20~55°C, discharging: -20~55°C)	-20~55°C wide operating temperature with self-heating function
Storage Temperature Range (°C)	-30~60	
Relative Humidity	5% to 95%, Non-condensation	
Operating Altitude (m)	< 3000	
Cooling	Natural convection	Natural cooling ensures whisper-quiet operation.
Display	LED	Long-strip LED indicator for effortless status checks.
Warranty	10 years*	10-year warranty, peace of mind guaranteed.

* Please refer to the related product warranty for details.

03

System Solutions

SOLINTEG

Compatible Solinteg Inverter

1-Phase Hybrid Inverter

MHS3-8K



M2HS3-6K



M2HS5-12K



3-Phase Hybrid Inverter

MHT4-20K



M2HT5-10K



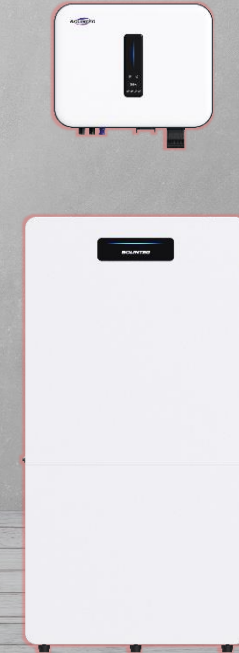
M2HT10-30K



- One-brand system
- One-stop service
- One monitoring platform

3-Phase AC-coupled Inverter

M2HT5-10K-AC



Solinteg Full-Scenario Solution for Home

SUITABLE FOR

New installation

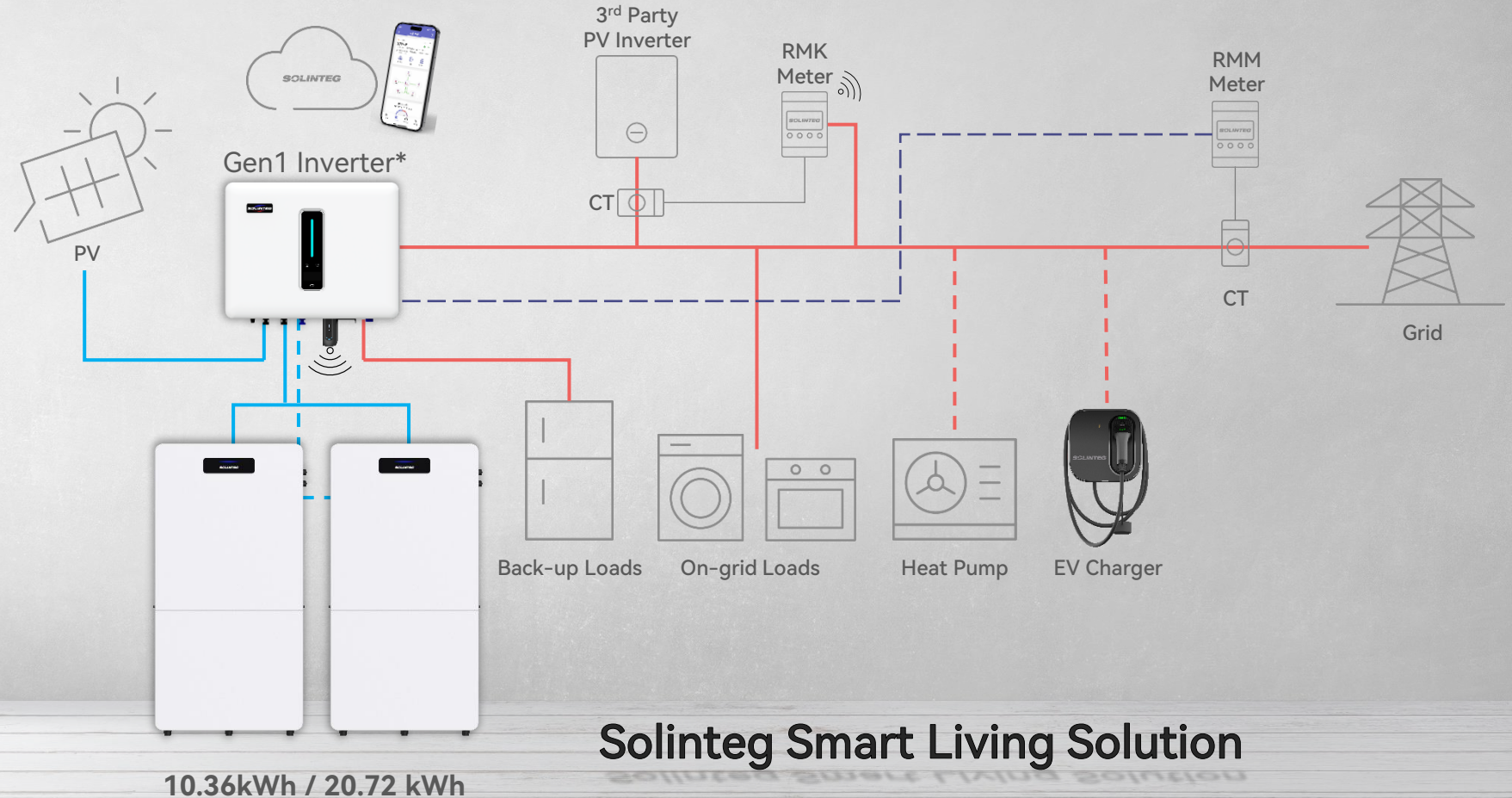
AC-coupling

DG integration

EV charger control

Smart loads control

On/Off grid



Solinteg Smart Living Solution

*Gen1 inverter means MHS3-8K, MHT4-20K.

Solinteg Full-Scenario Solution for Home

SUITABLE FOR

New installation

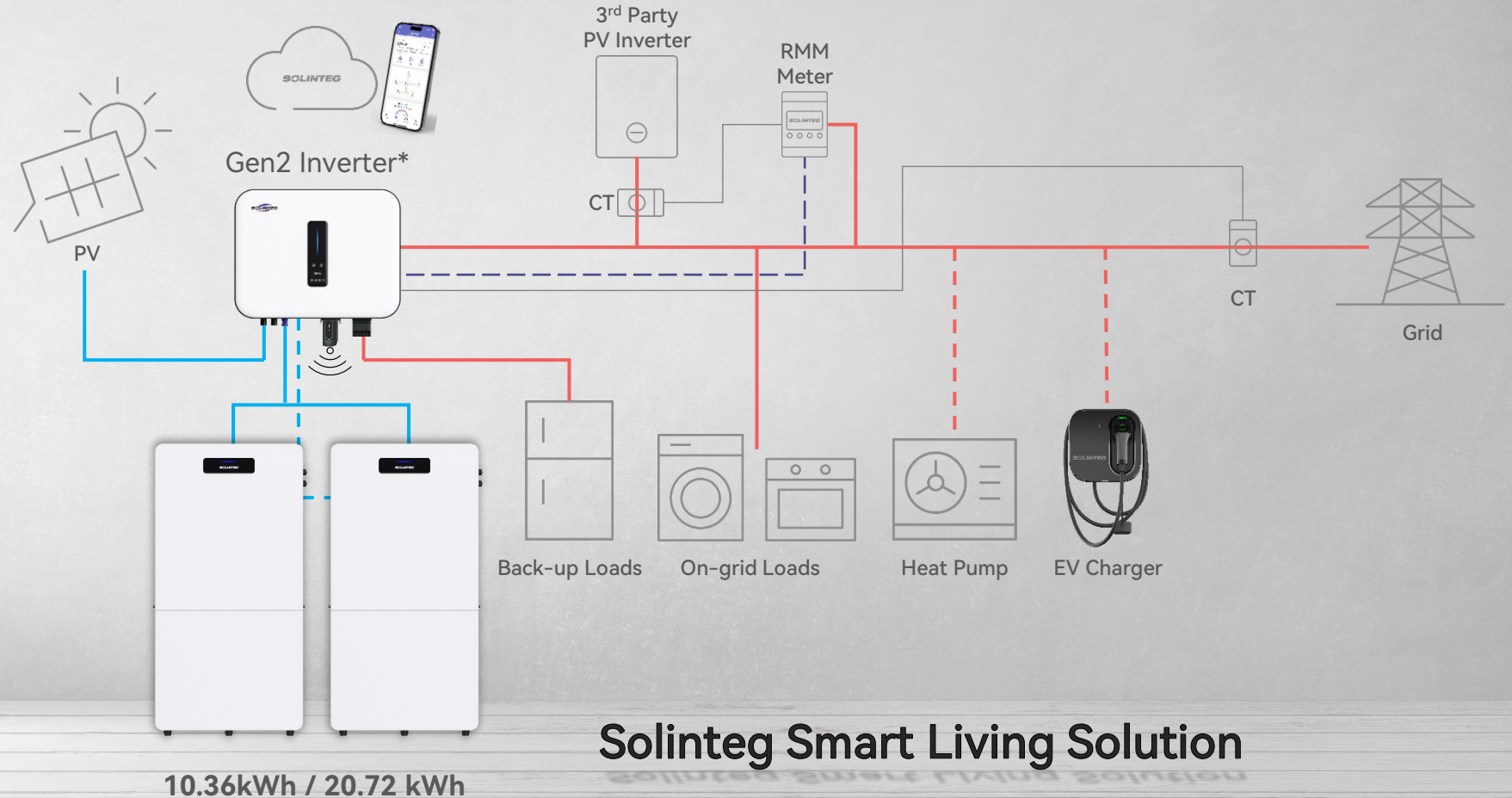
AC-coupling

DG integration

EV charger control

Smart loads control

On/Off grid



Solinteg Smart Living Solution

*Gen2 inverter means M2HS3-6K, M2HT5-10K(-AC), M2HS5-12K(coming soon), M2HT10-30K (coming soon)

Versatile Backup Durations for Diversified Needs

 Backup Duration With M2HS3-6K	Battery	EBA-B10K3	
	Cluster Number	Single Cluster	Two Clusters In Parallel
	Battery Capacity (kWh)	10.36	20.72
M2HS-3K-30	Charge/Discharge Power (kW)	3	6
	Backup Duration (h)	3.4	6.9
M2HS-3.6K-30	Charge/Discharge Power (kW)	3.6	3.6
	Backup Duration (h)	2.8	5.7
M2HS-4.2K-30	Charge/Discharge Power (kW)	4.2	4.2
	Backup Duration (h)	2.4	4.9
M2HS-5K-30	Charge/Discharge Power (kW)	5	5
	Backup Duration (h)	2	4.1
M2HS-6K-30	Charge/Discharge Power (kW)	6	6
	Backup Duration (h)	1.7	3.4
 Backup Duration With M2HT5-10K	Battery	EBA-B10K3	
	Cluster Number	Single Cluster	Two Clusters In Parallel
	Battery Capacity (kWh)	10.36	20.72
M2HT-5K-30	Charge/Discharge Power (kW)	5	5
	Backup Duration (h)	2	4.1
M2HT-6K-30	Charge/Discharge Power (kW)	6	6
	Backup Duration (h)	1.7	3.4
M2HT-8K-30	Charge/Discharge Power (kW)	8	8
	Backup Duration (h)	1.2	2.5
M2HT-9.9K-30	Charge/Discharge Power (kW)	9.9	9.9
	Backup Duration (h)	1	2
M2HT-10K-30	Charge/Discharge Power (kW)	10	10
	Backup Duration (h)	1	2

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

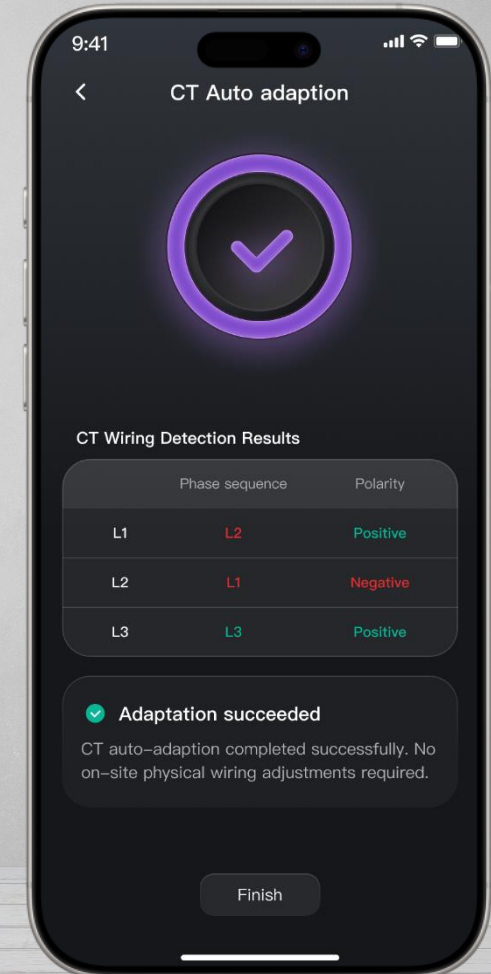
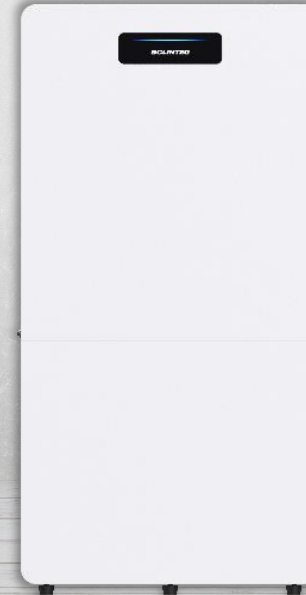
Streamlined Maintenance-free

No field troubleshooting needed

M2HT5-10K(-AC)*



E2BA-B10K3



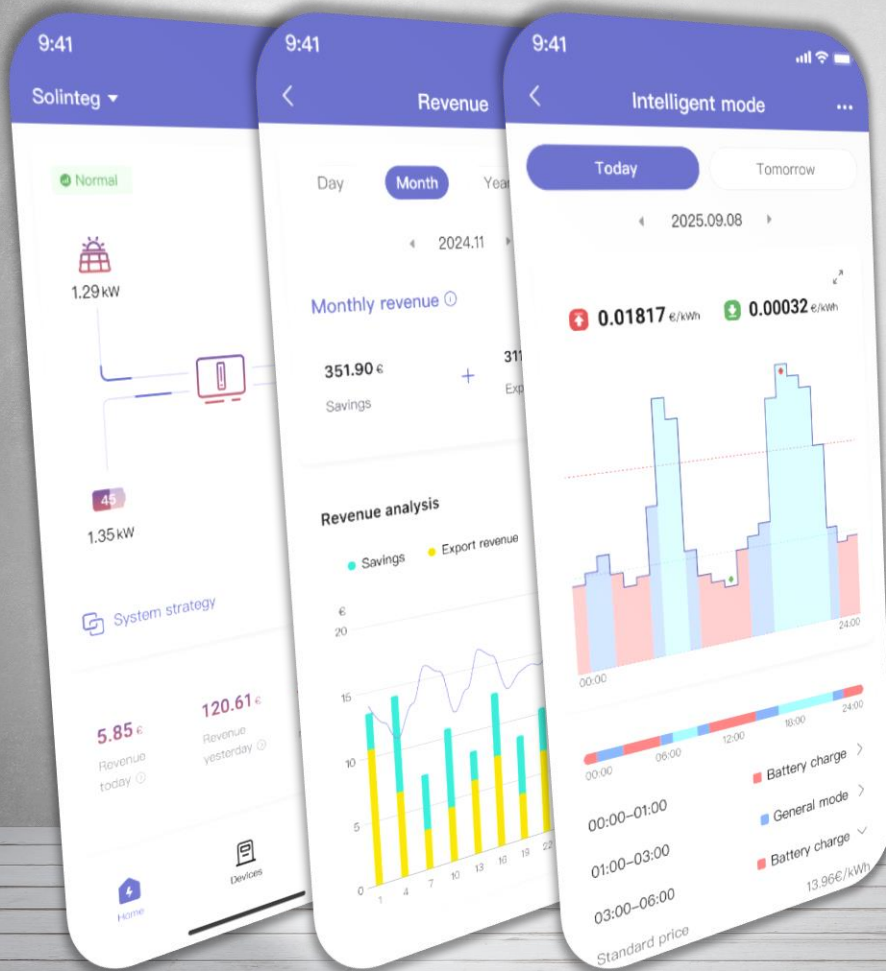
*Note: M2HT5-10K(-AC) requires specific firmware for CT phase-sequence and direction self-adaptation. Please contact the service team (service@solinteg.com) for details.

Solinteg Intelligent Monitoring Platform



ONE PLATFORM, FULL CONTROL

Intelligent Dynamic Pricing for Arbitrage



24 Countries Covered

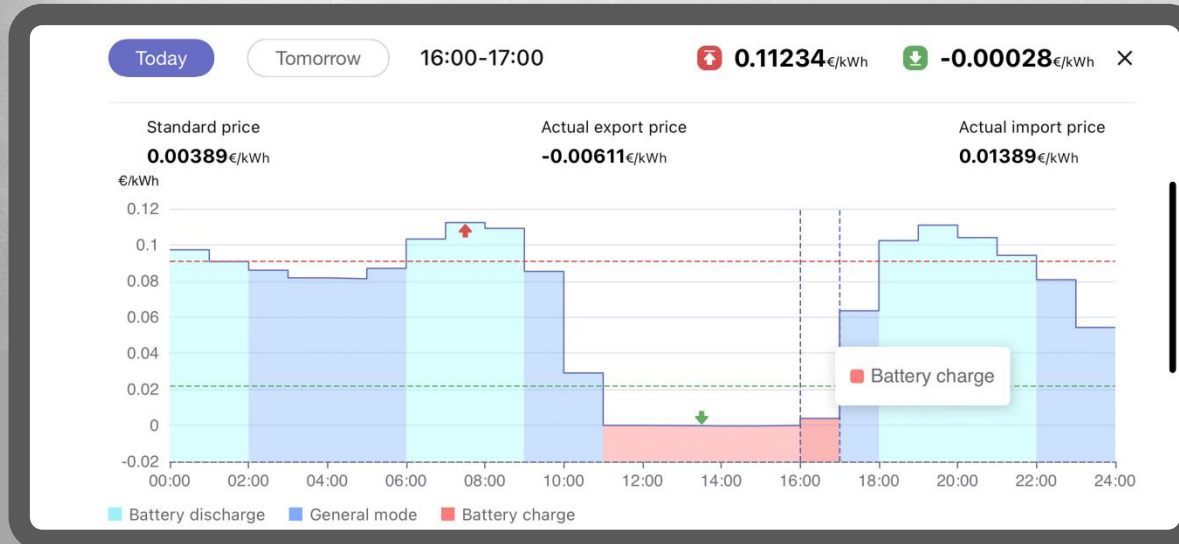


3 Platforms Integrated



Intelligent Dynamic Pricing for Arbitrage

Master the Volatility, Maximize the Arbitrage



3 Built-in Smart Strategies

Duration Control

Percentage Control

Fixed Price Control

2 Intervals

15min*

60min

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.

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

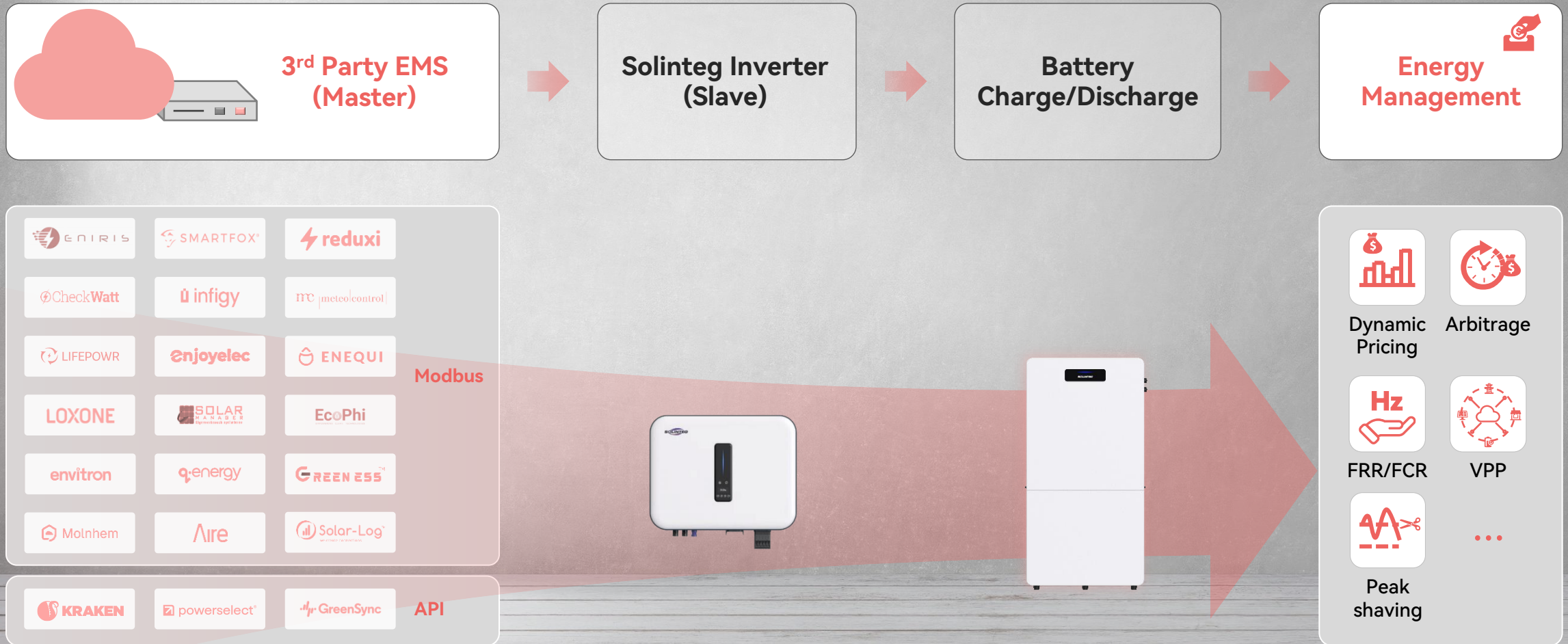
Saves:  Per month
39.27€

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€



Open Connectivity, Empower Energy Strategy



04

Installation

SOLINTEG

Battery Installation

! Pre-installation Checks

Verification: Ensure the **matching codes** on the nameplates of PACK A and PACK B are **identical**.

Pack A Nameplate

SOLINTEG

Model: E2BA-B10K3(A)

Total Storage Energy: 5.18kWh

Rated Capacity: 30Ah

Rated Voltage: 172.8V



A1B21000001110A1



Matching Code: **26 5 0001**

Pack B Nameplate

SOLINTEG

Model: E2BA-B10K3(B)

Total Storage Energy: 5.18kWh

Rated Capacity: 30Ah

Rated Voltage: 172.8V



A1B21000001110A1

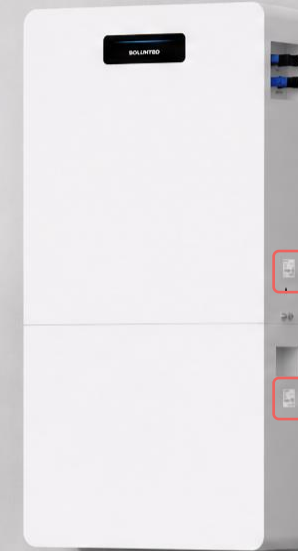


Matching Code: **26 5 0001**

1 Floor Mounting



2 Wall Mounting



Pack A Nameplate

Pack B Nameplate

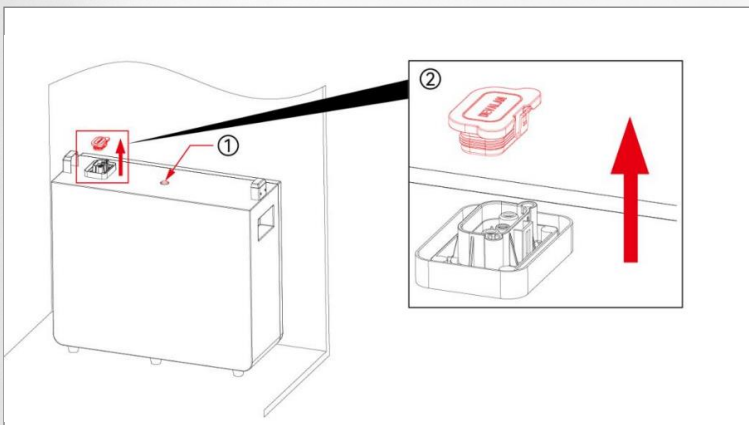
Two Installation Methods

- Floor mounting (Recommended)
- Wall mounting (Need extra wall-mount installation kit.)

Battery Installation – Floor Mounting

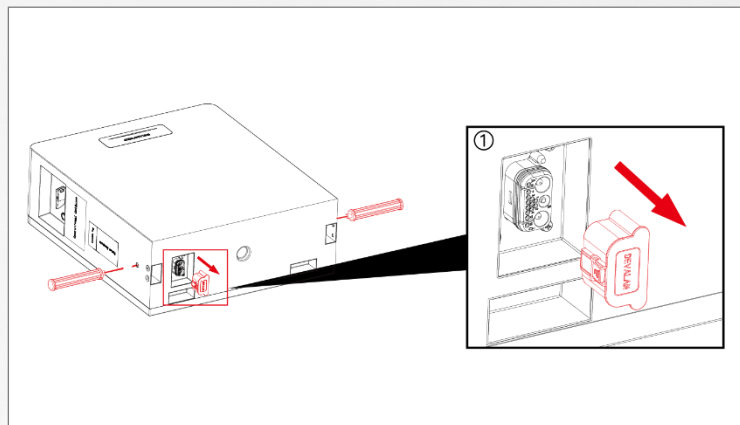
1 Position Pack B

- Place Pack B vertically 30–85mm from the wall, ensure it is level via spirit level ①, and remove dust cover ②.



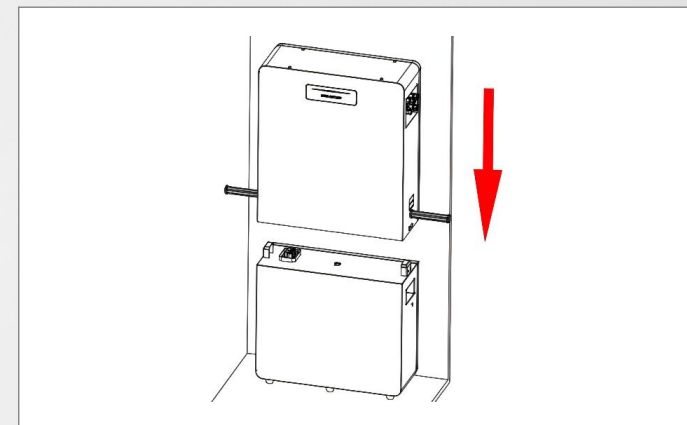
2 Prepare Pack A

- Attach lifting bars to Pack A.
- Remove its quick-connect dust cap ①



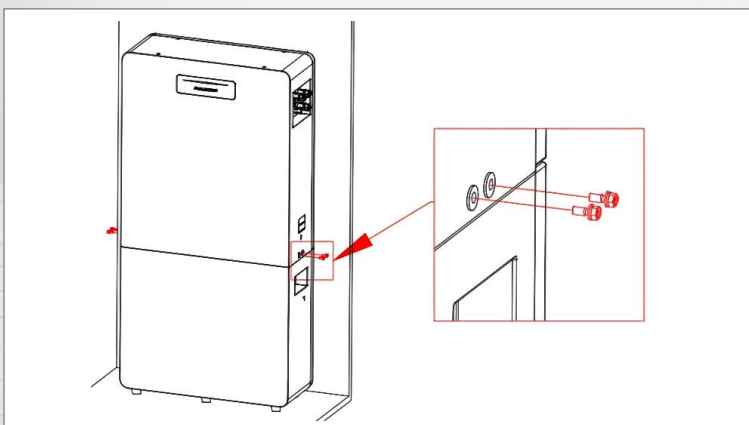
3 Stack Packs

- Align Pack A's plug with Pack B's socket, lower it vertically onto Pack B, and remove the lifting bars.



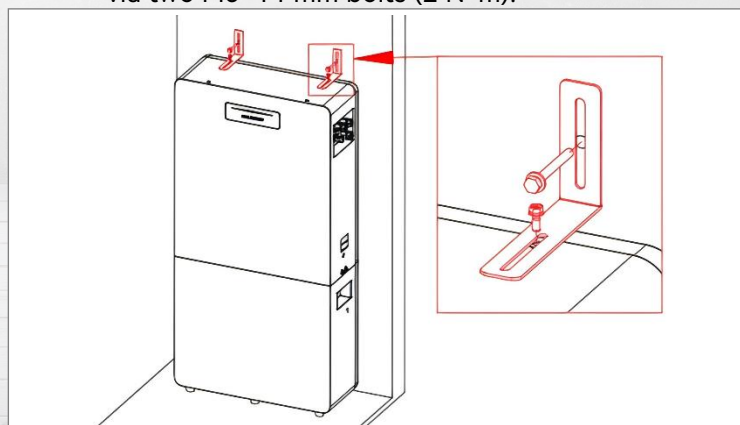
4 Fasten Packs

- Secure the upper and lower boxes together using four M5×14 mm screws (Torque: 2 N·m).



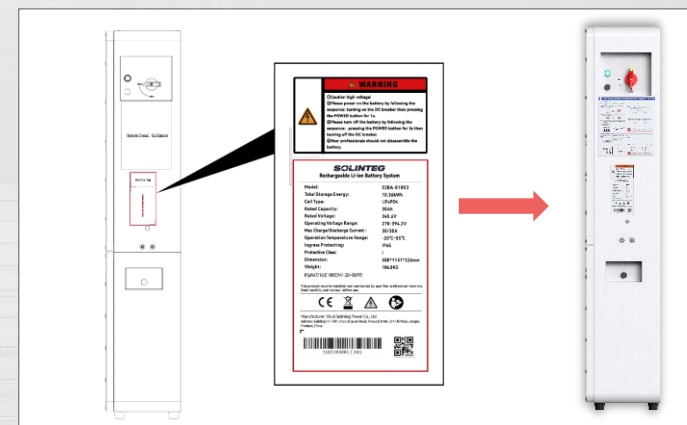
5 Anchor to Wall

- Drill holes, insert plugs, then secure the bracket to the wall via two ST6 screws (5.5 N·m) and to the enclosure via two M5×14 mm bolts (2 N·m).



6 Affix Nameplate

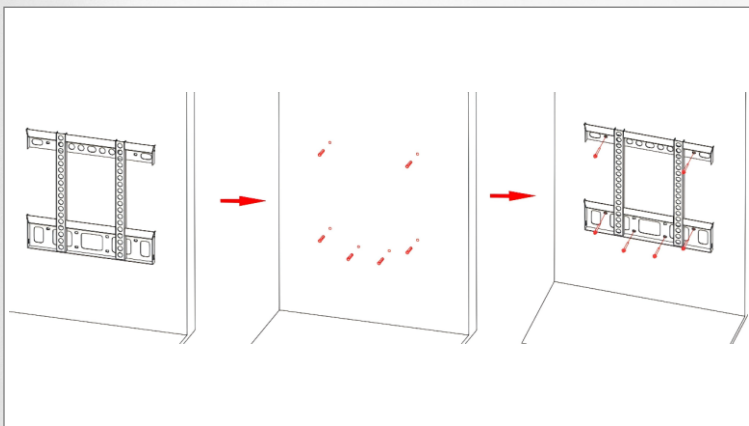
- Paste the system nameplate onto the designated area marked “Please Paste The System Nameplate”.



Battery Installation – Wall Mounting

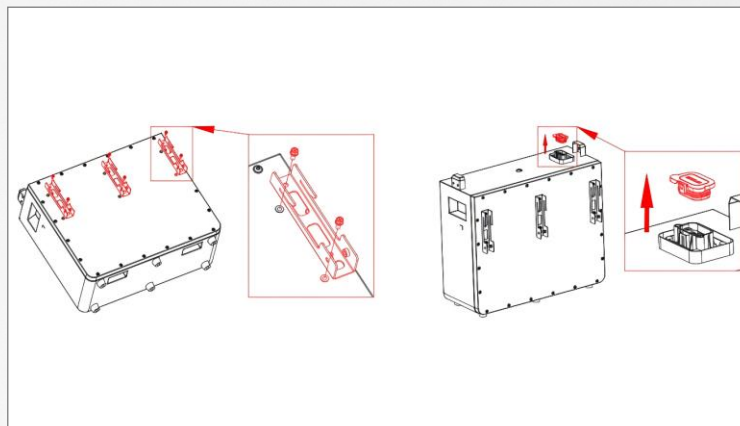
1 Install Bracket

- Level bracket (wider end down, height $\geq 340\text{mm}$), drill, and secure with ST6 expansion screws (5.5 N·m).



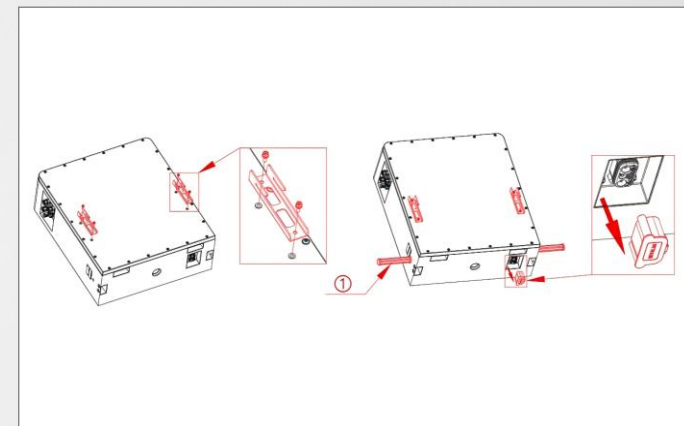
2 Pack B Hooks

- Fix 3 upward hooks to Pack B with six M5×14mm screws (2 N·m) and remove dust cap.



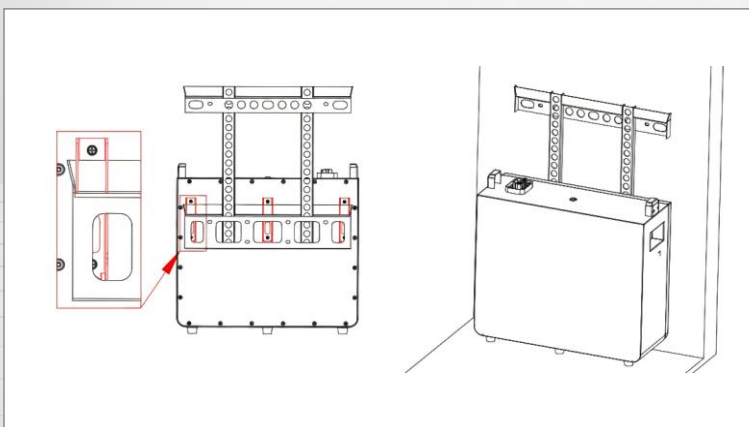
3 Pack A Hooks

- Fix 2 upward hooks to Pack A with four M5×14mm screws (2 N·m) and remove dust cap.



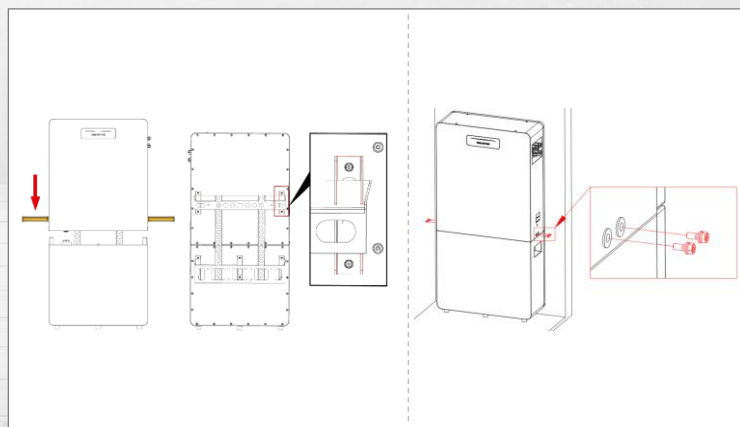
4 Mount Pack B

- Hang Pack B vertically onto the bracket's lower section, ensuring hooks sit fully inside.



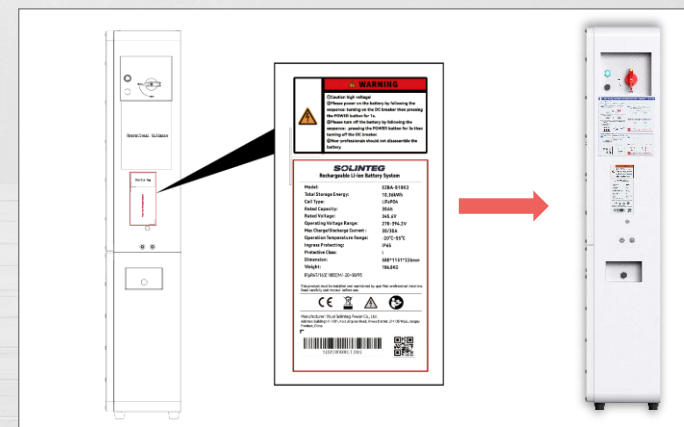
5 Stack Pack A

- Align Pack A's plug with Pack B's socket, lower it onto Pack B, and lock with M5×14mm screws (2 N·m).

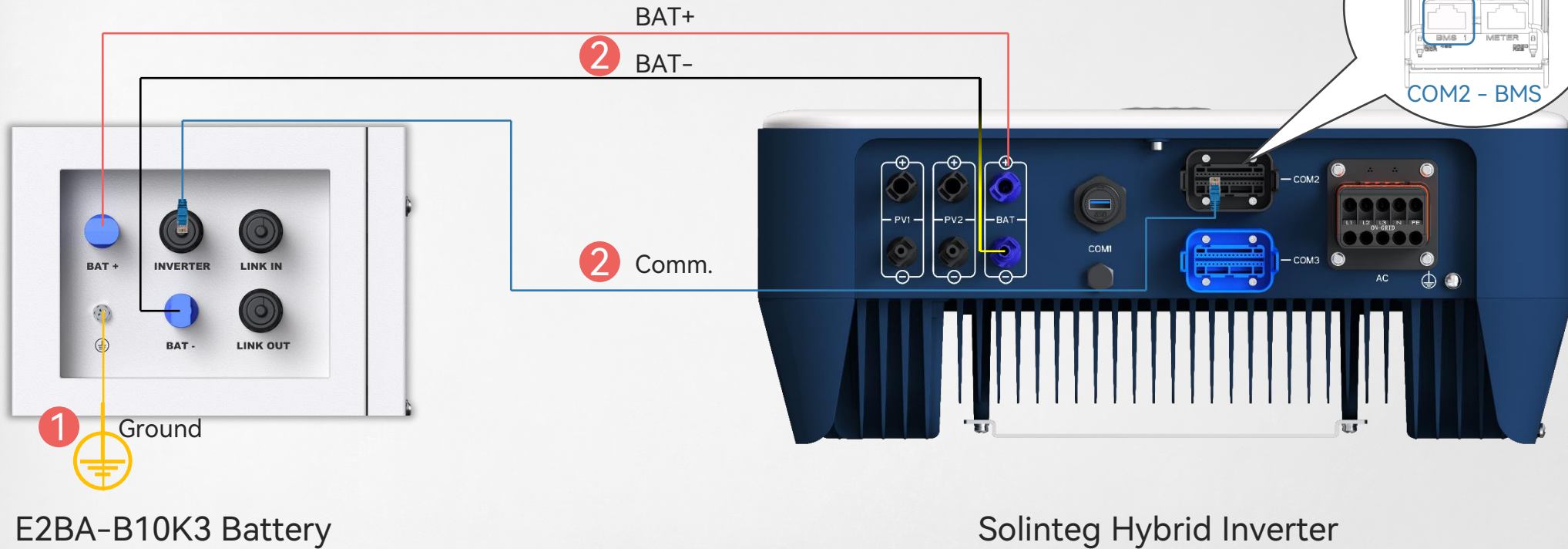


6 Affix Nameplate

- Paste the system nameplate onto the designated area marked “Please Paste The System Nameplate”.



Battery Installation - Electrical Connection



1 Grounding

Crimp the PE conductor into the OT terminal. Fasten OT terminal to the ground bolt (Torque: $1.5 \pm 0.15 \text{ N} \cdot \text{m}$). Connect the other end to the grounding copper busbar.

2 Power Cable Connection

Verify polarity. Plug BAT+ / BAT- power cables into the battery and inverter terminals; a "click" confirms secure lock.

3 BMS Communication

Connect the CAN cable from the battery's "INVERTER" port to the inverter's BMS port.

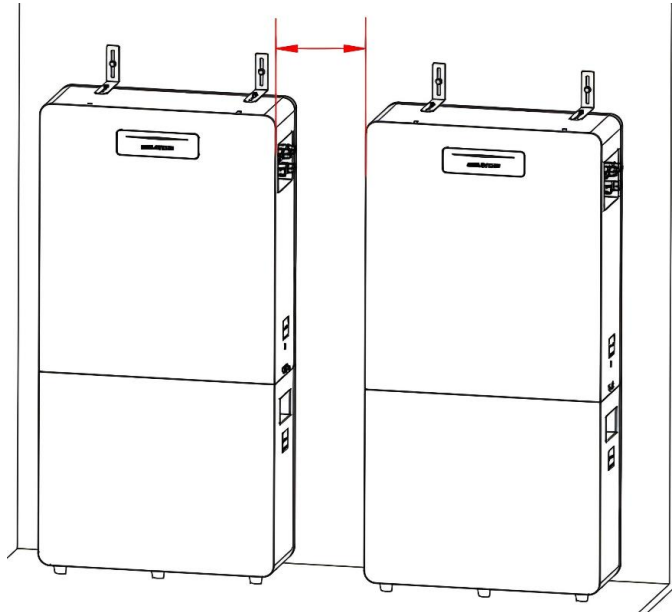


- ✓ Power cables BAT+/- (included in battery package).
- ✓ Communication cable (included in inverter package).

Parallel Installation

Method 1: Side-by-side

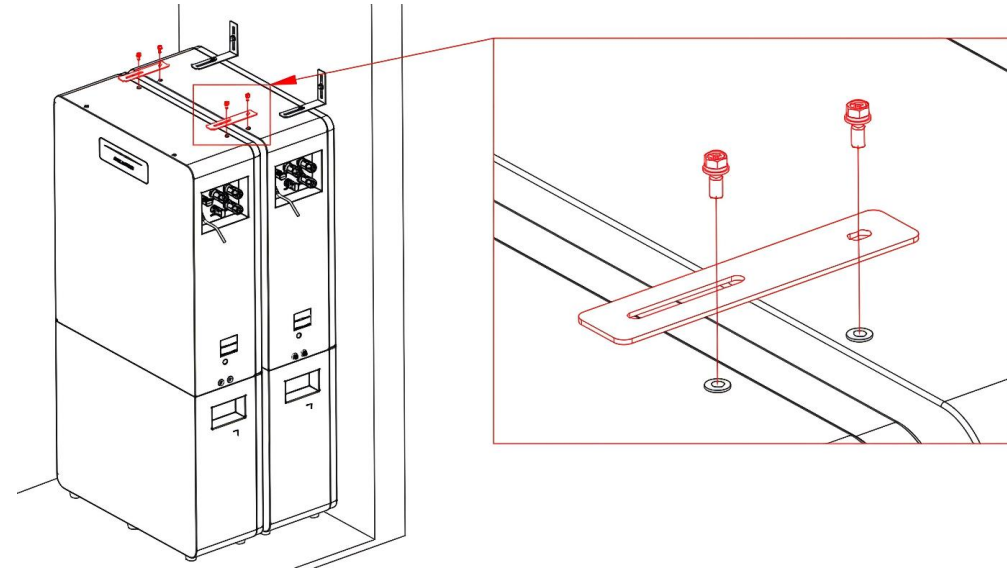
(Wall / Floor-mount)



- Clearance ≥ 300 mm.

Method 2: Back-to-back

(Floor-mount only)



- Align front-to-back with a **20–60 mm** gap.
- Secure with 2 brackets and 4 M5*14 mm screws (recommended torque: **2 N·m**).

Parallel Installation- Electrical Connection

1 Grounding

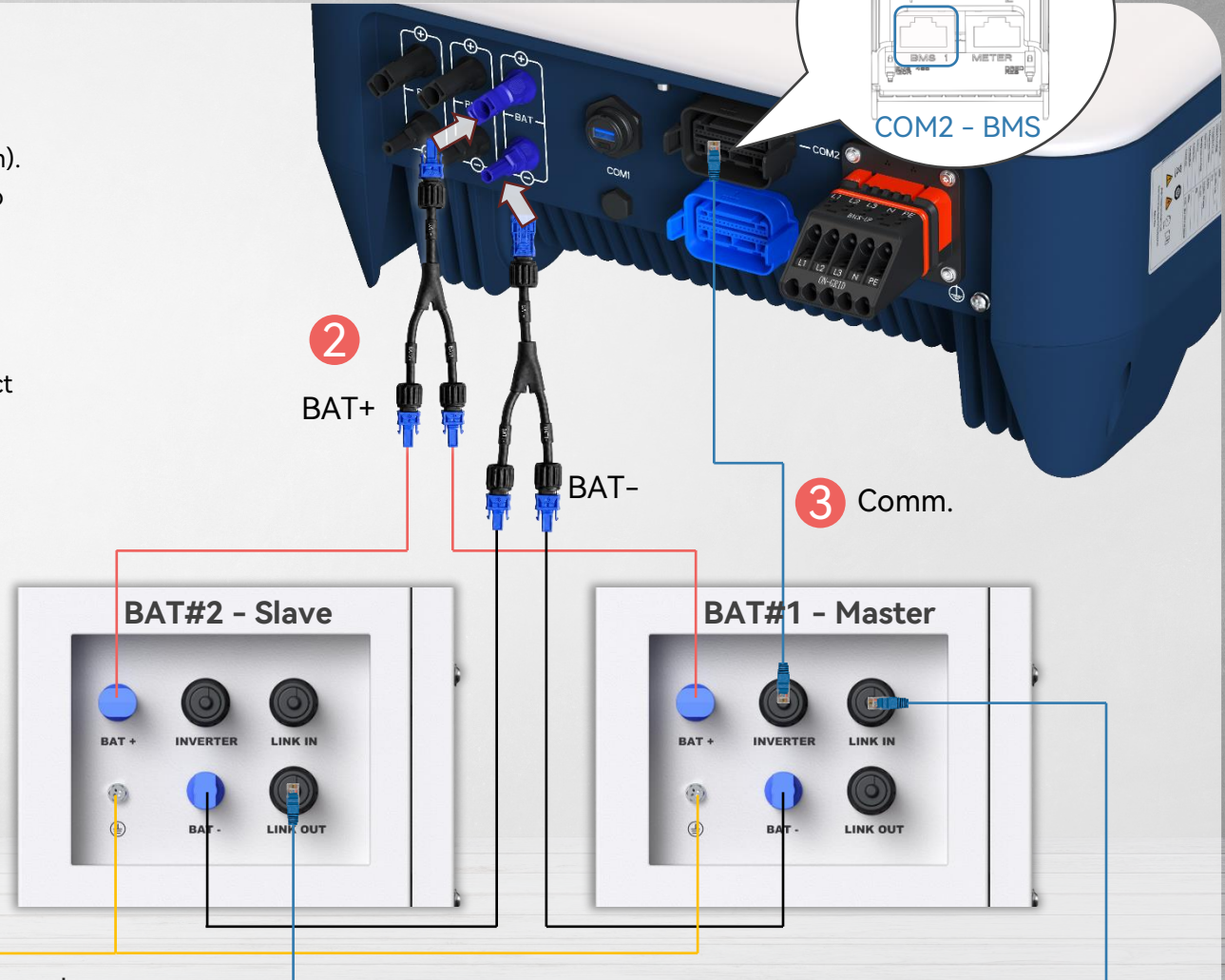
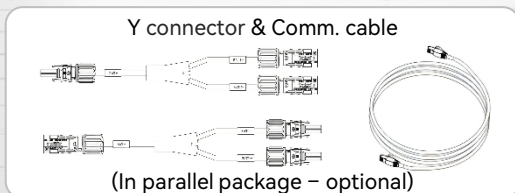
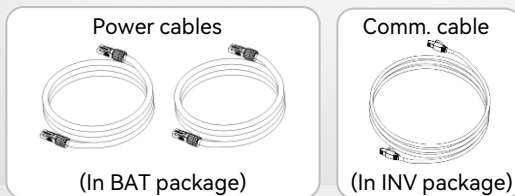
- Crimp the PE conductor into the OT terminals.
- Fasten the OT terminals to the ground bolt (Torque: $1.5 \pm 0.15 \text{ N} \cdot \text{m}$).
- Connect the other ends to the **same grounding copper busbar** to ensure equipotential bonding.

2 Power Cable Connection

- Verify polarity.
- Use the Y connector and included battery power cables to connect the inverter's BAT+/- to the BAT+/- of both batteries (see figure).

3 BMS Communication

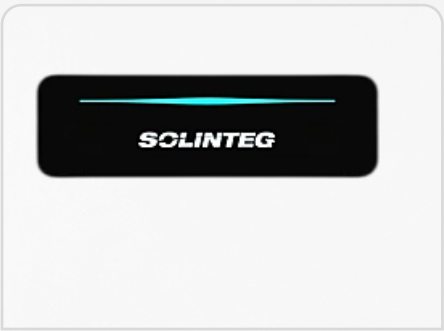
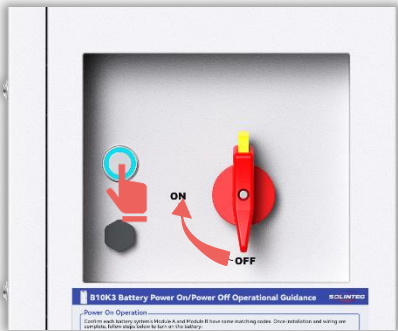
- Connect BAT#1 "LINK IN" to BAT#2 "LINK OUT" (Comm. cable).
- Connect BAT#1 "INVERTER" port to the inverter COM2 port (BMS/BMS 1) via the Comm. cable.



Power On and Commissioning

1 Power On

- 1) Rotate the DC switch to “ON”.
- 2) Press & hold the power button for 1 second until its indicator lights up.

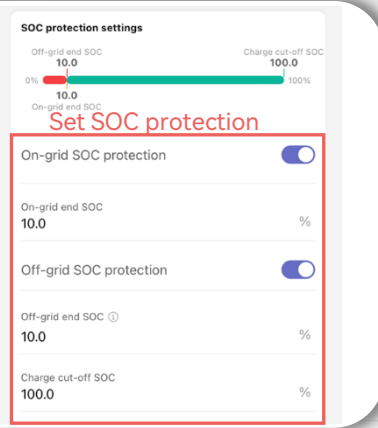
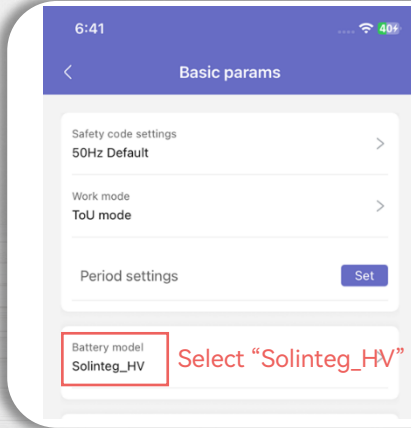
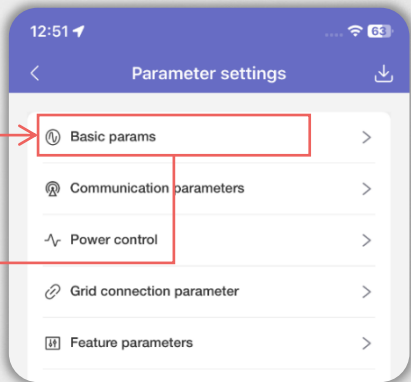
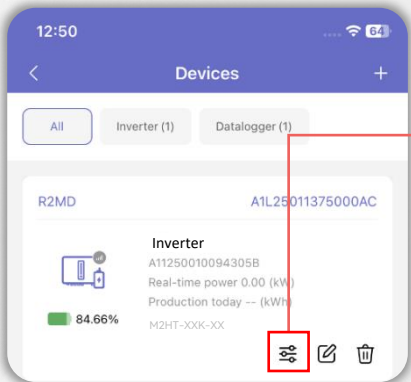


Indicator

Normal		Master / Independent battery operates properly
		Slave battery works normal
Abnormal		Battery abnormal startup
		Self-testing
		Sleep mode
		Slave battery offline
Fault		Battery fault
Upgrade		Updating firmware

2 Commissioning

Select the correct battery model and set the SOC protection limit on the inverter configuration page.



THANK YOU

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