

Hoymiles HiOne ALL-in-One BESS

Made to Outperform, Design to Simplify.

OPEN ENERGY FOR ALL

CONTACT DETAILS

Headquarter:

Hoymiles Power Electronics Inc.
Floor 6, Building 5, 99 Housheng Road,
Gongshu District, Hangzhou

hoymiles.com

+1 (205) 395-5515

service@hoymiles.com

support.hoymiles.com/hc/en-001

High Tech Campus 9, Unit BK3.28, 5656AE Eindhoven,
the Netherlands

[LINKEDIN](#) | [FACEBOOK](#) | [TWITTER](#) | [YOUTUBE](#)



HOYMILES.COM

ALL-IN-ONE BESS

RESIDENTIAL SOLAR & STORAGE SOLUTION

All-in-One Design

Integrates inverter, EMS, battery, and V2X EV charger into one compact, seamless system.

Upgrade with Ease

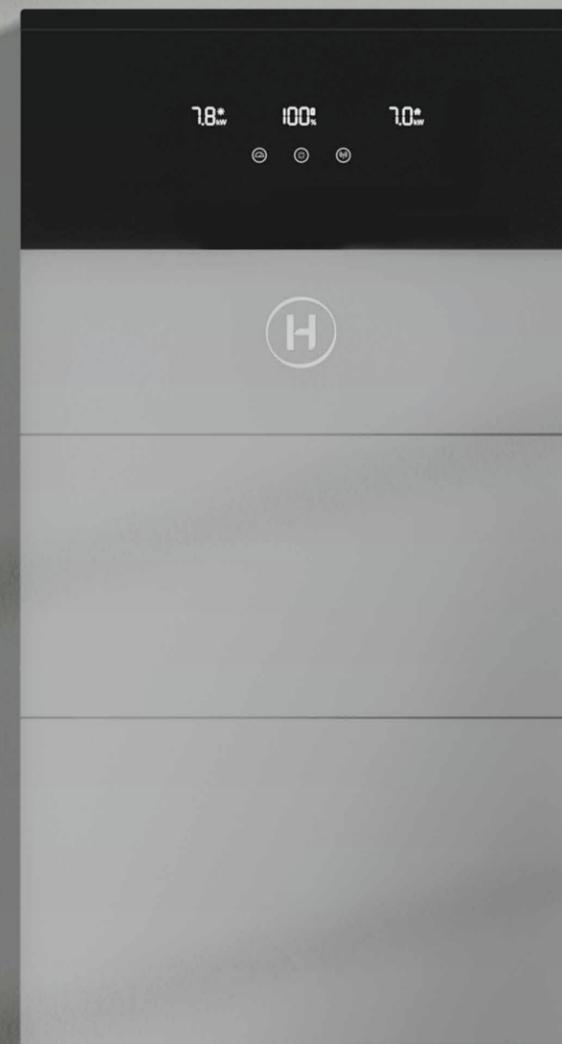
Supports mix-and-match expansion of new and existing batteries, with up to 64 kWh capacity per unit.

Install at Top Speed

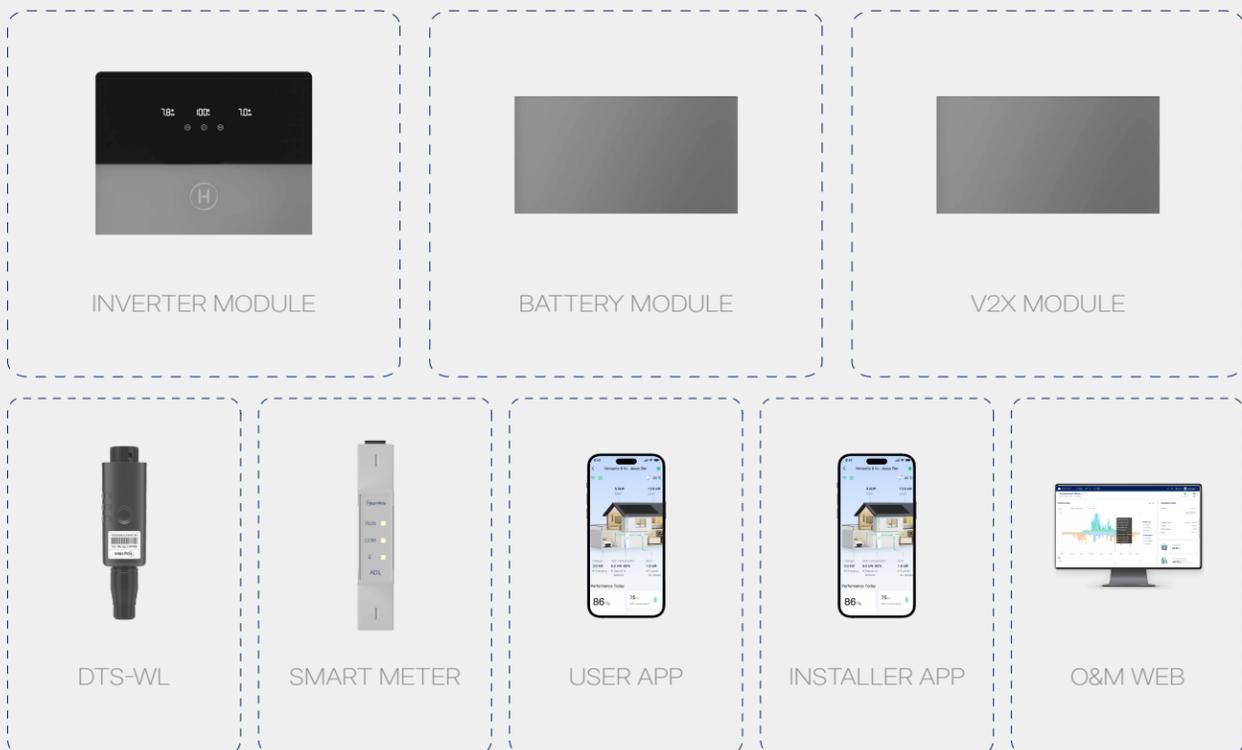
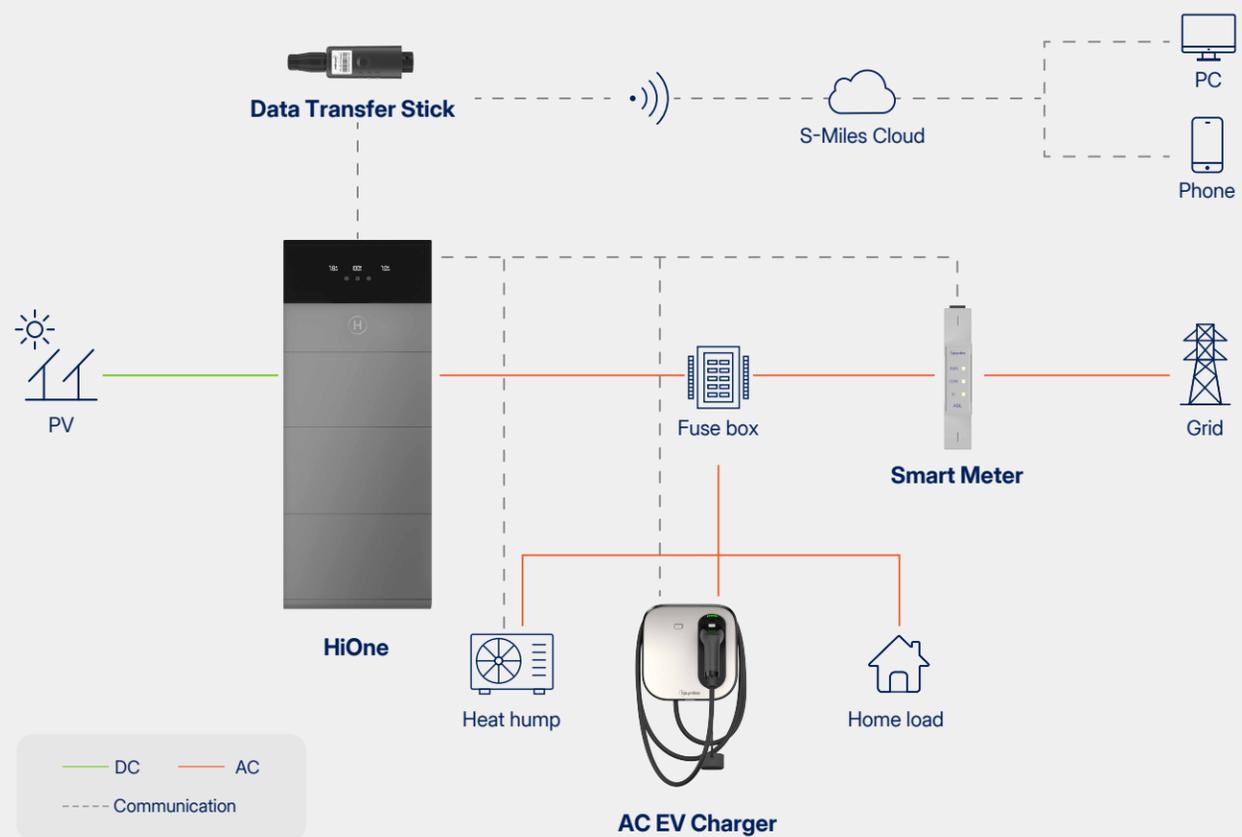
Plug-and-play connections and a stackable battery design make installation effortless.

Power Without Interruption

An additional smart gateway ensures 0 ms power switchover during outages for continuous operation.

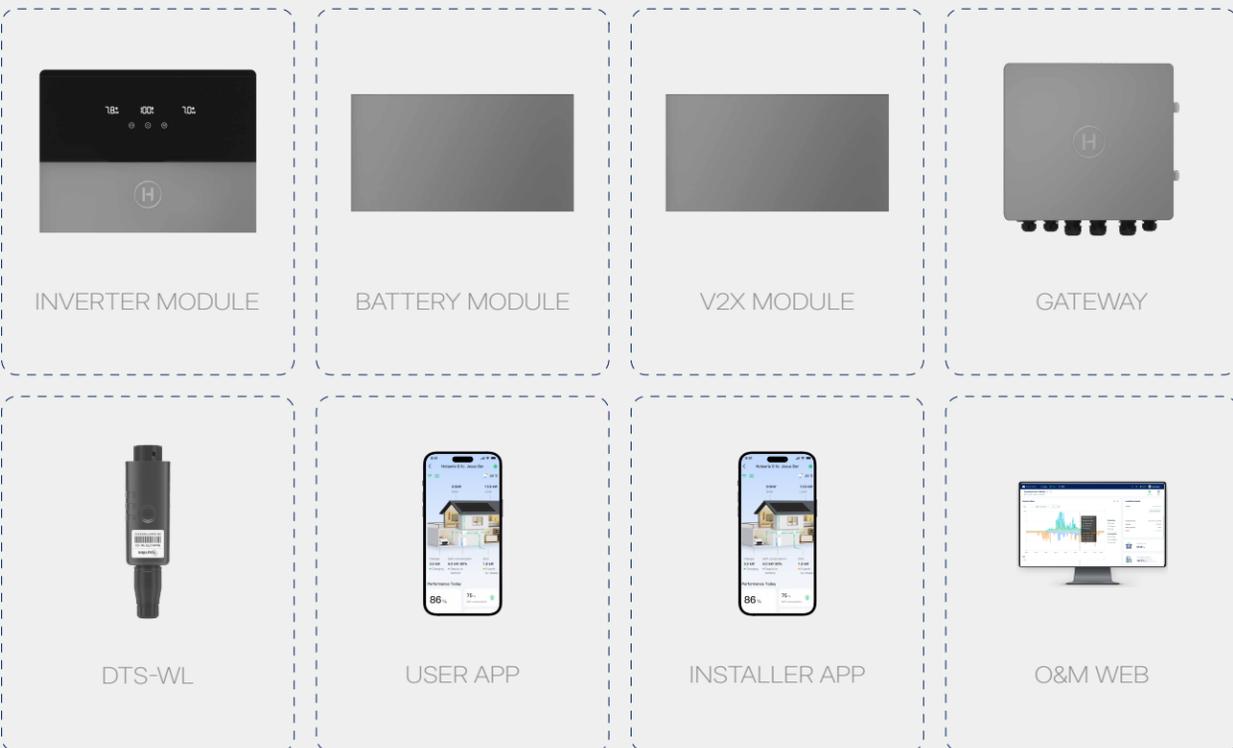
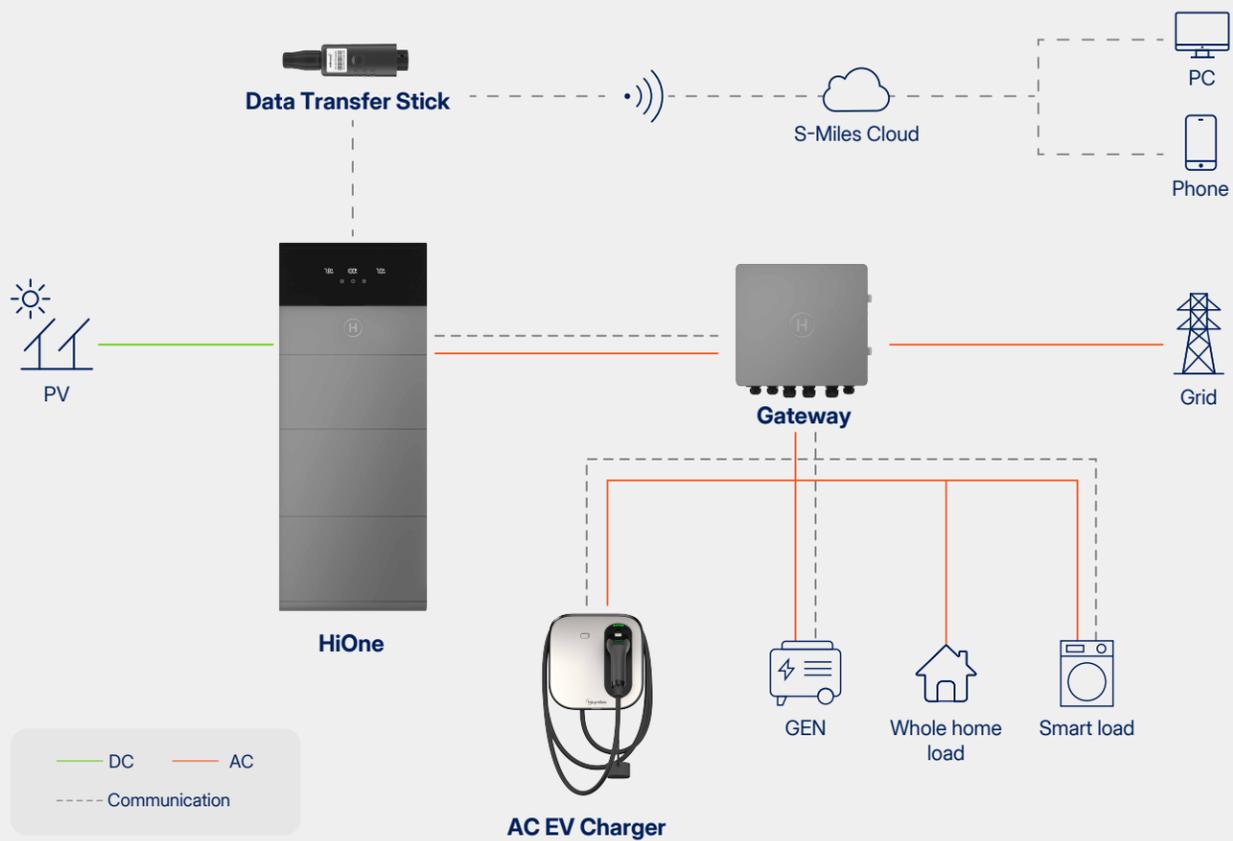


OPEN
INVERTER
VALLEY

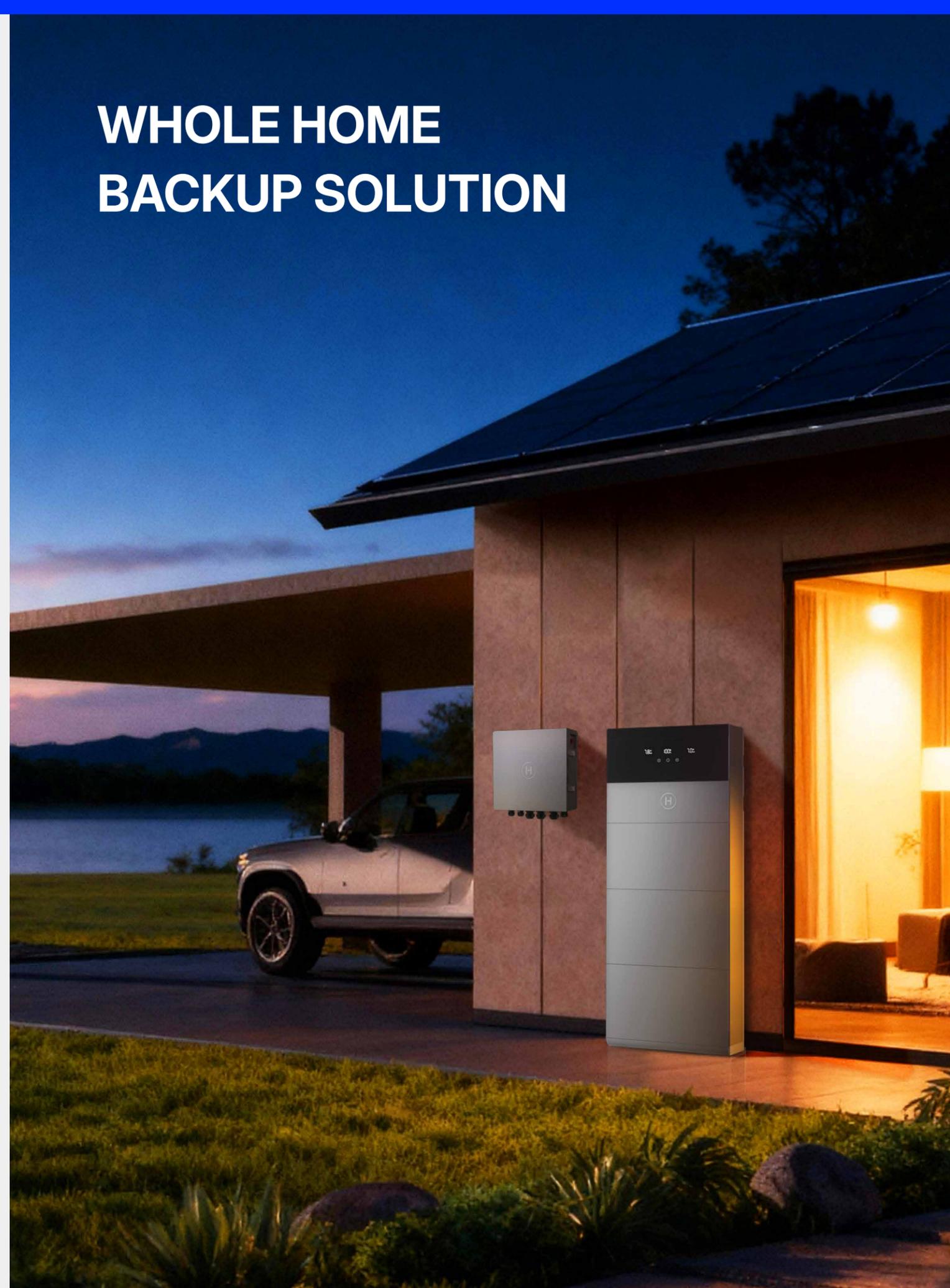


SINGLE UNIT SOLUTION





WHOLE HOME BACKUP SOLUTION

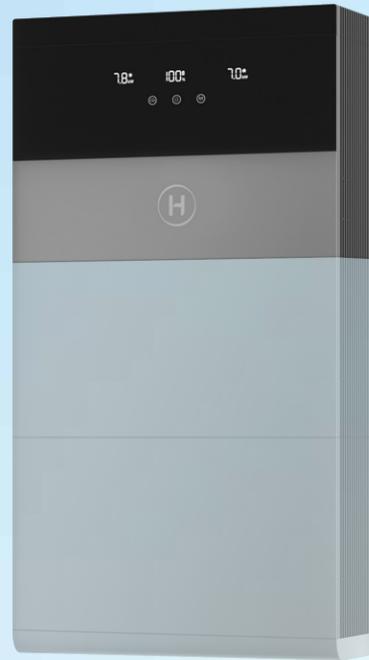


HOYMILES HIONE - INVERTER

Hoymiles launches a series of all-in-one energy storage inverters designed for residential and small C&I PV ESS systems. The hybrid inverter, battery, EMS, and V2X EV charger are integrated into one unit to provide users with a comprehensive PV ESS solution.

It has multiple working modes, supports parallel operation, and can connect to a heat pump, generator, etc., making it available in different application scenarios. It is highly reliable and can help users efficiently and independently use energy.

HiOne-(8-20)T-G3 | Three-phase



Features

- 01** DC/AC ratio up to 200%
- 02** Protection from bad weather with an IP66 design
- 03** Easy Installation with quick connector design and 5 minutes quick commissioning
- 04** Seamless backup power for the whole home and backup loads
- 05** Intelligent energy management supports multiple smart loads connection
- 06** S-Miles App supports multi-scenario display
- 07** Supports VPP or intelligent automatic electricity transaction
- 08** Integrated AC coupled solution optimizes management of energy storage and microinverters

Technical Specifications

Model	HiOne-8T-G3	HiOne-10T-G3	HiOne-12T-G3	HiOne-16T-G3	HiOne-20T-G3
Battery					
Battery type	Li-ion				
Max. charging/discharging power (W)	8000/8400	10000/10500	12000/12600	16000/16800	20000/21000
Charging strategy for Li-ion battery	Self-adaption to BMS				
Communication	CAN				
Compatible battery model	HiOne-8B-G3				
PV Input					
Recommended max. PV power (W)	16000	20000	24000	32000	40000
Max. input voltage (V)	1000				
Rated voltage (V)	720				
Start-up voltage (V)	170				
MPPT voltage range (V)	150-950				
Max. input current (A)	20/20/20		20/20/20/20		
Max. short circuit current (A)	30/30/30		30/30/30/30		
MPPT number/Max. input strings number	3/3		4/4		
AC Output					
Rated output power (W)	8000	10000	12000	16000	20000
Max. on-grid output apparent power (VA)	8800	11000	13200	17600	22000
Max. output current (A)	13.3	16.7	20.0	26.7	33.3
Max. off-grid output apparent power (VA) ⁽¹⁾	12000 (10s)	15000 (10s)	18000 (10s)	24000 (10s)	30000 (10s)
Grid form	3L/N/PE				
Rated AC output voltage (V)	380/400				
Rated grid frequency (Hz)	50/60				
Power factor	>0.99 (0.8 leading-0.8 lagging)				
THDi (@rated output)	<3%				
Efficiency					
Max. efficiency	98.5%				
EU efficiency	98%				
Protection					
Anti-islanding protection	Integrated				
AC overcurrent protection	Integrated				
AC short circuit protection	Integrated				
AC overvoltage and undervoltage protection	Integrated				
Surge protection	AC Type II				
General					
Dimensions (W × H × D [mm])	620 × 360 × 255				
Weight (kg)	≤30				
Mounting	Wall mounted/Floor standing				
Operating temperature (°C)	-30 to +65 (>45, derating)				
Relative humidity	0-95%, no condensation				
Cooling	Natural convection		Intelligent air cooling		
Topology	Non-isolation				
Altitude (m)	≤4000				
Protection degree	IP66				
Noise (dB)	<35		<55		
User interface	LED, App				
Communication	RS485, Bluetooth, Wi-Fi/Ethernet (optional)				

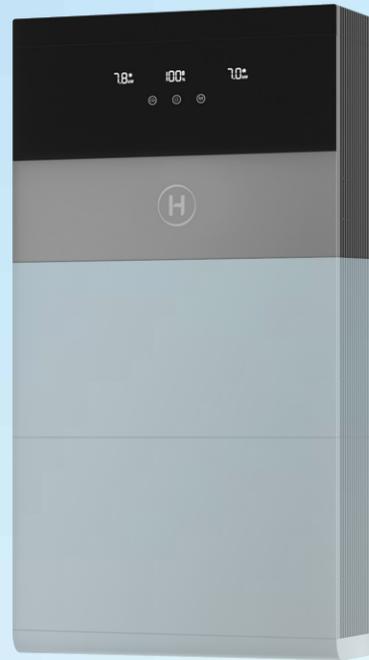
(1) It can be achieved when the inverter works with the HiBox.

HOYMILES HIONE - INVERTER

Hoymiles launches a series of all-in-one energy storage inverters designed for residential and small C&I PV ESS systems. The hybrid inverter, battery, EMS, and V2X EV charger are integrated into one unit to provide users with a comprehensive PV ESS solution.

It has multiple working modes, supports parallel operation, and can connect to a heat pump, generator, etc., making it available in different application scenarios. It is highly reliable and can help users efficiently and independently use energy.

HiOne-(3.6-12)S-G3 | Single-phase



Features

01 DC/AC ratio up to 200%

02 Protection from bad weather with an IP66 design

03 Easy Installation with quick connector design and 5 minutes quick commissioning

04 Seamless backup power for the whole home and backup loads

05 Intelligent energy management supports multiple smart loads connection

06 S-Miles App supports multi-scenario display

07 Supports VPP or intelligent automatic electricity transaction

08 Integrated AC coupled solution optimizes management of energy storage and microinverters

Technical Specifications

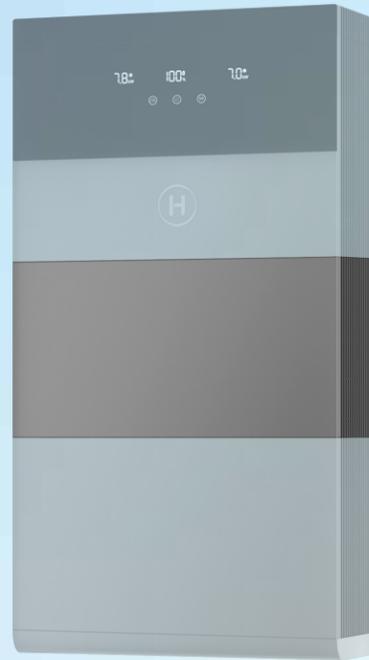
Model	HiOne-3.6S-G3	HiOne-4.6S-G3	HiOne-5S-G3	HiOne-6S-G3	HiOne-8S-G3	HiOne-10S-G3	HiOne-12S-G3
Battery							
Battery type	Li-ion						
Max. charging/discharging power (W)	3680/3864	4600/4850	5000/5250	6000/6300	8000/8400	10000/10500	12000/12600
Charging strategy for Li-ion battery	Self-adaption to BMS						
Communication	CAN						
Compatible battery model	HiOne-8B-G3						
PV Input							
Recommended max. PV power (W)	7200	9200	10000	12000	16000	20000	24000
Max. input voltage (V)	600						
Rated voltage (V)	380						
Start-up voltage (V)	70						
MPPT voltage range (V)	50-550						
Max. input current (A)	18/18	18/18/18		18/18/18			18/18/18
Max. short circuit current (A)	27/27	27/27/27		27/27/27			27/27/27/27
MPPT number/Max. input strings number	2/2	3/3		3/3			4/4
AC Output							
Rated output power (W)	3680	4600	5000	6000	8000	10000	12000
Max. on-grid output apparent power (VA)	3680	4600	5500	6600	8800	11000	13200
Max. output current (A)	16.7	20.9	25.0	30.0	40.0	50.0	60.0
Max. off-grid output apparent power (VA) ⁽¹⁾	5520 (10s)	6900 (10s)	7500 (10s)	9000 (10s)	12000 (10s)	15000 (10s)	18000 (10s)
Grid form	L/N/PE						
Rated AC output voltage (V)	220/230/240						
Rated grid frequency (Hz)	50/60						
Power factor	>0.99 (0.8 leading-0.8 lagging)						
THDi (@rated output)	<3%						
Efficiency							
Max. efficiency	98%						
EU efficiency	97.5%						
Protection							
Anti-islanding protection	Integrated						
AC overcurrent protection	Integrated						
AC short circuit protection	Integrated						
AC overvoltage and undervoltage protection	Integrated						
Surge protection	AC Type II						
General							
Dimensions (W × H × D [mm])	620 × 360 × 255						
Weight (kg)	<27						
Mounting	Wall mounted/Floor standing						
Operating temperature (°C)	-30 to +65 (>45, derating)						
Relative humidity	0-95%, no condensation						
Cooling	Natural convection					Intelligent air cooling	
Topology	Non-isolation						
Altitude (m)	≤4000						
Protection degree	IP66						
Noise (dB)	<35					<55	
User interface	LED, App						
Communication	RS485, Bluetooth, Wi-Fi/Ethernet (optional)						

(1) It can be achieved when the inverter works with the HiBox.

HOYMILES HIONE - V2X MODULE

The HiOne-25VD-G3 supports 25 kW bi-directional charging, enabling seamless interaction between electric vehicles and home energy systems. By directly utilizing solar-generated power, it allows EVs to be charged with clean energy or discharge to support household loads, forming an integrated PV-ESS-Charger ecosystem that maximizes energy efficiency and sustainability.

HiOne-25VD-G3



Technical Specifications

Model	HiOne-25VD-G3
DC Charging	
Max. charging/discharging power (kW)	25
Operating voltage range to inverter (V)	350-950
Operating voltage range to vehicle (V)	250-950
Max. operating current (A)	50
Charging interface	CCS2
General	
Dimensions (W × H × D [mm])	620 × 360 × 255
Charging/discharging temperature (°C)	-20 to +55 (>45, derating)
Protection degree	IP66
Cooling	Intelligent air cooling
Altitude (m)	≤4000
Charging cable length (m)	5
General	
Authentication	RFID card/App/no authentication
Application	Bi-directional V2X operation
User interface	LED indicator, App, RFID card
Remote function	OTA, remote diagnostics

Features

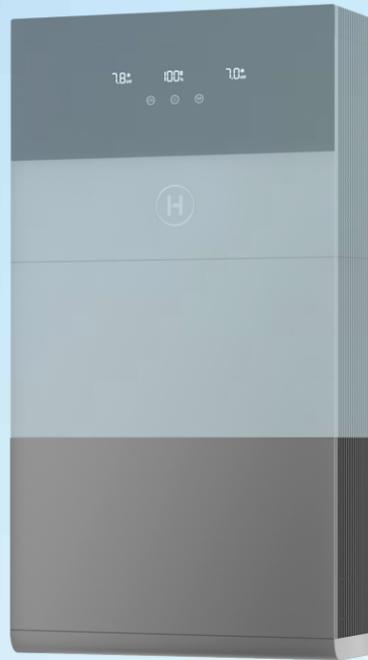
- 01 V2X enables energy exchange between EVs and home
- 02 25 kW bi-directional fast DC charging
- 03 Protection from bad weather with an IP66 design
- 04 Stackable design enables effortless installation

HOYMILES HIONE - BATTERY

Hoymiles launches a series of all-in-one energy storage inverters designed for residential and small C&I PV ESS systems. The hybrid inverter, battery, EMS, and V2X EV charger are integrated into one unit to provide users with a comprehensive PV ESS solution.

It has multiple working modes, supports parallel operation, and can connect to a heat pump, generator, etc., making it available in different application scenarios. It is highly reliable and can help users efficiently and independently use energy.

HiOne-8B-G3



Technical Specifications

Model	HiOne-8B-G3
Battery Data	
Battery type	LiFePO
Cell capacity (Ah)	314
Total energy (kWh)	8.04
Usable energy (kWh)	7.24
Max. charging/discharging power (kW)	4.02
Peak discharge power (kW)	6.03 (10s)
Communication	CAN
Recommended depth of discharge (DOD)	90%
Max. stackable quantity	4
Max. parallel quantity	2
General	
Dimensions (W × H × D [mm])	620 × 360 × 255 (single pack)
Weight (kg)	67
Mounting	Wall mounted/Floor standing
Installation environment	Indoor/Outdoor
Charging/discharging temperature (°C)	-20 to +55 (>45, derating)
Protection degree	IP66
Cooling	Natural convection
Altitude (m)	≤4000
Cycle life (25°C, 0.5C)	8000 Cycles

Features

- 01 Lower LCOE with 314 Ah large capacity battery cell
- 02 Multilevel security system supports battery combination of new and old
- 03 Protection from bad weather with an IP66 design
- 04 Self-heating technology improves battery performance

HOYMILES GATEWAY

The HiBox-63T-G3 is a smart gateway device that provides users with an excellent home backup solution. It can communicate with Hoymiles energy storage inverters, providing users with a comprehensive PV ESS solution, thus helping users in efficient and independent energy utilization.

HiBox-63T-G3 | Three-phase



Technical Specifications

Model	HiBox-63T-G3
AC Grid	
Grid form	3L/N/PE
Rated AC input/output voltage (V)	380/400
Rated AC input/output frequency (Hz)	50/60
Max. input/output current (A)	63
AC INV	
Max. input number	2
Rated AC input voltage (V)	380/400
Max. input current (A)	32*2
Smart Load/GEN/AC INV	
Max. input number	1
Rated AC input voltage (V)	380/400
Max. input current (A)	63
Backup Load	
Rated AC input/output voltage (V)	380/400
Rated AC input/output frequency (Hz)	50/60
Max. input/output current (A)	63
General	
Dimensions (W × H × D [mm])	535 × 490 × 162
Weight (kg)	17.5
Mounting	Wall mounted
Operating temperature (°C)	-30 to +55
Relative humidity	0-95%, no condensation
Cooling	Natural convection
Altitude (m)	≤4000
Protection degree	IP54
Communication	RS485

Features

01 Supports whole home backup solution with a maximum output current of 63 A

03 Supports seamless switch between on-grid mode and off-grid mode

02 Supports multi-source input and integrated control, ensuring an uninterrupted power supply

04 Supports connection to smart loads such as heat pumps and EV chargers

HOYMILES GATEWAY

The HiBox-100S-G3 is a smart gateway device that provides users with an excellent home backup solution. It can communicate with Hoymiles energy storage inverters, providing users with a comprehensive PV ESS solution, thus helping users in efficient and independent energy utilization.

HiBox-100S-G3 | Single-phase



Features

- 01 Supports whole home backup solution with a maximum output current of 100 A
- 02 Supports multi-source input and integrated control, ensuring an uninterrupted power supply
- 03 Supports seamless switch between on-grid mode and off-grid mode
- 04 Supports connection to smart loads such as heat pumps and EV chargers

Technical Specifications

Model	HiBox-100S-G3
AC Grid	
Grid form	L/N/PE
Rated AC input/output voltage (V)	220/230/240
Rated AC input/output frequency (Hz)	50/60
Max. input/output current (A)	100
AC INV	
Max. input number	2
Rated AC input voltage (V)	220/230/240
Max. input current (A)	50*2
Smart Load/GEN/AC INV	
Max. input number	1
Rated AC input voltage (V)	220/230/240
Max. input current (A)	100
Backup Load	
Rated AC input/output voltage (V)	220/230/240
Rated AC input/output frequency (Hz)	50/60
Max. input/output current (A)	100
General	
Dimensions (W × H × D [mm])	535 × 490 × 162
Weight (kg)	17.5
Mounting	Wall mounted
Operating temperature (°C)	-30 to +55
Relative humidity	0-95%, no condensation
Cooling	Natural convection
Altitude (m)	≤4000
Protection degree	IP54
Communication	RS485

HOYMILES DATA TRANSFER STICK

The DTS-G3 series Data Transfer Stick (DTS) is designed as a suitable option for the energy storage system. Its plug and play design simplifies the installation, and the built-in Bluetooth module makes the commissioning more convenient and efficient. Using the S-Miles App, you can establish a local connection via Bluetooth to operate and maintain an energy storage system. The DTS-G3 series can also upload real-time data to the S-Miles Cloud via Wi-Fi or LAN communication. This enables you to remotely monitor, operate, and maintain an energy storage system.

DTS-G3



Features

- 01 Integrated to use, simply plug and play
- 02 IP66 protection
- 03 Stable and reliable data transmission
- 04 Intelligent monitoring management via S-Miles Cloud

Technical Specifications

Model	DTS-WL-G3
Basic Data	
Max. inverter supported	10
Data upload cycle	30s to 600s
LED Indicator	3
Connection Interface	USB
Configuration method	BLE App
Communication	
Bluetooth standard	BLE 5.0
Wi-Fi standard	IEEE 802.11 b/g/n/ax @2.4 GHz
Ethernet standard	10/100 Mbps self-adaption Max. distance of network cable: 100 m
Power	
Operating voltage	5 Vdc
Power consumption	<5 W
General	
Dimensions (W × H × D)	49.2 × 183.7 × 34.9 mm (1.9 × 7.2 × 1.4 in)
Weight	105 g (0.23 lb)
Installation	Plug and play
Environment	
Operating temperature range	-25°C to +65°C (-13°F to +149°F)
Relative humidity	0-95%, no condensation
Operating altitude	≤4000 m (13123 ft)
Protection degree	IP66 ⁽¹⁾
Certifications and Standards	
Certificate	CE, PSTI, EN 18031, FCC, IC, UKrSEPRO, NTC, TA, NBTC, WPC

(1) The requirements of IP66 can be met only when the DTS is used with an inverter.

Model	DTS-WIFI-G3
Basic Data	
Max. inverter supported	10
Data upload cycle	30s to 600s
LED Indicator	3
Connection Interface	USB
Configuration method	BLE App
Communication	
Bluetooth standard	BLE 5.0
Wi-Fi standard	IEEE 802.11 b/g/n/ax @2.4 GHz
Power	
Operating voltage	5 Vdc
Power consumption	<5 W
General	
Dimensions (W × H × D)	49.2 × 126.8 × 33.2 mm (1.9 × 5.0 × 1.3 in)
Weight	82 g (0.18 lb)
Installation	Plug and play
Environment	
Operating temperature range	-25°C to +65°C (-13°F to +149°F)
Relative humidity	0-95%, no condensation
Operating altitude	≤4000 m (13123 ft)
Protection degree	IP66 ⁽¹⁾
Certifications and Standards	
Certificate	CE, PSTI, EN 18031, FCC, IC, UKrSEPRO, NTC, TA, NBTC, WPC

(1) The requirements of IP66 can be met only when the DTS is used with an inverter.

HOYMILES ELECTRIC ENERGY METER

The DIN-rail mounted multifunctional electric energy meter with external current transformers (CTs) is an intelligent instrument. Designed for new energy power generation systems, such as photovoltaic grid-tied systems, microinverter systems, energy storage systems, and AC-coupled systems, it is characterized by high accuracy, small size, fast response, and easy installation.

It can sample, meter, and monitor power parameters, and transmit the data to inverters. Based on real-time power and accumulated electrical energy, it supports export management, regulates power generation, and can manage the battery charging and discharging processes.

Additionally, it supports bidirectional metering. These functions can optimize the energy management of residential energy storage systems.

Meter-G3



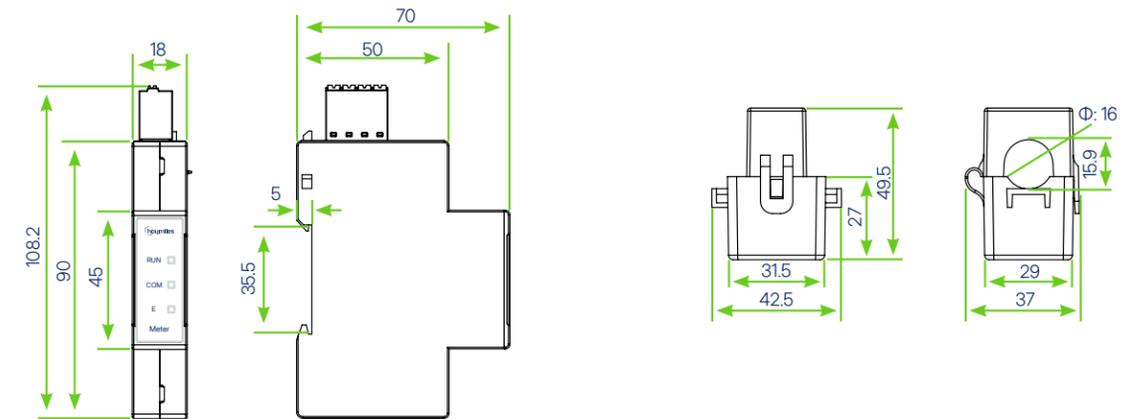
Features

- 01** Supports CT reverse detection and adaptive phase sequence
- 03** Uses CTs with RJ45 plugs to simplify the installation process
- 02** Features two CT terminals for flexible application in AC coupled systems
- 04** Compatible with 120 A/40 mA CT

Technical Specifications

Model	Meter-1S-G3	Meter-2S-G3	Meter-1T-G3	Meter-2T-G3
Basic Data				
Grid type		Single-phase		Three-phase four-wire
Rated input voltage (V)		230		3 × 230/400
Input voltage range (V)		230±20%		3 × 230/400±20%
Overload voltage (V)		1.2 times rating (continuous)/2 times rating (1s)		
Rated input current (A)		120		
Overload current (A)		1.2 times rating (continuous)/2 times rating (1s)		
Power consumption (VA)		<0.2		
Grid frequency (Hz)		50 (±0.5%)		
Response rate		≤100 ms (voltage, current, power) ≤1s (electrical energy)		
Measurement Accuracy				
Voltage		±0.5%		
Current		±0.5%		
Active power		±0.5%		
Reactive power		±0.5%		
Apparent power		±0.5%		
Active energy		Class B (split-core current transformer)		
Reactive energy		Class 2		
Electromagnetic Compatibility				
Electrostatic discharge immunity		Class III		
Electrical fast transient burst immunity		Class IV		
Surge (shock) immunity		Class IV		
Safety				
Power frequency withstand voltage (Vac)		3000, 1 min (between communication and signal input)		
Insulation resistance (MΩ)		>100 (input and output terminals to enclosure)		
Communication				
Interface		RS485		
Communication protocol		Modbus RTU		
Communication address range		Modbus RTU: 1-247		
Baud rate (bps)		1200-38400		
Environment				
Operating temperature (°C)		-40 to +70		
Storage temperature (°C)		-40 to +70		
Relative humidity		≤95%, no condensation		
Altitude (m)		≤2000		
Mechanical Data				
Dimensions (W × H × D [mm])		18 × 108.2 × 70		
Weight (kg)		63.15		
Mounting		DIN rail		
Protection degree		IP20		

Unit: mm



Electric Energy Meter

CT-120 A/40 mA



S-Miles Cloud

- Module level monitoring
- Individual MPPT
- Easy to operation and maintain the system

Available:

- Webpage
- APP- Android / IOS

