



DONNERGY

Draw a better world with
New energy

CONTACT US

Shenzhen Donnergy Technology Co., Ltd

Address: 6/F, Tower B, Jin'an Bldg, Shang Cun, Gong Ming,
Guang Ming District, Shenzhen, China

Hotline

Tel : +86755 88656959
Web : www.donnergy.com
E-mail : Sales@donnergy.com
: Support@donnergy.com



Solar Inverters & Digital Energy Storage System Expert

Shenzhen Donnergy Technology Co., Ltd



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About Donnergy

Shenzhen Donnergy Technology Co., Ltd is a leading provider of Solar Inverters and Energy Storage Solutions, Integrating R&D, Production, Sale And Service.

As a professional manufacturer which was honored with National High-tech Enterprise due to the continuous research and development in the field of Solar Energy Conversion and Power Storage, Donnergy has gained core technical advantages in PCS, EMS, BMS and Cloud System.

Continuous R&D innovation and strict quality control is the cornerstone of Donnergy, With a dedicated team of over 60 engineers, Donnergy has developed a wide range of products and obtained dozens of patents.

Most of products are certified with EN50549-1, IEC 62109-1&-2, IEC 61000-6-1&-3,VDE4105, CEI 0-21, G98&G99, NTS, UTE C15-712-120107, RD1663/2000, ISO9001, PSI, COC by TUV, SGS or ITS.

Factory



Assembly Workshop



SGS Certified Laboratory



Aging Room



Trial production prior to mass production

Our Advantages



Technological Innovation

Donnergy has gained core technical advantages in PCS, EMS, BMS and Cloud System, supporting OEM and ODM, providing customers with overall system solutions quickly.



Quality Control

Our inverters and batteries are produced according to the quality requirements of the car regulations and aging labs are equipped with advanced equipments.



Intelligent Manufacturing

Strictly follow quality control protocols in accordance with the European and USA standards,ISO9001 and ISO14001, produce high and cost-effective products with EU series national certifications.



Logistics Capability

There are multi-channel shipping methods such as land, sea and air to ensure fast, safe and efficient arrival.



Localization Service

Local office, warehouse and after-service center are available to quickly solve customers requirement.

Inverters

Draw a better world with New energy



GT400TL/600TL/800TL Microinverter



Main Features

- Low photovoltaic input voltage,high and low voltage isolated,safe to use.
- Built-in MPPT,DSP control,DC to AC peak efficiency up to 94.20%.
- Small and light-weighted,easy to install, IP67 class protection.
- WIFI Remote monitoring.
- Model GT800L can be paralleled up to 6 units.

Technical Parameters / Model	GT400TL	GT600TL	GT800TL
PV Input (DC)			
PV Max input Power (W)	250x2	350x2	450x2
PV Max Input Voltage (V)	60		
Start-up Voltage (V)	30		
MPPT Voltage Range (V)	25~55		
Full Load MPPT Voltage Range (V)	33 ~ 55		
Operating Voltage Range (V)	16~60		
Max Input Current (A)	7A x2	12A x2	14A x2
Maximum input short-circuit current (A)	15A x2	20A x2	25A x2
Number of MPP Trackers	2		
AC Output			
Rated Output Power (W)	400	600	800
Nominal Output Current (A)	1.74	2.6	3.48
Maximum Output Power (VA)	400	600	800
Nominal Grid Voltage (V)	230 (single-phase)		
Grid Voltage Range (V)	184 ~ 264VAC	184 ~ 264VAC	194 ~ 264VAC
Nominal Grid Frequency (Hz)	50Hz / 60Hz		
Max. Total Harmonic Distortion	<3%(rated power)		
Power Factor	>0.99		
Max Paralle	11pcs	7pcs	5pcs
Anti-islanding Protection	Yes		
AC Short Circuit Protection	Yes		
System			
Max. Efficiency	94.2%		
Protection Class	CLASS I		
Protection Level	IP67		
Cooling Method	Natural Cooling		
Monitoring	WIFI		
Operating Temperature Range (°C)	-40 ~ +65		
Manufacturer's Warranty	10 Years		
Mechanical Data			
Dimensions (W ×H × Dmm)	295 x 255 x 48		
Weight (kg)	6Kg		
Product Certification			
Test Standards	IEC 62321-3-1:2013; IEC 62321-4:2013+A1:2017; IEC 62321-5:2013;IEC 62321-6:2015; IEC 62321-7-1:2015; IEC 62321-7-2:2017;IEC 62321-8:2017 ENIEC 61000-6-3:2021; ENIEC 61000-6-1:2019;ENIEC 61000-3-2:2019+A1:2021; EN 61000-3-3:2013+A2:2021;EN 62109-1:2010; EN 62109-2:2011 VDE-AR-N 4105:2018; conjunction with DIN VDE V 0124- 100:2020		



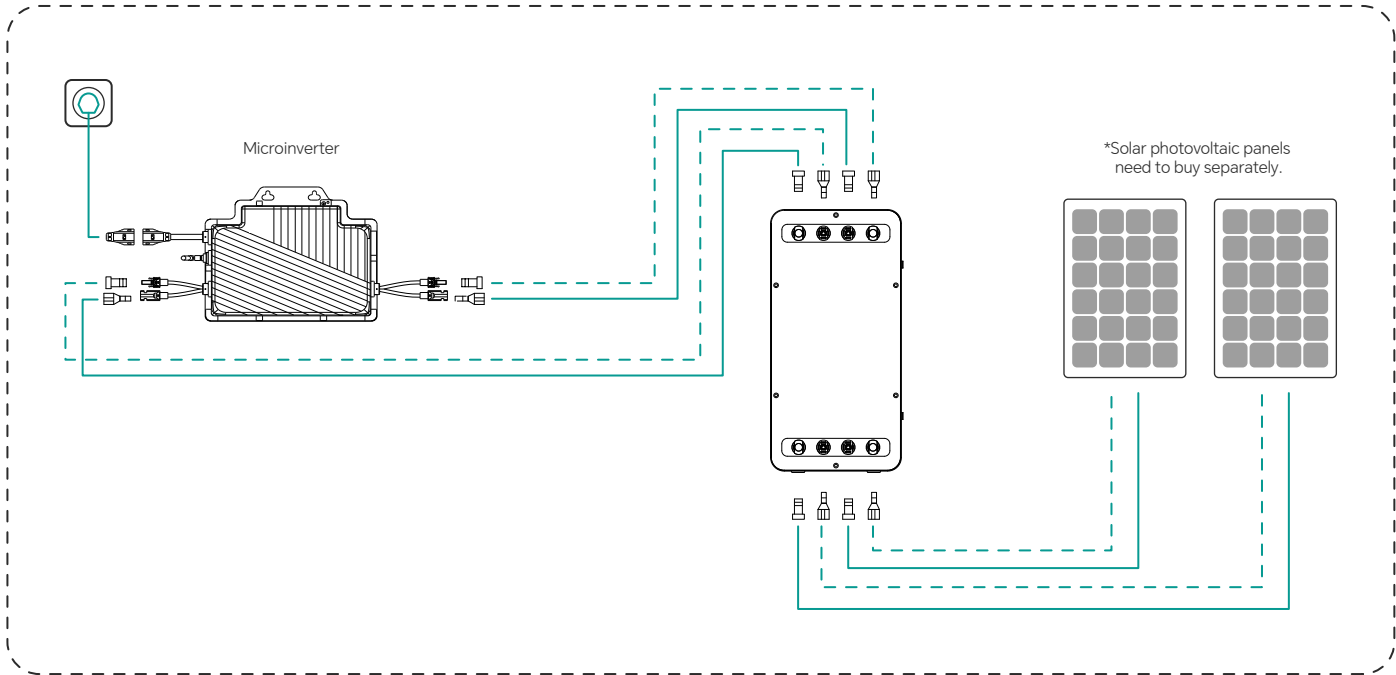
B2.5K-XSLA Balcony Solar Station



Main Features

- Easy plug-and-play installation,compatible with 99% of the market solar panels and microinverters.
- Support microinverter parallelism,Expand capacity and support greater output power.
- Noiseless design,IP65 waterproof,high temperature resistant fireproof material,Meet the conditions of all-weather use of the balcony.
- Lithium iron phosphate battery,7 layers of safety protection,6000+ cycles.
- Integrated MPPT,BMS power management technology,support battery 2240Wh~6720Wh capacity expansion.
- Real-time monitoring of intelligent APP,convenient for multi-scenario application switching.

Technical Parameters / Model	B2.5K-XSLA	B2.5K-XSLA(EXTRA BATTERY)
GENERAL		
Cell Chemistry	LifePO4	
Capacity	2240Wh	
Nominal Current	50A	
Life cycle	6000+ Cycles to 80% Capacity	
Storage Temp	-10°C~45°C	-20°C~60°C
Operating Temp	-10°C~40°C	0°C~50°C
Material	ABS + PC/Meta	
Weight	20±0.5kg	18±0.5kg
Dimensions	350*295*175mm	
Battery Management System	OVP, UVP, OCP, SCP, OTP, UTP, etc.	
Wireless	BT5.2 + WIFI 2.4G	/
MC4*2 PV INPUT		
Power	500W*2 Max	/
Voltage Range	12V~59V	/
Max. Input Current	10A	/
MC4*2 OUTPUT		
Power	400W*2 Max	/
Voltage Range	42V~50.4V	/
Max. Output Current	11.9A	/
INPUT		
Battery Voltage Range	44.8V	
Charge Voltage	52.5V	
Charge Current	50A	
OUTPUT		
Discharge Current	100A	
DoD	90%	



GH3600TL/4600TL/5000TL On-grid/Off-grid Hybrid Energy Storage PV Inverter



Main Features

- Multiple operating modes,on-grid,off-grid and UPS,MPPT charger built in.
- Controlled by built-in DSP and adopt advanced SPWM technology.
- Integrated smart APP,can remotely diagnose and update.
- Droop control,Max 6pcs in parallel.
- Suitable for customizing various PV Energy Storage System.
- Compatible with almost all 48V LiFePO4 battery pack.

Technical Parameters / Model	GH3600TL	GH4600TL	GH5000TL
Battery Data			
Battery Type	Lithium / Lead-Acid	Lithium / Lead-Acid	Li-Ion / Lead-Acid
Nominal Battery Voltage (V)	51.2		
Battery Voltage Range (V)	41.6 ~ 58.5		
Max. Continuous Charging Current (A)	80	95	95
Max. Continuous Discharging Current (A)	85	100	100
Max. Charge Power (W)	3600	4600	5000
Max. Discharge Power (W)	3600	4600	5000
PV String Input Data			
Max. Input Power (W)	5200	6500	7000
Max. Input Voltage (V)	500		
MPPT Operating Voltage Range (V)	120 ~ 430		
Start-up Voltage (V)	150		
Nominal Input Voltage (V)	360		
Max. Input Current per MPPT (A)	15		
Max. Short Circuit Current per MPPT (A)	18.9		
Number of MPP Trackers	2		
Number of Strings per MPPT	1		
AC Output Data (On-grid)			
Rated Power Output to Utility Grid (W)	3600	4600	5000
Max. Apparent Power Output to Utility Grid (VA)	3960	5000	5500
Max. Apparent Power from Utility Grid (VA)	3960	5000	5500
Nominal Output Voltage (V)	220 / 230 / 240		
Nominal AC Grid Frequency (Hz)	50Hz / 60Hz		
Max. AC Current Output to Utility Grid (A)	17.2	20.0	23.9
Max. AC Current From Utility Grid (A)	17.2	22.0	23.9
Max. Total Harmonic Distortion	<3%		
Power Factor (cosØ)	~0.99 (Adjustable from 0.8 leading to 0.8 lagging)		
Switch Time	<10 ms		
AC Output Data (Back-up)			
Back-up Rated Power (W)	3600	4500	4500
Max. Output Apparent Power (VA)	3600	4500	4500
Max. Output Current (A)	15.6	20	20
Nominal Output Voltage (V)	220 / 230 / 240		
Nominal Output Frequency (Hz)	50 / 60		
Output THDv (@Linear Load)	<3%		
Conversion Efficiency			
Max. Efficiency	97.8%		
EU Efficiency	97%		
Max. Battery to AC Efficiency	95%		
MPPT Efficiency	99.9%		
Protection			
Residual Current Monitoring	Integrated		
Anti-islanding Protection	Integrated		
Remote Shutdown	Integrated		
Protection Level	IP65		
Environmental / Ambient Conditions			
Operating Temperature Range (°C)	-25 ~ +60		
Relative Humidity	0 to 95 % , non-condensing		
Installation Altitude above Sea Level	up to 2000 m above sea level		
Cooling Method	Natural Cooling		
Monitoring Settings	Integrated data logger		
Other Data			
Dimensions (WxHxDmm)	350 x 580 x 230		
Weight (kg)	25±0.5		
Installation Type	Wall Installation with Wall Bracket		
Communication	CAN / RS485 / WiFi		
Manufacturer's Warranty	5 Years		
Product certification			



G6.2K-P1LA On-grid/Off-grid Hybrid Energy Storage PV Inverter



Main Features

- Multiple operating modes, on-grid,off-grid and UPS, MPPT charger built-in.
- IP65 protection rating.
- Integrated smart APP, can remotely diagnose and update.
- Droop control, Max 6pcs in parallel.
- Five-years warranty.
- Compatible with almost all 48V LiFePO4 battery pack.

Technical Parameters / Model	G6.2K-P1LA
PV Input (DC)	
Maximum Input Power	7000w
Maximum Input Voltage	500V
Starting Voltage	150V
PV Input Voltage Range	370V (100V~500V)
MPPT Voltage Range	120V~450V
MPPT Quantity	2
Maximum Input Current	18A/18A
Output/Input (AC)	
Rated Output Power	6200W
Maximum Output Apparent power	6600W
Rated Output Current	26.1A
Maximum Output Current	28.7A
Grid Voltage Type	230VAC (single phase)
Rated Grid Frequency	50Hz/60Hz (optional)
Total Current Waveform Distortion Rate	<3% (rated power)
Power Factor Range	>0.99 @ full power (Adjustable range 0.8 lead ~ 0.8 hysteresis)
Off-Grid Output	
Maximum Output Power	6000W
Rated Output Voltage	230VAC (single phase)
Rated Output Frequency	750Hz/60Hz (optional)
Switching Time	≤10ms
Total Harmonic Distortion (Linear Load)	THD<3% (Linear load<1.5%)
Overload capacity	2 times of rated power, 10 S
Battery	
Battery Voltage Range	40~60V
Maximum Battery Charge Current	100A
Maximum Battery Discharge Current	150A
Battery Type	Lead-acid or Lithium-ion
Communication Interface	RS485; CAN
Efficiency	
Maximum Efficiency	98%
European Efficiency	97%
MPPT Efficiency	99.9%
Inverter Efficiency	94.8%
System	
Protection Level	IP65
Ambient Temperature	-25~60℃, >45℃ Derating
Ambient Humidity	0~95% No condensation
Cooling Method	Smart cooling
Altitude	≤2000m
Display	LCD
Communication	LCD
Warranty	5 years (standard)
Other Data	
Installation	Wall-mounted



G6K/8K/10K/12K-P1LA Single Phase Hybrid Inverter



Main Features

- Maximum charge/discharge current: 190A.
- Up to 16 units can be connected in parallel during grid-connected and off-grid operation,supports parallel connection of multiple batteries.
- Supports AC AC coupling to retrofit existing solar systems.
- Color touch screen IP65 protection level.
- Directly supports diesel generator power without external converter.
- 6 programmable time periods with different operational modes.

Technical Parameters / Model	G6K-P1LA	G8K-P1LA	G10K-P1LA	G12K-P1LA
PV String Input Data				
Max. DC Input Power (W)	7800	10400	13000	15600
Rated PV Input Voltage (V)	370V (125V~500V)			
MPPT Voltage Range(V)	150~430V	150~425V		
Max. Power DC voltage range	200~425V			
Start-up Voltage(V)	125V			
Max. DC Short-circuit Current (A)	22+22	26+26	26+26+26	26+26+26
Number of MPPTS	2			
Number of Strings per MPPT	2+2	2+2	2+2+2	2+2+2
Efficiency				
Maximum Efficiency	97.60%			
European Efficiency	96.50%			
MPPT Efficiency	>99%			
AC Output				
Rated AC output power(W) and Rated output power UPS(W)	6000	8000	10000	12000
Max AC output Active Power (W)	6600	8800	11000	13200
Peak Power (Off-grid)	2 times rated power, 10 seconds			
AC Output Rated current (A)	27.3	34.8	43.5	52.2
Max AC Output Current (A)	30	38.2	47.8	57.4
Rated AC current of BYPASS relays(A)	40	50	60	60
Power Factor	0.8 (leading) to 0.8 (lagging)			
Output frequency and voltage	50/60Hz; L/N/PE 220/230V (single phase)			
Grid Type	Single Phase			
THDI (Rated power)	<3% (of nominal p ower)			
Grid DC component	<0.5% In			
Battery				
Battery Type	Lead-acid or Lithium Battery			
Rated battery voltage	40~60			
Maximum Charging Current (A)	135	190	220	250
Maximum Discharge Current (A)	135	190	220	250
Charging Curve	Three-stage Charging/Equalization Charging			
External Temperature Sensor	Available			
Battery Management System	Adaptive BMS System			
Protection				
PV Arc Fault Detection	Available			
PV Input Lightning Protection	Available			
Anti-islanding Protection	Available			
PV String Input Reverse Polarity Protection	Available			
Insulation Resistor Detection	Available			
Residual Current Monitoring Unit	Available			
Output Over Current Protection	Available			
Output Shorted Protection	Available			
Surge Protection	Available			
Over Voltage Category	DC Type II / AC Type III			
Certifications and Standards				
Grid Certification	IEC61727/62116,EN50549-1			
Safety/EMC Standards	IEC/EN 62109-1,IEC/EN 62109-2,IEC/EN 61000-6-1, IEC/EN 61000-6-2,IEC/EN 61000-6-3,IEC/EN 61000-6-4			
Other				
Operating Temperature Range (℃)	-40~60℃, >45℃ Derating			
Cooling Method	Smart Cool ing			
Noise Level (dB)	<30 dB			
BMS Communication Port	Rs485; CAN			
Weight (kg)	24			
Cabinet size(mm)	330W×580H×232D(Excluding Connectors And Brackets)			
Protection Level	IP65			
Installation Method	Wall-mounted			
Warranty	5 Years			



G8K/10K/12K-P3LA 3 Phase Inverter On-grid/Off-grid Hybrid Energy Storage



Main Features

- Ⓐ Maximum charge/discharge current: 240A.
- Ⓥ 48V low-voltage battery with integrated transformer for safety isolation.
- ⚡ Frequency droop control, supporting parallel operation of up to 10 units.
- 🔌 AC-coupled compatibility for retrofitting existing solar systems.
- 🔄 100% three-phase unbalanced output, with each phase capable of delivering up to 50% of rated power.
- 👍 Direct support for diesel generators without the need for external converters.
- ⚙️ 6 programmable time periods with different operational modes.

Technical Parameters / Model	G8K-P3LA	G10K-P3LA	G12K-P3LA
PV Input			
Max. DC Input Power (W)	10400	13000	15600
Rated DC Input Power(V)	550 (160-800)		
Start-up Voltage(V)	160		
MPPT Voltage Range(V)	200-650		
MPPT Voltage Range (V)	350-650		
Max. DC Input Current per String (A)	13+13	26+13	26+13
Max. DC Short-circuit Current (A)	17+17	34+17	34+17
Number of MPPTS	2		
Number of Strings per MPPT	1+1	2+1	2+1
Efficiency			
Maximum Efficiency	97.6%		
European Efficiency	97.0%		
MPPT Efficiency	99.0%		
AC Output			
Rated AC Output Power(W)	8000	10000	12000
Max. AC Output Power (W)	8800	11000	13200
Peak Power (Off-grid)	2 times rated power, 10 seconds		
Rated AC Output Current (A)	12.1	16.7	18.2
Max. AC Current(A)	13.4	18.4	20
Maximum Output Short-circuit Current (A)	75		
Maximum Continuous AC Output Current (A)	45		
Power Factor	0.8 (leading) to 0.8 (lagging)		
AC Output Frequency and Voltage	50/60Hz; 220/380Vac, 230/400Vac (three-phase)		
Grid Type	Three-phase four-wire		
Current Harmonics	<3% (of nominal power)		
Grid DC component	<0.5% In		
Battery			
Battery Type	Lead-acid or Lithium Battery		
Battery Voltage Range (V)	40-60		
Maximum Charging Current (A)	160	200	240
Maximum Discharge Current (A)	160	200	240
Charging Curve	Three-stage Charging/Equalization Charging		
External Temperature Sensor	Available		
Battery Management System	Adaptive BMS System		
Protection			
PV Input Lightning Protection	Available		
Island Protection	Available		
Reverse Polarity Protection for DC	Available		
Insulation Impedance Detection	Available		
Leakage Current Monitoring Protection	Available		
Output Over current Protection	Available		
Output Short-circuit Protection	Available		
Output Over voltage Protection	Available		
Surge Protection	Two-stage lightning protection on DC side, two-stage lightning protection on AC side		
Over voltage Protection	Two-stage lightning protection on DC side, three-stage lightning protection on AC side		
Certifications and Standards			
Grid Certification	IEC61727/ 62116,EN50549-1		
Safety/EMC Standards	IEC/ EN 61000-6-1/ 2/ 3/ 4, IEC/ EN 62109-1, IEC/ EN 62109-2		
Other			
Operating Temperature Range (°C)	-40-60°C, >45°C Derating		
Cooling Method	Smart Cooling		
Noise Level (dB)	≤50 dB		
BMS Communication Port	RS485; CAN		
Smart Monitoring	WiFi+APP		
Weight (kg)	37.5		
Dimensions (Height x Width x Thickness mm)	702×422×281 (Excluding Connectors And Brackets)		
Protection Level	IP65		
Installation Method	Wall-mounted		
Warranty	5 Years (10 Years Optional)		



G4K/5K/6K/7K/8K/10K-P3HE 3 phase High voltage Inverters



Main Features

- 🔌 UPS ≤ 10ms 100% unbalanced three phase input Intelligent phase power control Smart reverse battery protection.
- 🔌 150% DC input oversizing 2 MPPTs Max. efficiency 98.2%
- 🔌 Quick access to VPP platform Smart load management through dry contact Sta-ckable design, easy to expand capacity

Technical Parameters / Model	G4k-P3HE	G45k-P3HE	G6k-P3HE	G7k-P3HE	G8k-P3HE	G10k-P3HE
Input data(DC)						
Max.recommended PV power(for module STC)	6000W	7500W	9000W	10500W	12000W	15000W
Max.DC voltage	1000V					
Start voltage	120V					
Nominal voltage	600V					
MPP work voltage range	120V-1000V					
Number of independent MPP tracker	2					
No. of PV strings per MPP tracker	1					
Max.input current per MPP tracker	13.5A					
Max.short-circuit current per MPP tracker	16.9A					
AC output(Back-up)						
AC nominal output power	4000W	5000W	6000W	7000W	8000W	10000W
Max.AC apparent power	4000VA	5000VA	6000VA	7000VA	8000VA	10000VA
Nominal AC voltage	220V/380V,230V/400V					
Nominal AC frequency	50/60Hz					
Max.output current	6.1A	7.6A	9.1A	10.6A	12.1A	15.2A
THDV	<3%					
BAT Data(DC)						
Battery voltage range	100-550V					
Max.charging/discharging current	25A/25A					
Continuous charging/discharging power	4000W	5000W	6000W	7000W	8000W	410000W
Type of battery	lithium ion battery					
Max.efficiency	97.6%					
Euro weighted efficiency	97.2%					
MPPT efficiency	≥ 99.9%					
AC input/output (On-grid)						
AC nominal power	4000W	5000W	6000W	7000W	8000W	10000W
Max.AC apparent power	4000VA	5000VA	6000VA	7000VA	8000VA	10000VA
Nominal AC voltage/range	220V/380V,230V/400V					
AC grid frequency/range	50/60,±5Hz					
Max. output current	6.1A	7.6A	9.1A	10.6A	12.1A	15.2A
Displacement power factor, configurable	0.8leading...0.8lagging					
THDI	<3%					
AC connection	3W+N+PE					
General data						
Dimensions(W/H/D)in mm	545*480*190					
Weight	31KG					
Operating temperature range	-25° C ~+60° C (-13~+140 °F) with derating above 45° C~113 °F					
Noise emission (typical)	≤ 25 dB(A)					
Altitude	4000m					
Self-consumption	< 13 W					
Cooling method	Natural					
Degree of protection	IP66					
Protection						
DC reverse polarity protection	yes					
DC switch	yes					
DC Surge protection	yes					
Insulation resistance monitoring	yes					
AC surge protection	yes					
AC short-circuit protection	yes					
Ground fault monitoring	yes					
Grid monitoring	yes					
Anti-islanding protection	yes					
Residual-current monitoring unit	yes					
Features						
DC connection	MC4/H4(opt)					
AC connection	Connector					
BAT connection	Connector					
Display	LED&AP					
Interfaces:RS485/USB /CAN/Wi-Fi/GPRS	yes /yes /yes/opt/opt					
Warranty: 5 years/10 years	yes/opt					
Safety	IEC 62109-1,IEC 62109-2					
EMC	EN IEC 61000-6-1,EN IEC 61000-6-3					
Certification	G99/G100,VDE-AR-N 4105/VDE V 0214,EN 50549-1,VDE 0126/UTE C 15/VFR:2019,RD 1699/RD 244/UNE 206006/UNE 206007-1,CEI 0-21.C10/11.NRS 097-2-1 IEC 61727,IEC 60068,IEC 61683,EN 50530					



OH3600TL/OH5000TL Off-grid Hybrid Energy Storage PV Inverter

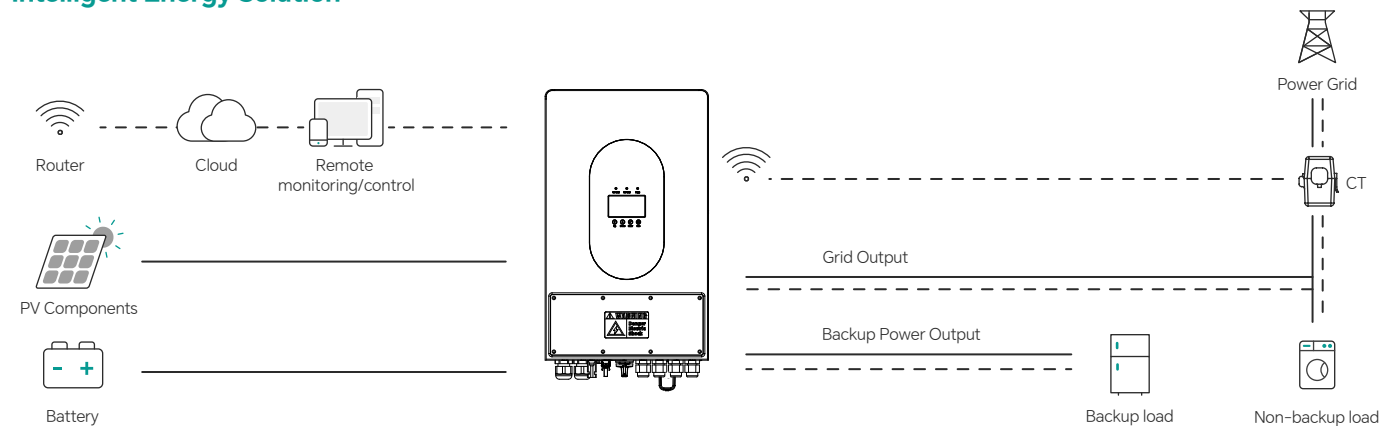


Main Features

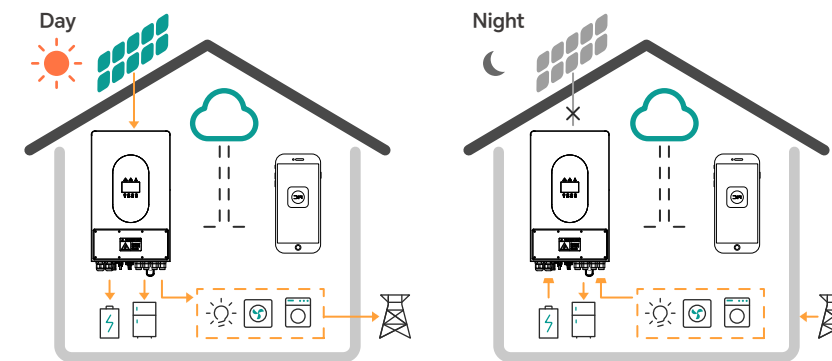
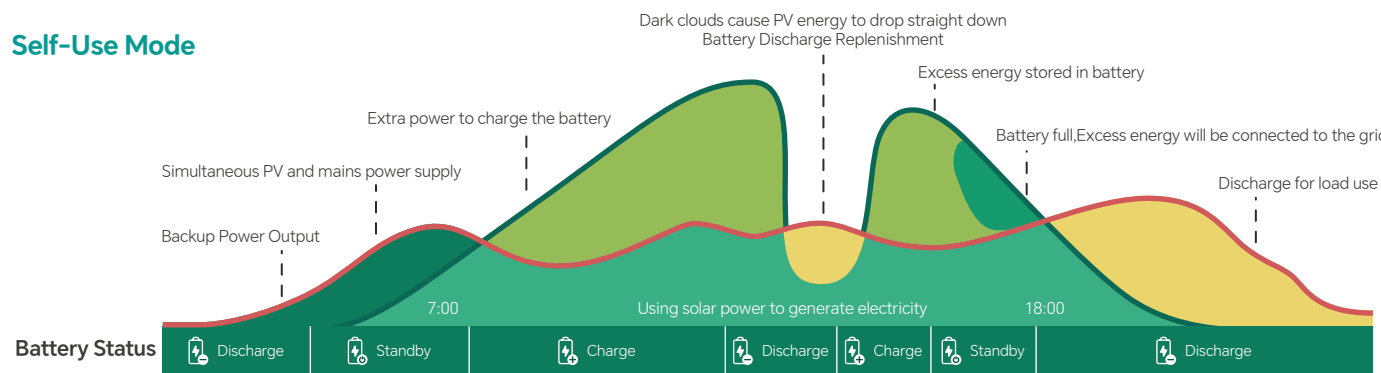
- Multiple operating modes, off-grid and UPS, MPPT charger built-in.
- Compatible with almost all 48V LiFePO4 battery pack.
- Integrated smart APP, can remotely diagnose and update.
- Max. 6pcs in parallel (Only OH5000TL).
- Suitable for customizing various PV Energy Storage System.
- Automatic activation of LiFePO4 battery pack.

Technical Parameters / Model		OH3600TL	OH3000TL-HP	OH5000TL
Battery Data				
Battery Type		Lead-Acid	Lithium / Lead-Acid	Lithium / Lead-Acid
Nominal Battery Voltage (V)		24	24	48
Max. Continuous Charging Current (A)		120	120	80
Max. Charge Power (W)		3200	3200	4500
Max. Discharge Power (W)		3000	3000	5000
PV String Input Data				
Max. Input Power (W)		2000	4000	6000
Max. Input Voltage (V)		145	500	500
MPPT Operating Voltage Range (V)		30~115	120~430	120~430
Start-up Voltage (V)		30	150	150
Nominal Input Voltage (V)		100	300	300
Number of MPP Trackers		1		
Number of Strings per MPPT		1		
AC Output Data				
Rated Power (W)		3600	3000	5000
Nominal Output Current (A)		13.6	13.6	21.7
Nominal Output Voltage (V)		208 / 220 / 230 / 240 VAC		
Nominal Output Frequency (Hz)		50Hz / 60Hz		
Output THDv		≤3% (Linear Load), ≤5% (Non-linear Load PF=0.7)		
Conversion Efficiency				
Max. Efficiency		93.5%	93.5%	93.6%
MPPT Efficiency		99.9%		
Protection				
AC Overcurrent Protection		Integrated		
AC Short Circuit Protection		Integrated		
AC Overvoltage Protection		Integrated		
Remote Shutdown		Integrated		
Environmental / Ambient Conditions				
Operating Temperature Range (°C)		0 ~ +50		
Excess Temperature Behaviour		Continuous power reduction (derating)		
Relative Humidity		0 to 95 % (climate class 4k6), non-condensing		
Installation Altitude above Sea Level		Up to 2000m above sea level		
Installation Location		Inside		
Cooling Method		Air Cooling		
Mechanical Data				
Dimensions (W × H × D mm)		300 x 485 x 120		
Weight (kg)		8.8±0.5	8.8±0.5	9.5±0.5
Protection Level		IP20		
Installation Type		Wall Installation with Wall Bracket		
Communications				
Display		LCD, WLAN + APP		
Monitoring Settings		Integrated data logger		
Communication with BMS		CAN		
Commun Wifi ication with Portal		Wifi		
Other Data				
Topology		Transformerless		
Reliability		Integrated		
Manufacturer's Warranty		2 Years		
Product certification				
Test Standards	EN IEC 61000-6-3:2021 EN IEC 61000-6-1:2019 EN 62920:2017+A1:2021 EN IEC 61000-3-2:2019/A1:2021 EN 61000-3-3:2013/A2:2021			

Intelligent Energy Solution

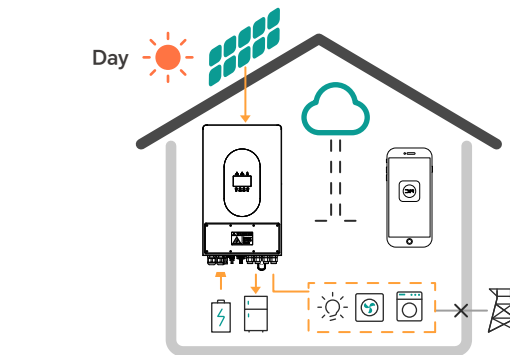


Self-Use Mode

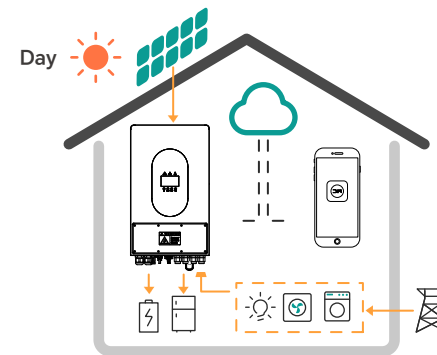


Day: During the day, excess energy from PV panels is used for local loads first, then for charging the battery, and finally sent to the grid.

Night: At night, if there is no PV energy, the stored battery energy and grid supply local loads together.



Off-Grid Mode: In this mode, only the Back-up interface outputs AC power, while the PV and battery only supply off-grid loads.



Economic Mode: Forced timing mode allows the grid to charge the battery. Charging time and power are adjustable.

Batteries

Draw a better world with New energy



LFBAT 51100-EU-W Wall Mounted Battery With 90mm thickness



Main Features

- Ⓢ Built-in Grade A LiFePO4 battery cell, highly reliable and durable.
- Ⓢ 90MM ultra-thin wall mounted design, perfectly fit for your beautiful home.
- Ⓢ All datas and settings from battery is under control and easy to manage the storage system.
- Ⓢ Built-in fuse in each battery cell, making it super safe and reliable.
- Ⓢ LCD display can support different setting and is easy to use.
- Ⓢ Pre-heating function optional.

Technical Parameters / Model	LFBAT 51100-EU-W	Remarks
Nominal energy	5120Wh	Standard charging and discharging test
Series parallel connection mode	16S1P	
Nominal capacity	100Ah	Standard charging and discharging test
Nominal voltage	51.2V	
Operating voltage range	40 ~ 58.4V	Temperature range:-20 ~ 65℃
Operating temperature (Charging)		0 ~ 65℃
Operating temperature (Discharging)		-20 ~ 65℃
Standard charging	Constant current charging:50A Charging voltage: 58.4V Cut off current: 5A	Maximum unit voltage 3.65V
Maximum Output Apparent power	Constant current charging:100A Charging voltage: 58.4V Cut off current: 5A	Maximum unit voltage 3.65V
Standard discharging	Constant current discharging: g 50A Cut off voltage: 40V	Minimum unit voltage 2.5V
Maximum continuous discharging current	Constant current discharging: 100A Cut off voltage: 40.0V	Minimum unit voltage 2.5V
Standard power		2560 watt
Storage temperature	-20~65	Humidity ≤95%ROH, no condensation.
Cycle life	The capacity decays to 80Ah Number of cycles ≥ 6000	80% DOD, @ 25±2℃, standard charging and discharging mode
Monthly self discharging	≤2.5%/month	After 3 months' shipment, the battery will be charged to 40%SOC and stored at @ 25±2℃
Monitoring communication		CAN/RS485/RS232
Balanced approach		Passive equalization
Shipping capacity	SOC 30 ~ 70% (TBD)	SOC 30 ~ 70% (TBD)
Weight (kg)		52
Dimensions (W ×H × Dmm)		660 x 830 x 190
Protection Level		IP20
Certificate		EN IEC 61000-6-1:2019 EN IEC 61000-6-3:2021



B2.5K-XWLA Wall Mounted Lithium Battery



Main Features

- Ⓢ Dynamic recognition and automatic parallel operation, without dialing codes.
- Ⓜ Multi-machine linkage on/off machine
- Ⓢ Standard Bluetooth, upgrade within 1m, and monitor within 3m.
- Ⓢ APP supports matching different brands of PCS protocols.

Technical Parameters / Model	B2.5K-XWLA
Nominal Characteristics	
Type	LiFePO4 Battery
Pack Method	8S1P
Nominal capacity	100Ah
Nominal voltage	25.6V
Energy	2560Wh
Charge method	CC/CV
Charge cut-off voltage	29.2V
Discharge cut-off voltage	20V
Standard charge current	50A
Max. continues charge current	100A
Standard discharge current	50A
Max. continues discharge current	100A
Discharge depth	100%
Operating efficiency	98%
Cycle life	6,000 times
Internal impedance	≤50mΩ
Dimension	L470 x W470 x H165mm
Communication Mode	CAN, RS485
Wireless monitoring and upgrading	Bluetooth as standard (4G optional)
Overall upgrade	OTA overall upgrade
Weight	Approx. 28KG
IP level	IP21
Maximum parallel quantity	16
Working temperature range	Charge: 0°C--55°C Discharge: -10°C--55°C
Storage Temperature	-20°C--60°C



B5K-XWLA Wall Mounted Lithium Battery



Main Features

- Ⓢ Dynamic recognition and automatic parallel operation, without dialing codes.
- Ⓜ Multi-machine linkage on/off machine
- Ⓢ Standard Bluetooth, upgrade within 1m, and monitor within 3m.
- Ⓢ APP supports matching different brands of PCS protocols.

Technical Parameters / Model	B5K-XWLA
Nominal Characteristics	
Type	LiFePO4 Battery
Pack Method	16S1P
Nominal capacity	100Ah
Nominal voltage	51.2V
Energy	5120Wh
Charge method	CC/CV
Charge cut-off voltage	58.4V
Discharge cut-off voltage	40V
Standard charge current	50A
Max. continues charge current	100A
Standard discharge current	50A
Max. continues discharge current	100A
Discharge depth	100%
Operating efficiency	98%
Cycle life	6,000 times
Internal impedance	≤50mΩ
Dimension	L620 x W470 x H165mm
Communication Mode	CAN, RS485
Wireless monitoring and upgrading	Bluetooth as standard (4G optional)
Overall upgrade	OTA overall upgrade
Weight	Approx. 49KG
IP level	IP21
Maximum parallel quantity	16
Working temperature range	Charge: 0°C--55°C Discharge: -10°C--55°C
Storage Temperature	-20°C--60°C



B10K-XWLE Battery Energy Storage System



Main Features

- A-grade REPT cells ensure superior performance stability.
- Dual-protection BMS enhances safety against overcharge/discharge.
- PCB integration technology prevents short-circuits.
- IP65 waterproof design enhances durability.
- WIFI monitoring and OTA firmware upgrades reduce after-sale costs.
- Supports up to 16 units in parallel for strong scalability.

Technical Parameters / Model	B10K-XWLE
Nominal Characteristics	
Rated Capacity	104Ah
Type	CB74-104Ah
Nominal Voltage	3.2V
Internal Impedance	≤0.4 mΩ
Standard charge	0.5C
Standard discharge	1C
Standard Charge Cut-off Voltage	13.65V
Standard Discharge Cut-off Voltage	2.5V
Dimension	52.3±0.5(T)*148.4±0.6(W)*119±0.6(H)mm
Weight	1.93±0.1kg
Operating Temperature Range	1~20~60°C
Combination method	2P16S
Rated Capacity	208Ah
Type	51.2V208Ah,10.64kWh
Nominal capacity	10.64kWh
Nominal voltage	51.2V DC
Voltage at end of Discharge	2.7V~ 43.2V
Recommended charging voltage by manufacturer	56.8V or 3.55V/any cell
Internal Impedance	≤40mΩ
Standard charge	90A
Max Charging Current(lcm)	100A
Upper limit charging voltage	56.8V or 3.55V/cell
Standard discharge	90A
Max continuous Discharging current	100A
Discharge Cut-off voltage(Udo)	43.2V
Recommend charging method declared by the manufacturer	Charged with constant current 90A until battery voltage reaches 56.8V, then switch to constant voltage 56.8V, til charge current drops to20A
Recommend discharging method declared by the manufacture	Discharged the battery with constant current 90Ato end of discharge cut-off voltage 43.2V
Operation Temperature Range	Charge:3~47°C Discharge: -7~47°C
Storage Temperature Range	-20°C~60°C
Battery system Size/Weight	(L762*W518*H164)±3mm/85±3kg
Packing size	L870*W595*H245mm
Class of protection	IP65



B5K-XRLA Tower Battery



Main Features

- Supports multiple brands of energy storage inverters.
- Intelligent BMS equipped inside to maintain the battery always work at best condition.
- Max. charge and discharge current as 150A which is specially designed for solar energy.
- LiFePO4 battery, more stable and safe.
- Excellent standby self-consumption as low as 4mA.
- Automatically output cut off after 30days nocharge and discharge to ensure security also can cut off output by manual operation.

Technical Parameters / Model	B5K-XRLA
Nominal Characteristics	
Nominal Voltage	51.2V
Nominal Capacity(25°C,0.2C)	100Ah
Mechanical characteristics	
Net weight	46.0KG
Dimension L*W*H	565*440*132mm
Terminal	Double M6
Electrical characteristics	
Voltage window	44.8V to 58.4V
Charge voltage	55.2V to 57.6V
Max.continue discharge current	100A
Max.pulse discharge current	150A 1Sec.
Max.continue charge current	50A
Operating conditions	
Cycle life(+25C,0.5C,90%DOD,60%EOL)	>6000 Cycles
Operation temperature	Discharge -10°C to +50°C Charge 0 °C to +50°C
Storage temperature	0 to 30°C
Storage duration	6 months at 25°C
Safety standard	UN38.3,MSDS
Protection Level	IP20

ESS

Draw a better world with New energy



Residential ESS With EV Charger



Main Features

- ✓ PV, Storage, EV charging and Power distribution Integrated.
- Ⓜ Controlled by built-in DSP and adopt advanced SPWM technology.
- Ⓜ Modular design for good expansibility, up to 6 battery modules in parallel.
- ⌚ Easy Installation within 20 minutes individually.
- ⌚ 24-hour real-time online monitoring.
- ⚠ Wheels for the machine are optional and available at an additional cost.

Technical Parameters / Model	GA5k/7K/5K~30KSL	GA8k/11K/10K~50KSL
Inverter Data		
AC Output Rated Power	5KW	8KW
Max. PV Input Power(W)	7000W	11000W
PV Input Voltage Range(V)	150 ~ 500	150 ~ 1000
MPPT Operating Voltage Range(V)	120 ~ 430	150 ~ 800
Number of MPPT rackers	2	
Number of Strings per MPPT	1	
Max. Input Current per MPPT	15A/15A	18A/18A
Nominal Utility Grid Voltage(V)	220/230/240	380/400
Nominal Utility Grid Frequency(Hz)	50/60	
Rated Power Output to Utility Grid(W)	5000	8000
Max. Apparent Power Output to Utility Grid(VA)	5500	8800
Back-up Rated Power(W)	4500	7200
Switch Time	<10ms	<15ms
Battery Data		
Battery Type	LiFePO4	Lithium / Lead-Acid
Single Battery Energy(kWh)	5.12	10
No. of Expandable Batteries	6	
Usable Energy Range(kWh)	25.12 ~ 30.72	10.24 ~ 61.44
Battery Voltage Range(V)	41.6 ~ 58.5	41.6 ~ 58.5
EV Charger Data		
Rated Power(W)	7000	11000
Nominal Voltage(V)	220 / 230 / 240	380/400
Nominal Frequency(Hz)	50 / 60	99.9%
Operation Mode	Swipe card/APP control/Insert charger plug to start automatically Schedule appointment for charging	
Output cable	5m AC charging cable	
Convention Efficiency		
Max. Efficiency	98%	
EU Efficiency	97%	97.5%
Max. Battery to AC Efficiency	95%	94.5%
MPPT Efficiency	99.9%	
System Data		
Operating Temperature Range (°C)	-25 ~ 55°C	-25 ~ 60°C
Relative Humidity	≤95% (25°C)	≤0-95%
Vibration	< 0.5G	< 0.5G
Noise	< 35 dB	< 25 dB
Installation Altitude above Sea Level	< 2000m	≤4000m
Protection Level	IP54	IP66
Cooling Mode	Natural Cooling	Air Cooling
Communication	RS485/CAN/WiFi	
Inverter Dimensions (W ×H × D mm)	645 x 557 x 370	
EV Charger Dimensions (W ×H × D mm)	650 x 270 x 370	
Single Battery Dimensions(W ×H × D mm)	585 x 270 x 370	
Base Dimensions (W ×H × D mm)	680 x 110 x 378	



O5K/5K~30K-XSLA All-in-One Stackable Energy Storage System



Main Features

- Integrated inverter and storage battery, built-in MPPT controller.
- Supports off-grid and UPS working modes.
- Adopting high cycle times, LiFePO4 cells and intelligent system.
- 5kWh to 30kWh, with flexible energy configuration for the user.
- Cloud energy management application, cell phone & computer can grasp system data at any time.

Technical Parameters / Model						
Battery Type		LifePO4				
Rated Voltage(V)		51.2				
Rated Capacity(Ah)		100	200	300	400	500
Rated Energy(Wh)		5120	10240	15360	20480	25600
Max. Operating Current(A)		100				
Cycle Times		≥6000 cycles @ 80% DOD, 25 °C, 0.5C				
Charge Voltage(V)		56				
Discharge Cut-off Voltage(V)		46				
Charge Temperature		0°C ~ 60°C				
Discharge Temperature		-20°C ~ 60°C				
Storage Temperature		0 °C ~ 45 °C @ 60% ±25% RH				
Technical Parameters / Model		O5K/5K~30K-XSLA				
Battery Data						
Battery Type		Lithium				
Nominal Battery Voltage(V)		48				
Max. Continuous Charging Current(A)		80				
Max. Charge Power(W)		4500				
Max. Discharge Power(W)		5000				
PV Input Data						
Max. Input Power(W)		6000				
Max. Input Voltage(V)		500				
MPPT Operating Voltage Range(V)		120 ~ 430				
Start-up Voltage(V)		150				
Nominal Input Voltage(V)		300				
Number of MPPT Trackers		1				
Number of String per MPPT		1				
AC Output Data						
Rated Power(W)		5000				
Nominal Output Current(A)		21.7				
Nominal Output Voltage(V)		220/230/240				
Nominal Output Frequency (Hz)		50/60				
Output THDv (@Linear Load)		<3%				
Coversion Efficiency						
Max. Efficiency		93.6%				
MPPT Efficiency		99.9%				
Protection						
AC Overcurrent Protection		Integrated				
AC Short Circuit Protection		Integrated				
AC Over voltage Protection		Integrated				
Remote Shutdown		Integrated				
Environmental/Ambient Conditions						
Operating Temperature Range(°C)		0 ~ 50°C				
Excess Temperature Behaviour		Excess Temperature Behaviour				
Relative Humidity		0 ~95%				
Installation Altitude above sea level		Up to 2000m above sea level				
Cooling Method		Air Cooling				
Mechanical Data						
Product dimensions (W x H x D mm)		\				
Protection Level		IP20				
Installation Type		Floor-standing				
Communications						
Display		LCD, WLAN + APP				
Monitoring Settings		Integrated data logger				
Communication with BMS		CAN				
Communication with Portal		WiFi				
Other Data						
Topology		Transformerless				
Reliability		Integrated				



O10K/5K~30K-XSLA All-in-One Stackable Energy Storage System



Main Features

- Integrated inverter and storage battery, built-in MPPT controller.
 - Supports off-grid and UPS working modes.
- Adopting high cycle times, LiFePO4 cells and intelligent system.
- 10kWh to 50kWh, with flexible energy configuration for the user.
 - Cloud energy management application, cell phone & computer can grasp system data at any time.

Technical Parameters / Model							
Battery Type		LifePO4					
Rated Voltage(V)		51.2					
Rated Capacity(Ah)		100	200	300	400	500	600
Rated Energy(Wh)		5120	10240	15360	20480	25600	30720
Max. Operating Current(A)		100					
Cycle Times		≥6000 cycles @ 80% DOD, 25 °C, 0.5C					
Charge Voltage(V)		56					
Discharge Cut-off Voltage(V)		46					
Charge Temperature		0°C- 60°C					
Discharge Temperature		-20°C- 60°C					
Storage Temperature		0 °C ~ 45 °C @ 60% ±25% RH					
Technical Parameters / Model		O10K/5K~30K-XSLA					
Battery Data							
Battery Type		Lithium					
Nominal Battery Voltage(V)		48					
Max. Continuous Charging Current(A)		160					
Max. Charge Power(W)		9000					
Max. Discharge Power(W)		10000					
PV Input Data							
Max. Input Power(W)		11000					
Max. Input Voltage(V)		450					
MPPT Operating Voltage Range(V)		120 ~ 430					
Start-up Voltage(V)		150					
Nominal Input Voltage(V)		300					
Number of MPPT Trackers		2					
Number of String per MPPT		1					
AC Output Data							
Rated Power(W)		10000					
Nominal Output Current(A)		43					
Nominal Output Voltage(V)		220/230/240					
Nominal Output Frequency (Hz)		50/60					
Output THDv (@Linear Load)		<3%					
Coversion Efficiency							
Max. Efficiency		93.6%					
MPPT Efficiency		99.9%					
Protection							
AC Over current Protection		Integrated					
AC Short Circuit Protection		Integrated					
AC Overvoltage Protection		Integrated					
Remote Shutdown		Integrated					
Environmental/Ambient Conditions							
Operating Temperature Range(°C)		0 ~ 50°C					
Excess Temperature Behaviour		Excess Temperature Behaviour					
Relative Humidity		0 ~95%					
Installation Altitude above sea level		Up to 2000m above sea level					
Cooling Method		Air Cooling					
Mechanical Data							
Protection Level		IP20					
Installation Type		Floor-standing					
Communications							
Display		LCD, WLAN + APP					
Monitoring Settings		Integrated data logger					
Communication with BMS		CAN					
Communication with Portal		WiFi					
Other Data							
Topology		Transformerless					
Reliability		Integrated					



O5K/5K-XPLA Battery Energy Storage System



Main Features

- A-grade REPT cells ensure superior performance and reliability.
- Dual-protection BMS enhances safety against overcharge, discharge, temperature, and current.
- Stackable battery packs with wire-free design, up to 8 layers.
- IP65-rated battery system for high safety protection.
- Inverter box with dual AC output, USB charging, waterproof design.
- Off-grid PCS function for home storage and outdoor applications.

Technical Parameters / Model	O5K/5K-XPLA
Battery Parameters	
Rated Capacity	100Ah
Type	CB79-100Ah
Nominal Voltage	3.2V
Internal Impedance	≤0.6 mΩ
Standard charge	0.5C
Standard discharge	3.65V
Standard Charge Cut-off Voltage	2.5V
Standard Discharge Cut-off Voltage	T52.32±0.5x W148.40±0.6 x H119.0±0.6mm
Dimension	1.86±0.1kg
Weight	Charge:0℃ < T≤55℃ Discharge:-20℃≤T≤55℃
Operating Temperature Range	1P16S
Combination method	100Ah
Rated Capacity	51.2V/100A
Type	5.12kwh
Nominal voltage	51.2V DC
Nominal voltage	43.2V
Voltage at end of Discharge	≤60mΩ
Internal Impedance	50A
Standard charge	100A
Max Charging Current(Icm)	58.4V or 3.65V/cell
Upper limit charging voltage	550A
Standard discharge	100A
Max continuous Discharging current	43.2V
Discharge Cut-off voltage(Udo)	Charge:0~55℃
Operation Temperature Range	Discharge: -20~55℃
Storage Temperature Range	-20℃~60℃
Battery system Size/Weight	(W635*D420*H190)±5mm/46.7±3kg
Class of protection	IP65
Inverter power	5KW
Electric quantity	5.12KWh
Grid voltage range	220V/230/240V
Grid type	L+N+PE
PV Input Data	
MPPT voltage range(V)	120-430V
Number of MPPT	1
General data	
Operating Temperature Range (℃)	-20~55℃
Cooling	Smart cooling
Installation Style	/
Storage Temperature Range	-20℃~50℃
Battery system Size/Weight	(W635*D420*H477)±5mm/73±3kg
Class of protection	IP20



E30K/50K 60-XCHE Intelligent C&I Energy Storage Integrated Cabinet



Main Features

- Proven and safe, economical and environmentally friendly LiFePO4 battery module, providing long life and reliability.
- High degree of modularization, simple structure, easy to install and maintain.
- High-performance and high-efficiency BMS, compatible with a variety of communication protocols.
- Comprehensive battery protection strategy to ensure the safety of the energy storage system.
- Intelligent temperature control system, effectively extending the service life of the battery.
- PACK targeted fire extinguishing function can be customized.

Technical Parameters / Model	E30K/60-XCHE	E50K/60-XCHE
Battery Parameters		
Number of battery packs	12	
Rated voltage	614.4V	
Voltage range	537.5~691.2V	
Rated energy	60kWh	
Max. charging and discharging current	100A	
Communication	RS485/CAN	
Cycle life	6000times	
PV parameters		
Max.PV input power	39kW	65kW
Ratedinput voltage	600VDC	
Max.input voltage	1000VDC	
MPPT voltage range	200-850VDC	
PV input current	36+36+36(A)	36+36+36+36(A)
AC side parameters		
AC rated input/output power	30kVA	50kVA
AC Max.input/output power	33kVA	55kVA
AC rated input/output current	45.6A	75.8A
AC Max.inputoutput power	60A	83.3A
Voltage	3UN/PE; 230/400V	
Frequency	50V60Hz%	
THDie	≤3%	
Power Factor	0.8leading to 0.8 lagging	
System parameters	±3%	
Dimension(W*H*D)	1200*2160*750mm	
Weight	860kg	880kg
Communication	CAN/RS485AVIFI/ETHe	
Warranty	5 years	
Expansion	Support in parallel up to 150kw/180kwh	
Enclosure protection rating	IP55	
Cooling	Air cooling	
Environmenttemperaturee	-30~50℃	
Humidity	10%~95%RH	
Altitude	<2000m	
Certifications	UN38.3/CE/IEC62619/VDE-AR-N 4105/IEC 62109	

ESS IoT

Draw a better world with New energy



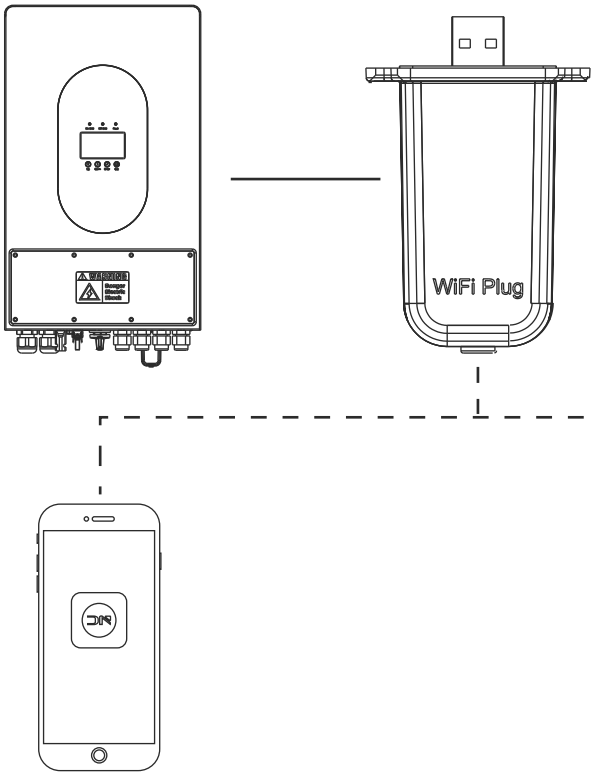
WiFi Dongle WIFI Data Acquisition Communication Box



Main Features

- Support WPS automatic network configuration;
- Enables remote upgrades without the need to be physically present The inverter program can be upgraded.
- Cloud energy management applications,mobile phones, computers at any time Master the system data.

Technical Parameters		
Inverter communication interface	USB	USB
Wireless standards	802.11 a/b/g/n	802.11 a/b/g/n
Serial port communication rate	115200bps	115200bps
Frequency range	2.412GHz-2.472GHz	2.4G&5GHz
Wireless transmit power	802.11b: +16dBm(@11Mbps)/802.11g: +14dBm(@54Mbps) 802.11n: +13dBm(@HT20, MCS7)	802.11b: +17dBm(@11Mbps)/802.11g: +16dBm(@54Mbps) 802.11n: +15dBm(@HT20, MCS7)
Data acquisition interval	1-10min adjustable (default 5 minutes)	1-10min adjustable (default 5 minutes)
Working mode	AP/STA/AP+STA	AP/STA/AP+STA
Network distribution mode	APP/WEB	APP/WEB
Status display	2 LED	2 LED
Installation method	Plug and play, supporting inverter installation	Plug and play, supporting inverter installation
Electrical performance		
Input voltage	5V	5V
Rated power	3W	3W
power consumption	< 1.5W	< 1.5W
Dimensions (L*W*H)	64*52*28 (mm)	64*52*28 (mm)
Weight	30g±2	30g±2
Operating temperature	-40℃- 85℃	-40℃- 85℃
Operating humidity	<85%	<85%
Waterproof rating	IP65	IP65



Android / IOS APP

- Fast and simple, saving cost, time and worry.
- Display single real-time data and power generation data.
- Real time energy flow diagram and equipment status are clear and easy to see.
- Monitor the power generation status of the power stationat any time and anyw- here, and the data is clear at a glance.
- Support remote parameter setting and fault diagnosis.
-

Smart IoT

“Smart Donnergy” WIFI data acquisition communication box

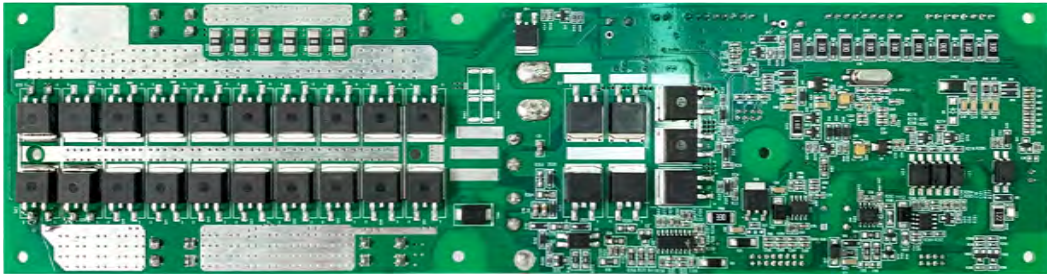
The running data of your PV plant will beuploaded to the server of Donnergy via thisWiFi Dongle and it can be viewed either withyour mobile app or our energy managementsystem:power.donnergy.com.



PC

- Support device remote firmware upgrade.
- Real time control of equipment maintenance and operation status.
- Multi level authority management, which can quickly retrieve power stations and equipment.
- Visual display of equipment power generation and equipment operation status.
- Support remote parameter setting and fault diagnosis.
-

BMS BMS battery management system



BMS battery management system is mainly used for communication backup power supply batteries, home storage and other energy storage systems. It is applicable for battery packs consisting of 15~16 series of Li (NiCoMn) O2 or LiFePO4 cells. It can provide overcharge, overdis-charge, overcurrent, over-temperature and short-circuit protections to the the battery pack, monitoring the voltage, current and other working state of the battery pack. It is featured with fault alarm log recording function and it supports accurate estimation of the SOC during charging and discharging. Charge equalization is another important feature of our EMS and it supports parallel operation and it can be used to communicate with the dynamic loop monitoring or the upper computer through the RS485/CAN/UART serial port, and use the upper computer software for parameter configuration and data monitoring.

Type of lithium battery	Li (NiCoMn) O2 / LiFePO4	Li (NiCoMn) O2 / LiFePO4
Number of lithium battery strings	15~16 strings	15~16 strings
Battery capacity	100AH	100AH
Electricity meter function	SOC estimation	SOC estimation
Maximum continuous charging and discharging current	100A	100A
Pre-charge function	Support capacitor charging above 20000UF	Support capacitor charging above 20000UF
External communication mode	RS485/CAN/UART	RS485/CAN/UART
Technical Parameters		
Monomer over charge protection	Default parametersWhether it can be set	Whether it can be set
Cell over voltage alarm voltage	3650mV	yes
Single over charge protection voltage	3750mV	yes
Monomer over charge protection delay	15.0S	yes
Motive overvoltage protection clearance	Default parameters	Whether it can be set
Single over charge protection release voltage	3380mV	yes
Discharge release	Discharge current>300mA	/
Monolithic over discharge protection	Default parameters	Whether it can be set
Single over discharge alarm voltage	2600mV	yes
Single over discharge protection voltage	2300mV	yes
Monomer over-discharge protection delay	15.0S	yes
Monomer over-discharge protection delay	Default parameters	Whether it can be set
Single over discharge protection release voltage	2400mV	yes
Charging is released	Charging current > 300mA	/
Overall over charge	Default parameters	Whether it can be set
Overall over charge alarm voltage	58.4V	yes
Overall over charge protection voltage	59.2V	yes
Overall over charge protection delay	1.0S	yes
Overall ove rvoltage protection is removed	Default parameters	Whether it can be set
Overall over charge protection release voltage	54V	yes
Capacity decommissioning	SOC < 96%	/
Discharge release	Discharge current > 300mA	/
Overall over discharge protection	Default parameters	Whether it can be set
Overall over discharge alarm voltage	41.6V	yes
Overall over discharge protection voltage	36.8V	yes
Overall over discharge protection delay	1.0S	yes
Overall over discharge protection is lifted	Default parameters	Whether it can be set
Overall over discharge protection release voltage	38.4V	yes
Discharge when there is a charge	Charging current > 300mA	/
Charging current limit function	Default parameters	Whether it can be set
Charge current limit	10A	/
Charge over current protection	Default parameters	Whether it can be set
Charge over current alarm current	110A	yes
Charge over current protection current	120A	yes
Charge over current protection delay	1.0S	yes
Charging over current protection is removed	Default parameters	Whether it can be set
Automatic discharge release	Automatic dismissal after 30s	/
Discharge	Discharge current > 300mA	/
Discharge over current protection	Default parameters	Whether it can be set
Discharge over current 1 alarm current	110A	yes
Discharge over current1 protects the current	120A	yes
Discharge over current 1 protection delay	1.0S	yes
Discharge over current 1 protection delay	Default parameters	Whether it can be set
Automatic purge	Automatically discharged after 1 minute	/
Charging clears short-circuit protection	Charging current > 300mA	/

Technical Parameters		
Short-circuit protection	Default parameters	Whether it can be set
Short-circuit protection	Integrated	/
Short-circuit protection is removed	Short-circuit protection is automatically released	/
MOS high temperature protection	Default parameters	Whether it can be set
MOS over temperature alarm temperature	90°C	yes
MOS over temperature alarm temperature	115°C	yes
MOS protection release temperature	85°C	yes
Cell temperature protection	Default parameters	Whether it can be set
Charging low temperature alarm temperature	0°C	yes
Charge low temperature protection temperature	-5°C	yes
Charging low temperature protection to release temperature	5°C	yes
Charging high temperature alarm temperature	50°C	yes
Charging high temperature protects the temperature	55°C	yes
Charging high temperature protection release temperature	50°C	yes
Discharge low temperature alarm temperature	-15°C	yes
Discharge low temperature protection temperature	-20°C	yes
Discharge low temperature protection release temperature	-15°C	yes
Discharge high temperature alarm temperature	55°C	yes
Discharge high temperature protection temperature	60°C	yes
Discharge high temperature protection release temperature	55°C	yes
Environmental requirements		
Operating temperature	-20 ~ 60°C	
Storage temperature	-20 ~ 75°C	
Operating humidity	10 ~ 85%RH	
Storage humidity	10 ~ 85%RH	



WiFi Dongle(Wi-Fitype1.3) Quick installation Guide

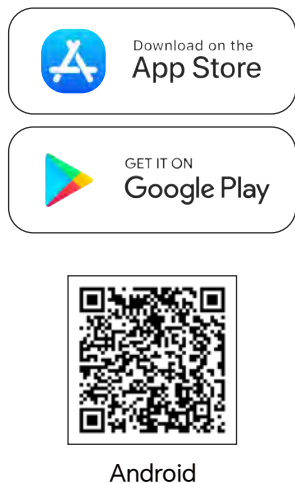
The company develops and produces photovoltaic inverter equipment by itself. In order for customers to use the company's products more conveniently, it develops a set of remote energy real-time management system, and also develops an app based on mobile phone operation, which is convenient for customers to view photovoltaic inverters at any time. The core functions of the App are as follows: WIFI configuration: complete the configuration of connecting the PV inverter to WIFI. After the WIFI configuration is successful, the PV inverter connects to the remote energy real-time management system and uploads data;

login function: the customer enters the user name and Password, after successful login, enter the power station list display interface; power station list: users can view the equipment running status, total power generation and total revenue under each power station; power station overview: overview of power station information and equipment information, including power generation, Current power, CO2 emission reduction, total power generation and other information; equipment operation flow chart: display the information of machine operation, display the basic information such as the model and version number of the machine, and select different machine operating status display through different serial numbers; Power Plant Daily Record: Users can view the latest error/warning information. You can view the time when the event occurred in the power station, the device serial number, event name and other information; remote settings: divided into basic settings, working mode settings, reset wifi, restart the machine, activate the battery function, the user can according to their own needs The selected machine Online remote operation.

WIFI / Quick installation Guide

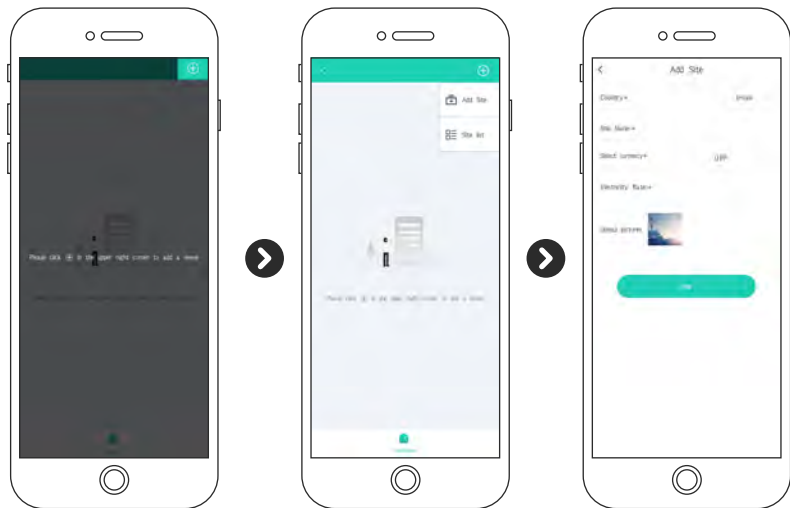
1. APP download

App Store search for "Mini EMS";
Android scan the QR code below to download directly.



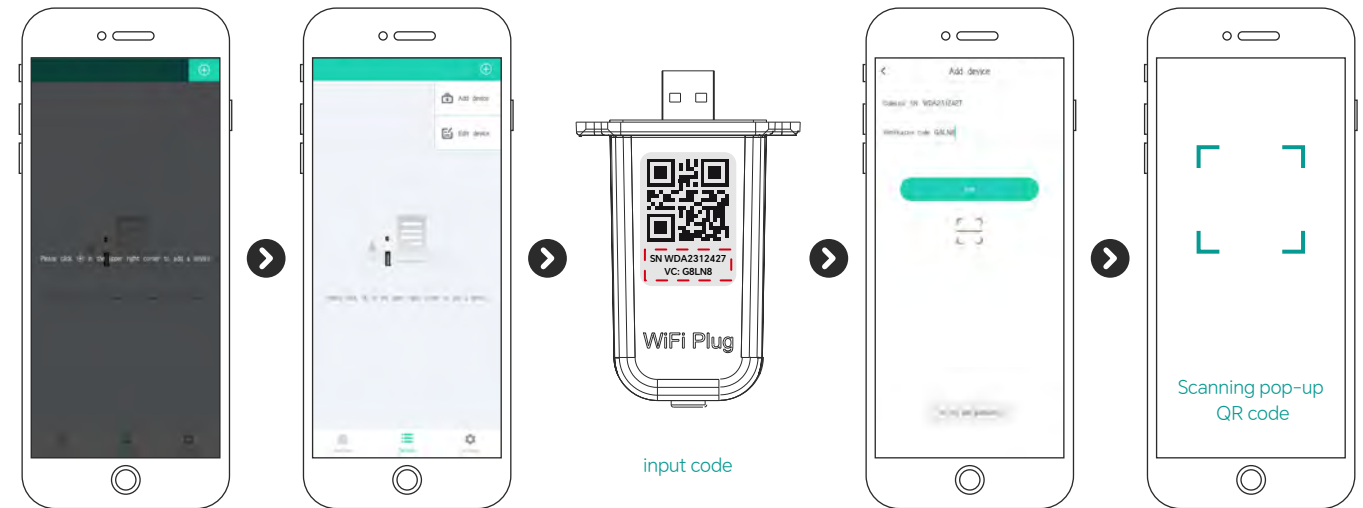
2. Register an account and create a venue

- ① Click the "Register" button on the home page of the APP and fill in the relevant information as prompted to complete the registration.
- ② Log in to the APP and complete "Add Place" according to the guidance.



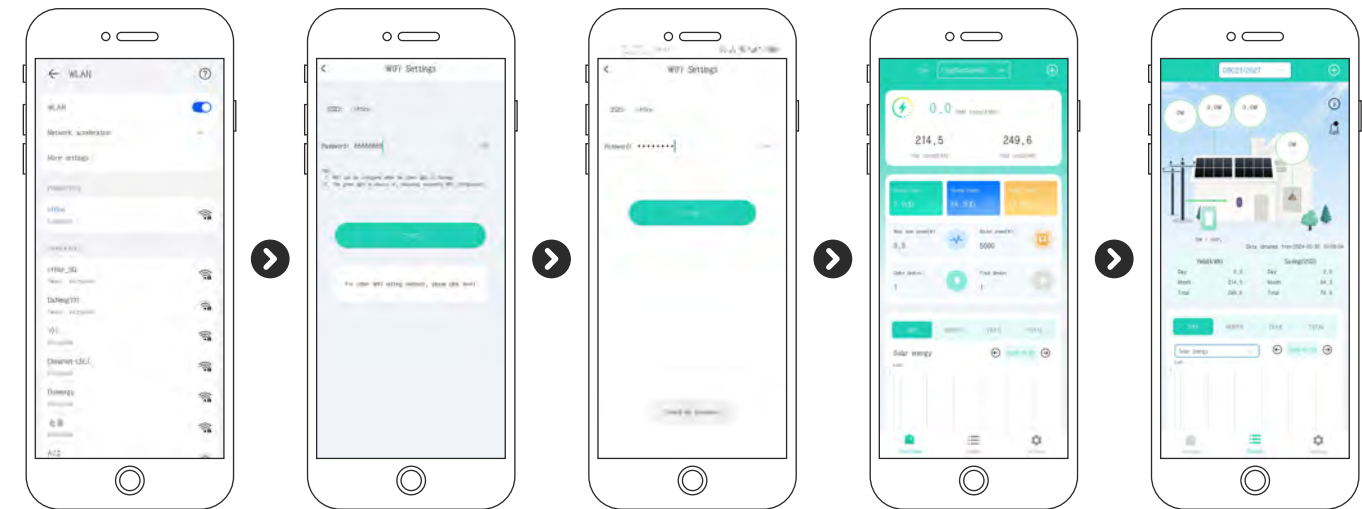
3. Add device

Complete Add Device as instructed.
Note: Add the serial number of WiFi Dongle and scan is supported Qr code or manual input,



4. Network connection parameter Settings

- ① Plug the WiFi Dongle into the inverter WIFI/USB port;
- ② Mobile phone WLAN connection 2.4GWiFi;
- ③ Return to the APP to fill in the WIFI password;
- ④ When the WiFi Dongle indicator is blinking blue/green, press it "Start" button; When the indicator is steady blue or green, it indicates The distribution network is complete.



5. WiFi Dongle digital sampler LED status indicator

Blue	Green	Implication
Not bright	Not bright	No USB was recognized
Slow flash	Not bright	USB is recognized
Slow flash	Not bright	Configuration phase
Slow flash	Steady on	Networking success
Slow flash	Slow flash	Allow APP network distribution
Steady on	Steady on	Successfully connecting to the server

6. The collector module fails to connect to the network?

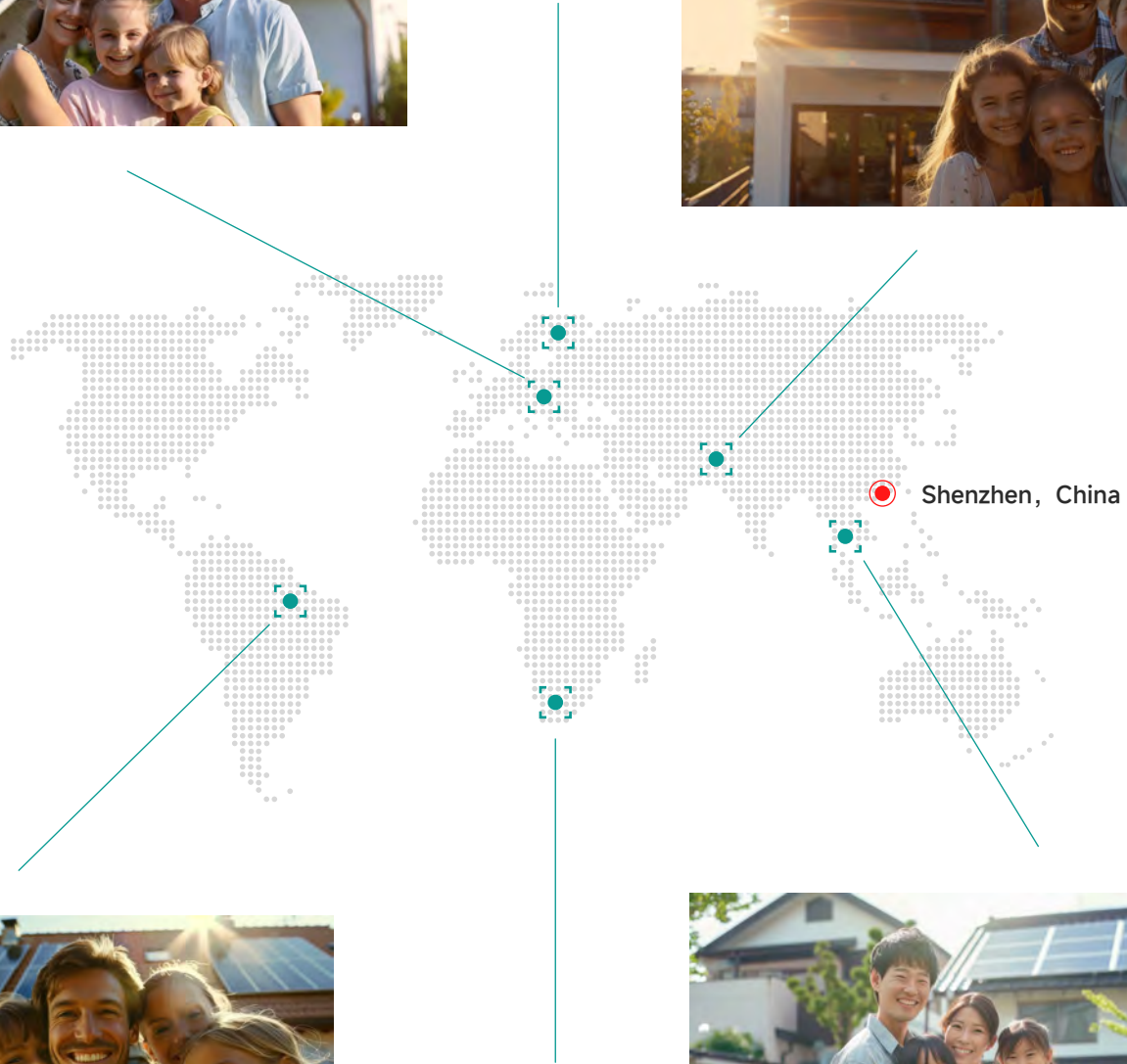
- ① Move the wireless router closer to the inverter.
- ② Plug and remove the collector. When the green light blinks, press the button at the bottom of the collector for 0.5S, and then set it in APP WIFI Click Start.
- ③ The collector module can connect to a 2.4GHz frequency network only.
- ④ The wireless name of the router should be composed of English and numbers and does not support Chinese names and special characters.
- ⑤ The router is prohibited from using dual-band integration.
- ⑥ If the WPS direct connection function is used, check whether the router supports the WPS function.
- ⑦ When using the APP network, the network must be configured when the two indicators are blinking slowly.
- ⑧ Hold down the reset button for more than 10 seconds, reset the collector module, power on the collector, and configure the network.

6.1. Can't the network currently connected to the mobile phone be retrieved when configuring the network for the collector module with the APP?

- ① Exit the APP first, and then re-enter the WIFI setting interface.
- ② Check whether the network the phone is currently connected to is 2.4Ghz frequency.

6.2. After the configuration is completed, the blue light and green light are steady on, but the status on the monitoring website is still displayed as offline?

- ① Wait more than 1 minute and then exit the APP to check whether the data is updated.
- ② Check whether the serial number of the registered collector is consistent with that of the current collector module.



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