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2026

# SOLAR ENERGY STORAGE SOLUTIONS

Make life full of hope, make the world better

APAC Version (Asia-Pacific)

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# ABOUT US

## Guangzhou Felicity Solar Technology Co., Ltd.

Founded in 2007 and headquartered in Guangzhou, China, we employ over 2,000 staff and occupy 85,000+ square meters. We integrate R&D, manufacturing, marketing, and sales, and have established localized warehousing networks, after-sales service centers, and overseas branches. We are a trusted provider with 19 years of industry expertise, offering off-grid and hybrid solar energy storage solutions for residential, commercial, and industrial needs.



VR Factory Tour

With a R&D team of over 400 professionals, a 3,000 sqm R&D center, and more than 10% of annual investment dedicated to technology development, we had secured over 170 patents in core technologies. Through our 50+ global branches, we connect with users across 150+ countries and areas, delivering a comprehensive product line that includes inverters, LiFePO4 batteries, all-in-one systems and solar controllers. We are committed to bringing hope and a brighter future to the world through solar energy technology, both now and in the future.



**19**

years Industry Expertise

**170+**

Patented Technologies

**50+**

Overseas Branches

**150+**

Countries & Regions Market

**10%+**

Technical Investment

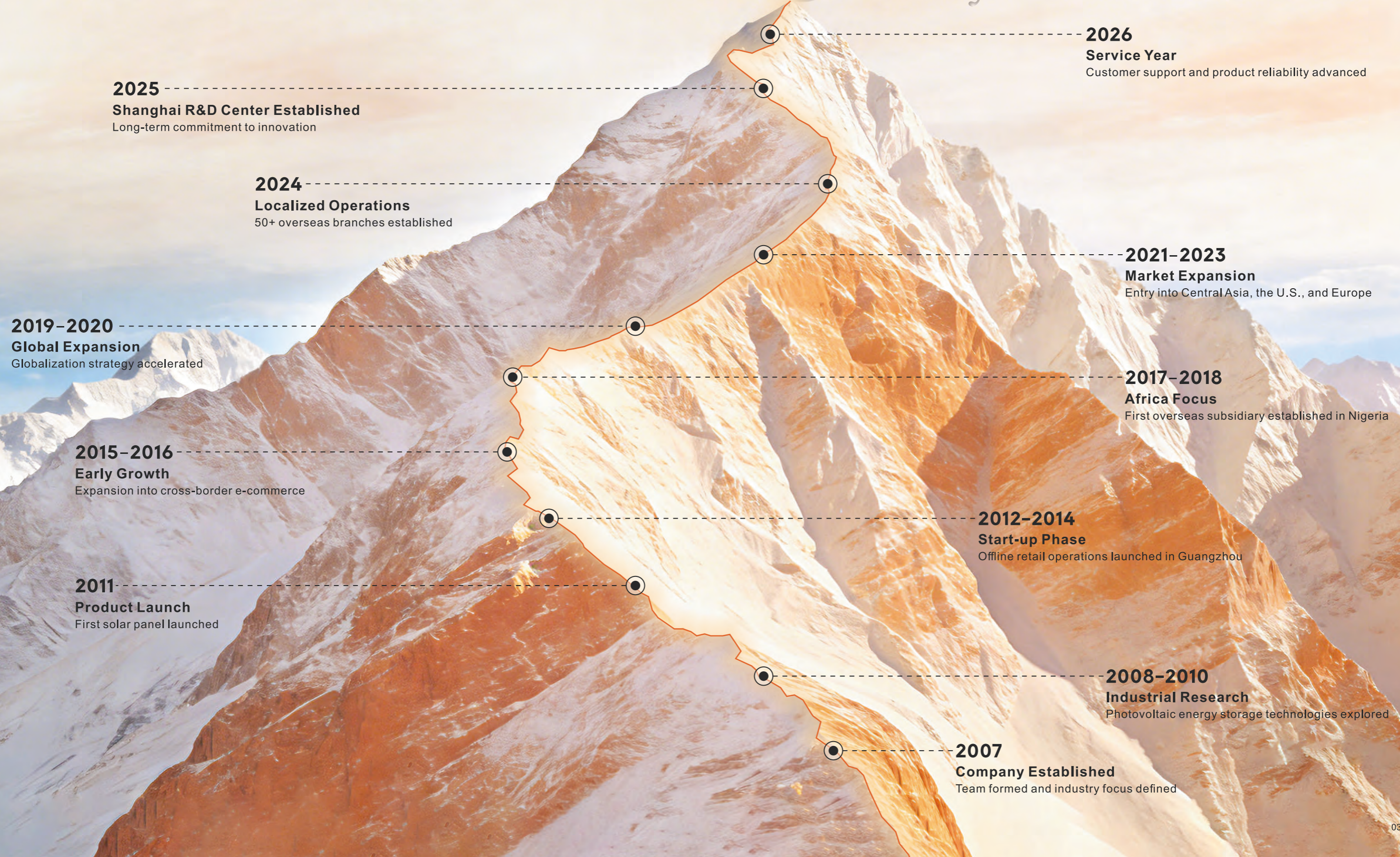
**400+**

R&D Teammates

# FELICITYSOLAR



# COMPANY HISTORY



**2026**  
**Service Year**  
Customer support and product reliability advanced

**2025**  
**Shanghai R&D Center Established**  
Long-term commitment to innovation

**2024**  
**Localized Operations**  
50+ overseas branches established

**2021-2023**  
**Market Expansion**  
Entry into Central Asia, the U.S., and Europe

**2019-2020**  
**Global Expansion**  
Globalization strategy accelerated

**2017-2018**  
**Africa Focus**  
First overseas subsidiary established in Nigeria

**2015-2016**  
**Early Growth**  
Expansion into cross-border e-commerce

**2012-2014**  
**Start-up Phase**  
Offline retail operations launched in Guangzhou

**2011**  
**Product Launch**  
First solar panel launched

**2008-2010**  
**Industrial Research**  
Photovoltaic energy storage technologies explored


**2007**  
**Company Established**  
Team formed and industry focus defined

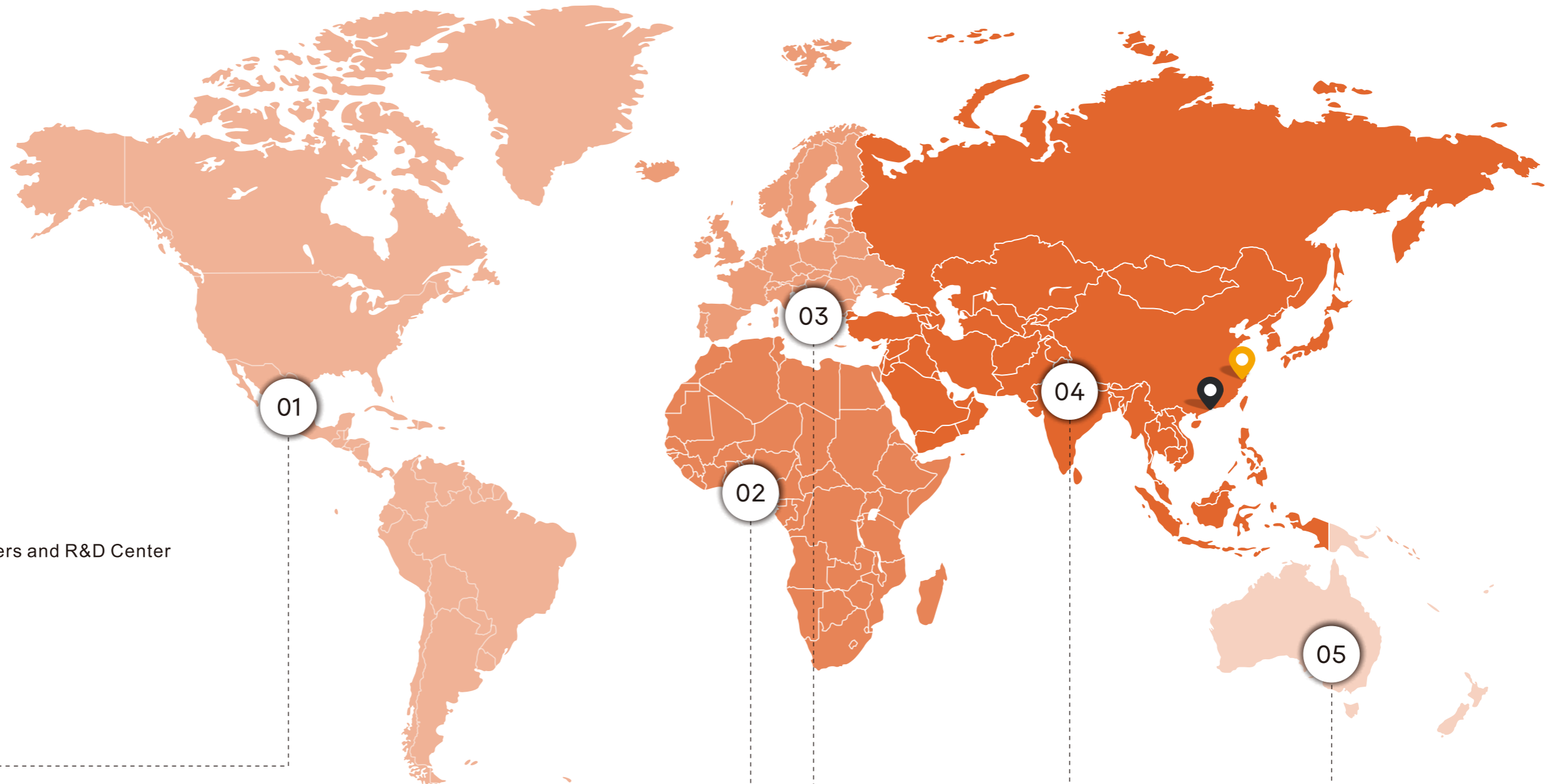
# WORLDWIDE BUSINESS PRESENCE

- G**reen power
- O**ne-stop solutions
- S**ervice first
- O**n-time support
- L**ocal service
- A**rea-focused
- R**eliable products



 Guangzhou Headquarters and R&D Center

 Shanghai R&D Center



**01**  
**the America**

Market Coverage **35**  
After-sales Centers **9**  
Offline Stores **26**

**02**  
**Africa**

Market Coverage **54**  
After-sales Centers **37**  
Offline Stores **118**

**03**  
**Europe**

Market Coverage **44**  
After-sales Centers **3**  
Offline Stores **8**

**04**  
**Asia**

Market Coverage **49**  
After-sales Centers **21**  
Offline Stores **46**

**05**  
**Oceania**

Market Coverage **14**  
After-sales Centers **1**  
Offline Stores **4**

# WHY CHOOSE US



## Product Reliability

Regional Compatibility: adapted to different grid voltages across regions.

Functions: smart management, easy for after-sales servicing, simplified system setup.

Performance: high stability, safety, durability, and strong environmental adaptability.



## Standardized Manufacturing

Smart Production: high-efficiency production lines with automated equipments.

Standardized Testing – strict testing procedures for product reliability.

Quality Management – comprehensive quality control guarantees high-standard products.



## Pricing Policy

Stable Pricing – consistent pricing to support long-term cooperation.

Price Protection – safeguarding partner interests in the market.

Regional Protection – ensuring fair market competition within designated areas.



## Local Service

Service Centers – fast, efficient, and professional after-sales support.

Offline Stores – face-to-face consultation and system recommendations.

Warehouses – sufficient inventory for fast and convenient delivery.

SUPERIORITY



# INVERTER COMPATIBILITY LIST



# Off-grid High-frequency Solar Inverter

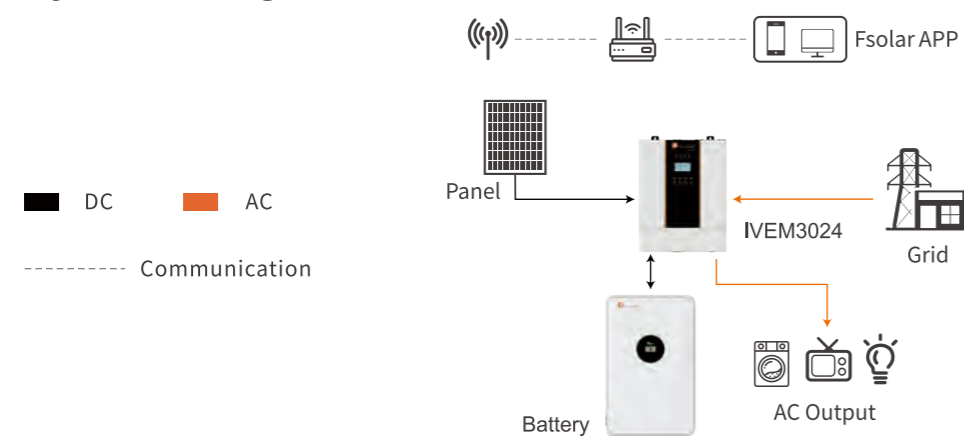
IVEM Series | IVEM3024/5048



## Features

- Supports parameters setting via LCD screen.  
(input voltage/charging current/charge mode).
- Compatible with mains voltage or generator power.
- Built-in MPPT solar charge controller.
- Lithium battery activation function.
- Auto restart while AC is recovering.
- Inverter running without battery.
- Cold start function.

## System Diagram



## Specifications

Model	IVEM3024	IVEM5048
<b>Line Mode Specifications</b>		
Rated Output Power(VA)	3000VA	5000VA
Rated Output Power(W)	3000W	5000W
Nominal DC Input Voltage	24V	48V
Nominal Input Voltage	230Vac	
Max. AC Input Voltage	280Vac	
Nominal Input Frequency	50Hz / 60Hz (Auto Detection)	
Efficiency(Line Mode)	>95% (Rated R Load, Battery Full Charged)	
Pass Through Without Battery	Yes	
<b>Utility Charge Mode Specifications</b>		
Nominal Input Voltage	230Vac	
Input Voltage Range	90-280Vac	
Max. Charge Current	100A	
Over Charge Protection	Yes	
<b>Solar Charging &amp; Grid Charging</b>		
Max. PV Open Circuit Voltage	500V	
PV Voltage Working Range	120V-500V	
Max. Input Power	4000W	6000W
Max. Solar Charging Current	100A	100A
Max. Charging Current(PV+Grid)	100A	100A
Max. Input Current	15A	20A
Min. Startup Voltage	125V	
<b>Inverter Mode Specifications</b>		
Output Voltage Waveform	Pure Sine Wave	
Nominal Output Voltage	230Vac+5%	
Nominal Output Frequency(Hz)	50±0.3Hz/60Hz±0.3Hz(Adjustable)	
Parallel Capability	No	Yes, Up to 12 Units
Peak Efficiency	93%	
Over-Load Protection(SMPS load)	5.5s@≥150% Load; 10.5s @105% ~150%Load	
Surge Rating	2* Rated Power for 5s	
Capable of Starting Electric	Yes	
Output Short Circuit Protection	Yes	
<b>General Specifications</b>		
Operating Temperature	0°C~55°C	
Range Storage Temperature	-15°C~60°C	
Net Weight(KG)	10.8KG	13.2KG
Product Dimension(MM)	395*295*129MM	415*320*129MM
Package Dimension(MM)	472*372*202MM	494*399*202MM
Certification	CE-EMC、IEC 62109-1/2、IEC 63027	CE-EMC、IEC 62109-1/2

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# Off-grid High-frequency Solar Inverter

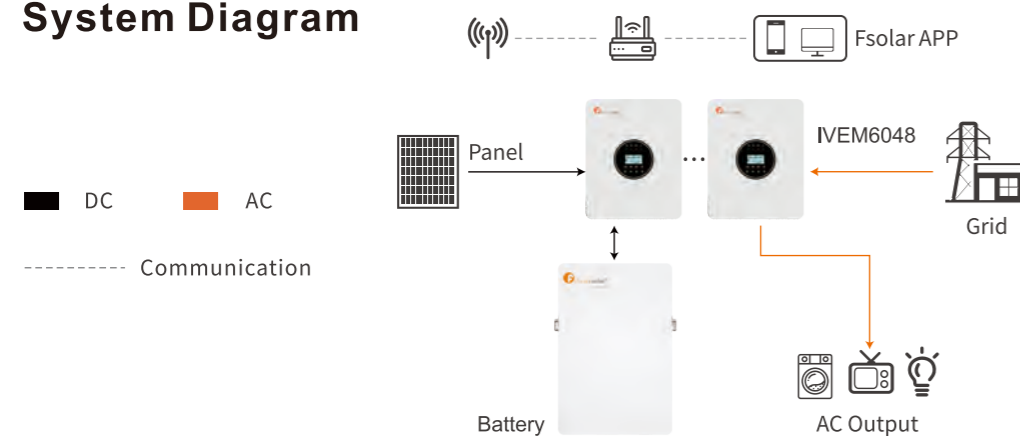
IVEM Series | IVEM6048



## Features

- Wide PV voltage input range (90VDC-500VDC).
- Supports up to 12 units in parallel (Battery must be connected).
- Support parameters setting via LCD screen (input voltage/charging current/charge mode).
- Overload/ over temperature/ short circuit protection.
- Compatible with mains voltage or generator power.
- Built-in MPPT solar charge controller.
- Lithium battery activation function.
- Auto restart while AC is recovering.
- Inverter running without battery.
- Cold start function.

## System Diagram



## Specifications

Model	IVEM6048
<b>Line Mode Specifications</b>	
Rated Output Power(VA)	6000VA
Rated Output Power(W)	6000W
Nominal DC Input Voltage	48V
Nominal Input Voltage	230Vac
Max. AC Input Voltage	280Vac
Nominal Input Frequency	50Hz / 60Hz (Auto detection)
Efficiency(Line Mode)	>95% (Rated R Load, Battery Full Charged)
Pass Through Without Battery	Yes
<b>Utility Charge Mode Specifications</b>	
Input Voltage Range	90~280Vac
Max. Charge Current	100A
Over Charge Protection	Yes
<b>Solar Charging &amp; Grid Charging</b>	
Max.PV Open Circuit Voltage	500V
PV Voltage Working Range	90V-450V
Max. Input Power	7000W
Max. Solar Charging Current	120A
Max. Charging Current(PV+Grid)	120A
Max. Input Current	27A
Min. Startup Voltage	95V
<b>Inverter Mode Specifications</b>	
Output Voltage Waveform	Pure Sine Wave
Nominal Output Voltage	230Vac±5%
Nominal Output Frequency(Hz)	50±0.3Hz/60Hz±0.3Hz(Adjustable)
Parallel Capability	Yes, Up to 12 Units
Peak Efficiency	93%
Over-Load Protection(SMPS load)	5s@≥150% load; 10s @105%~150% load
Surge Rating	2* Rated Power for 5s
Capable of Starting Electric	Yes
Output Short Circuit Protection	Yes
<b>General Specifications</b>	
Operating Temperature	-10°C~50°C
Range Storage Temperature	-15°C~60°C
Net Weight(KG)	11.5KG
Product Dimension(MM)	420*335*142MM
Package Dimension(MM)	512*417*216MM
Certification	EN IEC 61000-6-2: 2019/EN IEC 61000-6-4: 2019/EN 61000-3-12: 2011/ EN IEC 61000-3-11: 2019/EN 62109-1: 2010/EN 62109-2: 2011

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# Off-grid High-frequency Solar Inverter

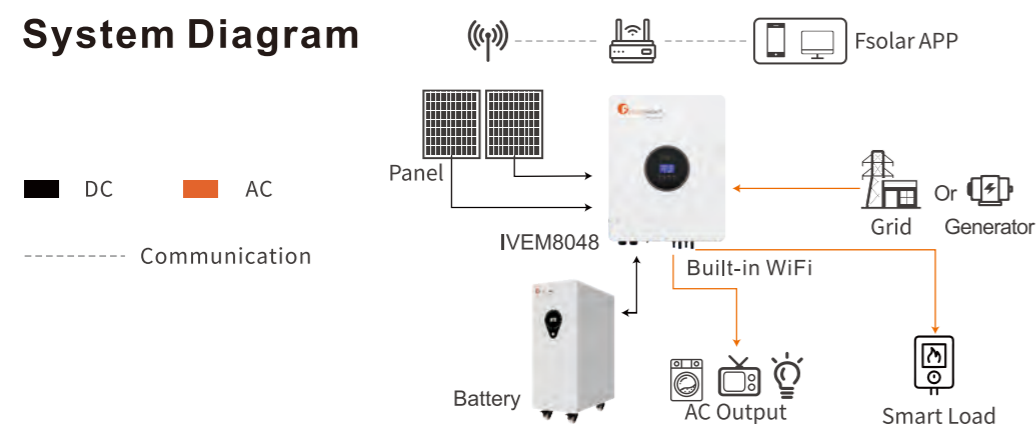
IVEM Series | IVEM8048



## Features

- Built-in WiFi for mobile monitoring (APP is required).
- Support parameters setting via LCD screen (input voltage/charging current/charge mode).
- Supports up to 6 units in parallel (Battery must be connected).
- Equipped with dual-output (Single machine mode).
- The second path of the AC output can set the output time.
- Overload/ over temperature/ short circuit protection.
- Compatible with mains voltage or generator power.
- Built-in MPPT solar charge controller with 2 strings of solar input.
- Lithium battery activation function.
- Inverter running without battery.
- Auto restart while AC is recovering.
- Cold start function.

## System Diagram



## Specifications

Model	IVEM8048
<b>Line Mode Specifications</b>	
Rated Output Power(VA)	8000VA
Rated Output Power(W)	8000W
Nominal DC Input Voltage	48V
Nominal Input Voltage	230Vac
Max. AC Input Voltage	280Vac
Nominal Input Frequency	50Hz / 60Hz (Auto Detection)
Efficiency(Line Mode)	>95% (Rated R Load, Battery Full Charged)
Pass Through Without Battery	Yes
<b>Utility Charge Mode Specifications</b>	
Nominal Input Voltage	230Vac
Input Voltage Range	90-280Vac
Max. Charge Current	150A
Over Charge Protection	Yes
<b>Solar Charging &amp; Grid Charging</b>	
Max.PV Open Circuit Voltage	500V
PV Voltage Working Range	90V-450V
Max. Input Power	10000W(5000W for single PV)
Max. Solar Charging Current	150A
Max. Charging Current(PV+Grid)	150A
Max. Input Current	20A X 2 (MAX 40A)
Min. Startup Voltage	100V
Number of MPP Trackers / Strings Per MPP Tracker	2/1
<b>Inverter Mode Specifications</b>	
Output Voltage Waveform	Pure sine wave
Nominal Output Voltage	230Vac+5%
Nominal Output Frequency(Hz)	50±0.3Hz/60Hz±0.3Hz(Adjustable)
Parallel Capability	Yes, up to 6 units
Peak Efficiency	94.5%
Over-Load Protection(SMPS load)	5s@≥150% load; 10s @105% ~150% load
Surge Rating	2* rated power for 5s
Capable of Starting Electric	Yes
Output Short Circuit Protection	Yes
<b>General Specifications</b>	
Operating Temperature	-10°C~50°C
Range Storage Temperature	-15°C~60°C
Net Weight(KG)	23.7KG
Gross Weight(KG)	27.4KG
Product Dimension(MM)	607*464*141MM
Package Dimension(MM)	712*582*259MM
Certification	EN IEC 61000-6-2: 2019/EN IEC 61000-6-4: 2019/EN 61000-3-12: 2011/ EN IEC 61000-3-11: 2019/EN 62109-1: 2010/EN 62109-2: 2011

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# Off-grid High-frequency Solar Inverter

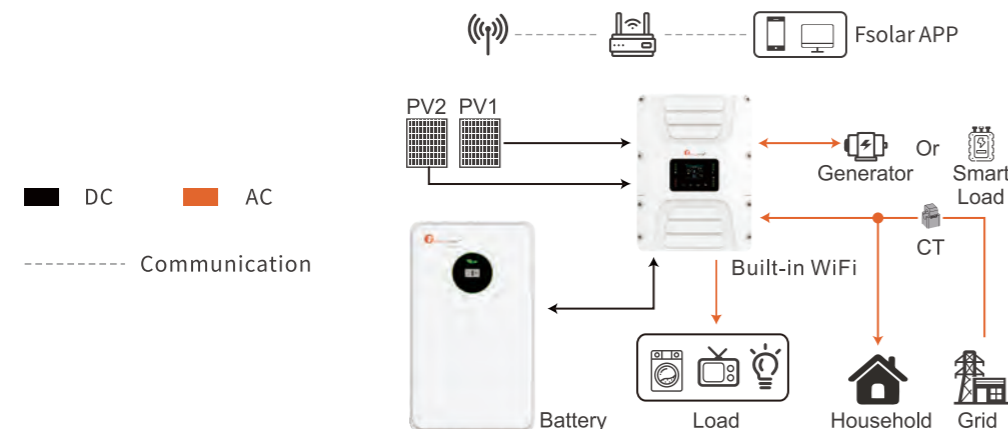
IVAM Series | IVAM6048P1G1



## Features

- Build-in WiFi for real-time monitoring.
- Build-in 2 strings of MPPT trackers.
- Programmable multiple operation modes: on grid, off grid and UPS.
- Compatible with utility power or generator power.
- IP65 protection level.
- Max. 12 units in parallel (6kW-72kW)
- LCD touchscreen for easy parameter and working mode settings.
- Guaranteed safety with multiple protections.
- Equipped with a power-limiting function to avoid grid overflow.
- Auto restart while AC is recovering.

## System Diagram



## Specifications

Model	IVAM6048P1G1
<b>Battery Input Data</b>	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range(V)	40~60
Max. Charging Current/Max. Discharging Current(A)	135
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
Number of Battery Input	1
<b>PV String Input Data</b>	
Max. PV Access Power(W)	12000W (6000W for per PV)
Max. PV Input Power(W)	9600
Max. PV Input Voltage(V)	500
Start-up Voltage(V)	120
PV Input Voltage Range(V)	90~500
MPPT Voltage Range(V)	90~425
Full Load MPPT Voltage Range(V)	300~425
Rated PV Input Voltage(V)	370
Max. Operating PV Input Current(A)	20+20
Max. Input Short-Circuit Current(A)	27+27
No. of MPP Trackers/No. of Strings MPP Tracker	2/1+1
<b>AC Output Data</b>	
Rated AC Output Power(VA/W)	6000
Max. AC Output Power(VA/W)	6000
Max. AC Output Current(A)	26.1
Peak Power(W)	2 Times of Rated power, 10s
Rated Output Voltage(V)	230
Output Type	L+N+PE
Rated Output Frequency	50Hz/60Hz
Output Voltage Waveform	Pure Sine Wave
<b>AC Input Data(Grid and Generator)</b>	
Max. Input Power to Battery(W)	6000
Rated Input Voltage(V)	230
Rated Input Frequency	50Hz/60Hz
Grid Input Current(A)	35
Generator Input Current(A)	35
<b>Equipment Protection</b>	
AC Output Overvoltage Protection	Yes
AC Output Short Circuit Protection	Yes
AC Output Overcurrent Protection	Yes
DC Polarity Reverse Connection Protection	Yes
Thermal Protection	Yes
DC Terminal Insulation Impedance Monitoring	Yes
DC Component Monitoring	Yes
Ground Fault Current Monitoring	Yes
Arc fault circuit interrupter (AFCI)	Optional
Power Network Monitoring	Yes
Earth Fault Detection	Yes
DC Input Switch	Yes
Overvoltage Load Drop Protection	Yes
Surge Protection Level	TYPE II(DC), TYPE II(AC)
<b>General Data</b>	
Display	LCD+LED
Communication Interface	RS485, CAN
Monitor Mode	WiFi/LAN (Optional)
<b>General Data</b>	
Operating Temperature Range	-40 to +60°C, >45°C Derating
Ingress Protection (IP) Rating	IP65
Over Voltage Category	OVC II(DC), OVC III(AC)
Warranty	5 Years
Type of Cooling	Intelligent Air Cooling
Net Weight	13.5kg
Product Dimension	320x432x183mm
Package Dimension	412x532x270mm
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

\*Disclaimer: This product is currently in pilot production. Final specifications, design, and features may differ from those presented here.  
 \*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# Off-grid High-frequency Solar Inverter

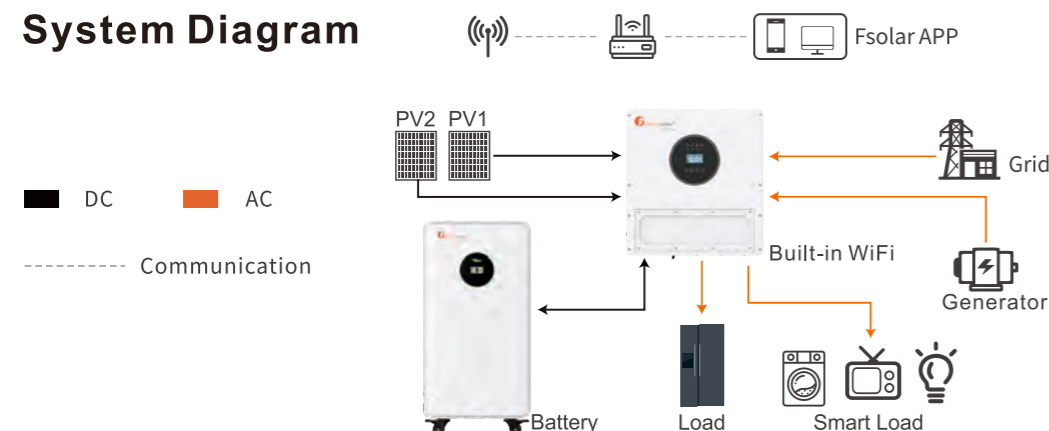
IVBM Series | IVBM8048/10048P1G1



## Features

- Built-in Wi-Fi for mobile monitoring (APP is required).
- Supports up to 6 units in parallel (Battery must be connected).
- Built-in MPPT solar charge controller with 2 strings of solar input.
- IP65 protection level.
- Independent generator port.
- Independent smart load port with dual outputs; the second output allows a customizable load schedule.
- Overload/over temperature/short circuit protection.
- Lithium battery activation function.
- Compatible to mains voltage or generator power.
- Auto restart while AC is recovering.
- Inverter running without battery.
- Configurable parameters setting (input voltage/charging current/charge mode).
- Cold start function.

## System Diagram



## Specifications

Model	IVBM8048P1G1	IVBM10048P1G1
<b>Line Mode Specifications</b>		
Rated Output Power(VA)	8000VA	10000VA
Rated Output Power(W)	8000W	10000W
Nominal DC Input Voltage	48V	
Input Voltage Waveform	Sinusoidal (Utility or Generator)	
Nominal Input Voltage	230Vac	
Max. AC Input Voltage	280Vac	
Nominal Input Frequency	50Hz / 60Hz (Auto Detection)	
Efficiency(Line Mode)	>95% (Rated R Load, Battery Full Charged)	
Pass Through Without Battery	Yes	
Max. Bypass Overload Current	53A/8000W	65A/10000W
Max. Inverter/Rectifier Current	40A/8000W	46A/10000W
Max. Smart Load Output Current	40A	46A
Max. Input Current of Generator	32A	
<b>Utility Charging Mode Specifications / Generator Charging Mode Specifications</b>		
Input Voltage Range	90~280Vac	
Max. Charge Current	150A	200A
Over Charge Protection	Yes	
<b>Solar Charging &amp; Grid Charging or GEN Charging</b>		
Max.PV Open Circuit Voltage	450V	
PV Voltage Working Range	90V-450V	
Max. Input Power	10,000W(5,000W for Single PV)	11,000W(5,500W for Single PV)
Max. Solar Charging Current	150A	200A
Max. Charging Current (PV+Grid or GEN)	150A	200A
Max. Input Current	20A × 2 (MAX 40A)	
Min. Startup Voltage	160V	
<b>Inverter Mode Specifications</b>		
Output Voltage Waveform	Pure Sine Wave	
Nominal Output Voltage	230Vac ± 5%	
Nominal Output Frequency (Hz)	50 ± 0.3Hz/60Hz ± 0.3Hz (Adjustable)	
Peak Efficiency	94.5%	
Over-Load Protection (SMPS load)	5s @ ≥ 150% load; 10s @ 105% ~ 150% load	
Surge Rating	2* Rated Power for 5s	
Capable of Starting Electric	Yes	
Output Short Circuit Protection	Yes	
<b>General Specifications</b>		
Operating Temperature	0°C~50°C	
Range Storage Temperature	-15°C~60°C	
Warranty	5 Years	
Net Weight (KG)	24.3KG	
Gross Weight (KG)	28.3KG	
Product Dimension (D*W*H)	525 × 490 × 189.2MM	
Package Dimension (D*W*H)	597 × 572 × 267MM	

\*Disclaimer: This product is currently in pilot production. Final specifications, design, and features may differ from those presented here. \*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# Low-voltage Hybrid Solar Inverter

IVGM Series | IVGM5~8KLP1G1

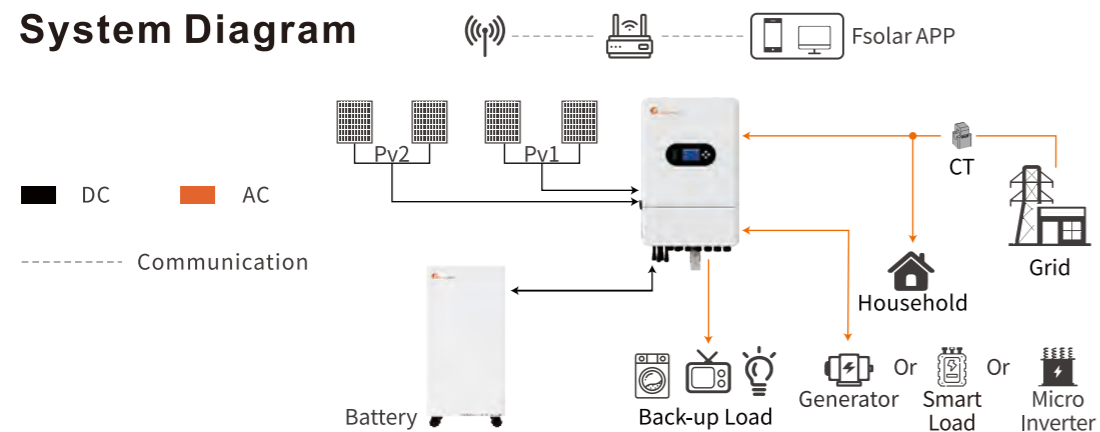
Single Phase



## Features

- Configurable parameters and working mode by LCD touch screen.
- Supporting WiFi monitoring and Fsolar smart cloud monitoring system.
- Battery charge and discharge current up to 120A~190A.
- Prevent grid overload with built-in limit function while seamlessly switching between battery and grid supply within 10ms for uninterrupted power.
- IP65 protection level.
- Customizable battery charge / discharge scheduling.
- Optimize energy use with Time-of-Use, Sell-First, and Zero Export options to maximize savings and efficiency.
- Built-in dual MPPT solar charge controllers, 1.5 times over configuration capacity.
- Programmable generator port, support smart load and micro inverter access.
- Support parallel operation with single-phase, and three-phase.
- Max. 6 units in parallel.

## System Diagram



## Specifications

Model	IVGM5KLP1G1	IVGM6KLP1G1	IVGM7K6LP1G1	IVGM8KLP1G1
<b>Battery Input Data</b>				
Battery Voltage Range	40V~60V			
Max. Charging and Discharging Current	120A/120A	135A/135A	190A/190A	190A/190A
Max. Charging and Discharging Power	5000W	6000W	7600W	8000W
Battery Type	Li-Ion /Lead-acid			
<b>DC Input Data(PV side)</b>				
Max. Recommended PV Power	7500W	9000W	11400W	12000W
Max. PV Voltage	500V			
Start Voltage	100V			
PV Voltage Range	90V-500V			
MPPT Voltage Range	120V-425V			
MPPT Voltage Range for Full Load	290V-425V	230V-425V	230V-425V	230V-425V
Nominal Voltage	380V			
Pv Input Current	13A+13A	26A+13A	26A+26A	26A+26A
Max. Shorted Current	17A+17A	44A+17A	44A+44A	44A+44A
Number of MPP Trackers / Strings Per MPP Tracker	2/1+1	2/2+1	2/2	2/2
<b>Grid Data</b>				
Nominal Input Voltage	220/230Va.c (Single Phase)			
Nominal Grid Frequency	50/60Hz			
Max. AC Output Power	5500W	6600W	8360W	8800W
AC Output/Input Rated Current	21.7A	26.1A	33A	34.8A
Max. Output Current	23.9A	28.7A	36A	38.3A
Max. Continuous AC Passthrough	40A	40A	50A	50A
<b>AC Output Data(Back Up)</b>				
Rated Output Power	5000W	6000W	7600W	8000W
Max. Output Current	40A	40A	40A	40A
Rated AC Output Voltage	220/230Vac (Single Phase)			
Rated AC Output Frequency	50/60Hz			
<b>Protection</b>				
Output Over Current Protection	Integrated			
Output Over Power Protection	Integrated			
Output Short-Circuit Protection	Integrated			
Anti-islanding Protection	Integrated			
GFCI Protection	Integrated			
Arc Fault Circuit Interrupter(AFCI)	Integrated			
Insulation Resistor Detection	Integrated			
<b>General Data</b>				
Operating Temperature Range	-25°C~60°C, >45°C Derating			
Protection Degree	IP65			
Cooling Concept	Smart Cooling			
Communication	RS232 / RS485			
BMS Communication	CAN / RS485			
Monitor Module	WiFi / GPRS			
Display	LCD+LED			
Installation Style	Wall-mounted			
Warranty	10 Years			
Grid Regulation(In progress)	VDE 4105、CEI 0-21、G99、NRS 097-2-1、EN 50549-1、EN 50549-10、NC RFG(Poland)、EN 50549-1/-10+Netherlands、PPDS、NTS & UNE217001 & UNE217002、UL1741			
Safety Regulation	IEC 62109-1/-2			
EMC	IEC/EN 61000-6-1/2/3/4、EN/IEC 61000-3-11/12			
Net Weight(KG)	33.5KG			
Gross Weight(KG)	40.5KG			
Product Dimension(MM)	430*654*243MM			
Package Dimension(MM)	787*547*358MM			

\* Refer to Felicitysolar's Warranty Policy for applicable conditions.

# Low-voltage Hybrid Solar Inverter

T-REX Series | T-REX-10KLP3G01

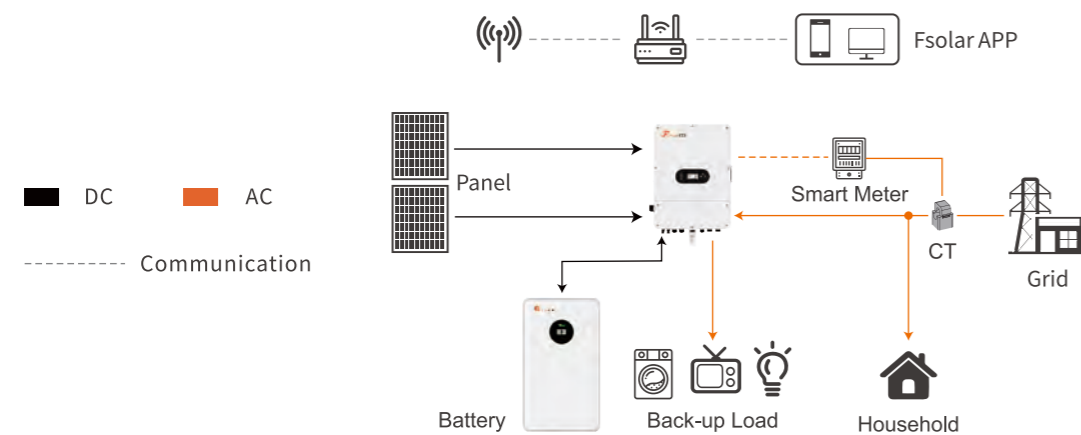
Three Phase



## Features

- AI-powered forecasting, smart planning & personalized energy optimization.
- AC couple to retrofit existing solar system.
- Support WiFi for mobile monitoring.
- Customizable battery charge / discharge scheduling.
- Max. charging / discharging current of 200A.
- IP65 protection level.
- Switch power supply within 20ms.

## System Diagram



## Specifications

Model	T-REX-10KLP3G01
<b>Battery Input Data</b>	
Battery Voltage Range	40V~60V
Max. Charging and Discharging Current	200A/200A
Max. Charging and Discharging Power	10000W
Battery Type	Li-Ion / Lead-acid
<b>DC Input Data(PV side)</b>	
Max. Recommended PV Power	13000W (6500W for Single PV)
Max. PV Voltage	900V
Start Voltage	180V
PV Voltage Range	160V-900V
MPPT Voltage Range	200V-850V
MPPT Voltage Range for Full Load	450V-850V
Nominal Voltage	720V
Max. Input Current	15A/15A
Max. Shorted Current	18A/18A
Number of MPP Trackers / Strings Per MPP Tracker	2/1
<b>Grid Data</b>	
Nominal Input Voltage	L1/L2/L3/N/PE, 230/400Vac
Nominal Grid Frequency	50/60Hz
Max. Input Current	30A
Max. Charge Current	200A
Max. AC Output Power	10000W
AC Output Rated Current	14.5A
Max. Output Current	18A
Max. Continuous AC Passthrough	30A
Power Factor	>0.99
Displacement Power Factor	0.8(Leading) to 0.8(Lagging)
THDI	<3%
<b>AC Output Data(Back Up)</b>	
Rated Output Power	10000VA/10000W
Max. Output Current	30A
Rated AC Output Voltage	L1/L2/L3/N/PE, 230/400Vac
Rated AC Output Frequency	50/60Hz
<b>Protection</b>	
Output Over Current Protection	Integrated
Output Over Power Protection	Integrated
Output Short-Circuit Protection	Integrated
Anti-islanding Protection	Integrated
GFCI Protection	Integrated
Insulation Resistor Detection	Integrated
<b>General Data</b>	
Operating Temperature Range	-25°C~60°C,>45°C Derating
Protection Degree	IP65
Cooling Concept	Smart cooling
Communication	RS232/RS485
BMS Communication	CAN/RS485
Monitor Module	WiFi/GPRS
Display	LCD+LED
Installation Style	Wall-mounted
Warranty	10 Years
Grid Regulation	VDE-AR-N 4105
Safety Regulation	IEC 62109-1/-2
Net Weight(KG)	38.9KG
Gross Weight(KG)	47.1KG
Product Dimension(MM)	655*475*266MM
Package Dimension(MM)	792*597*351MM

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# Low-voltage Hybrid Solar Inverter

IVGM Series | IVGM10~20KLP3G1

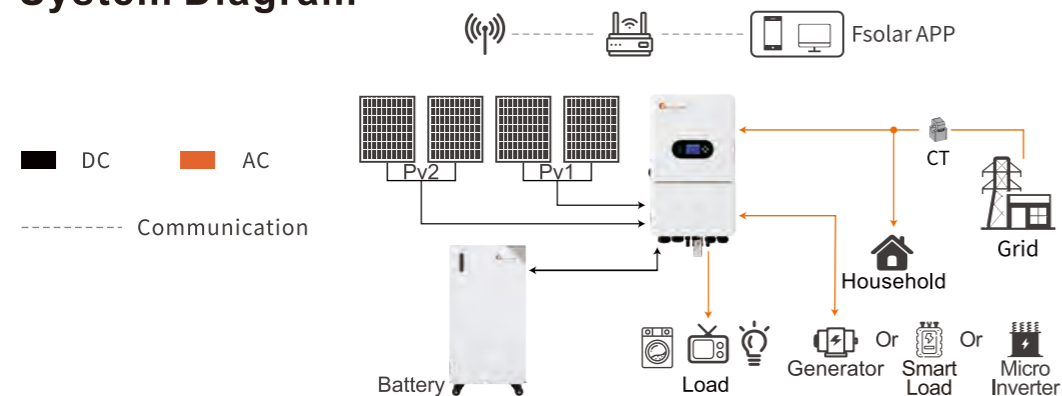
Three Phase



## Features

- Supports WiFi monitoring and F solar smart cloud monitoring system.
- Supports 100% unbalanced three-phase output for flexible load connection.
- LCD touch screen for easy parameter and mode settings.
- Fit for outdoor installation with IP65 protection level.
- Uninterrupted power with EPS function.
- Customizable battery charge / discharge scheduling.
- Compatible with generator, microgrid, and smart load port.
- Time of Use function to save on electricity cost.
- Battery charge and discharge current up to 350A.
- 4-channel PV, 2-channel MPPT, 1.6 times overconfiguration capacity.
- Max. 10 units in parallel.
- Auto restart while AC is recovering.

## System Diagram



## Specifications

Model	IVGM20KLP3G1	IVGM18KLP3G1	IVGM16KLP3G1	IVGM15KLP3G1	IVGM14KLP3G1	IVGM12KLP3G1	IVGM10KLP3G1
<b>Battery Input Data</b>							
Battery Type	Li-Ion / Lead-acid						
Battery Voltage Range	40V~60V						
Max. Charging/Discharging Current	350A	330A	300A	280A	260A	240A	210A
<b>PV String Input Data</b>							
Max. PV Input Power	32kW	28.8kW	25.6kW	24kW	22.4kW	18kW	15kW
Max. PV Input Voltage	800V						
Start-up Voltage	160V						
MPPT Voltage Rang	160V-650V						
Rated DC Input Voltage	550V						
Full Load DC Voltage Range	550V-800V	500V-800V	445V-800V	416V-800V	389V-800V	347V-800V	289V-800V
Max. Operating PV Input Current						26+26(A)	
Max. Input Short-Circuit Current						39+39(A)	
No. of MPP Trackers /No. of Strings MPP Tracker	2/2+2						
<b>AC Input/Output Data</b>							
Rated AC Input/Output Active Power	20kW	18kW	16kW	15kW	14kW	12kW	10kW
Max. AC Input/Output Apparent Power	22kVA	19.8kVA	17.6kVA	16.5kVA	15.4kVA	13.2kVA	11kVA
Peak Power (Off-grid)	2 Times of Rated Power, 10s						
Rated AC Input/Output Current	28.9A	26.1A	23.2A	21.8A	20.3A	17.4A	14.5A
Max. AC Input/Output Current	31.9A	28.7A	25.5A	23.9A	22.3A	19.2A	16A
Max. Continuous AC Passthrough (Grid to Load)						45A	
Max. Output Overcurrent Protection						65A	
Rated Input/Output Voltage/Range	220/380,230/400Vac(-20%~+15%)						
AC Wiring Mode	3L+N+PE						
Rated Input/Output Grid Frequency/Range	50/60 Hz(45~55Hz/55~65Hz)						
<b>Equipment Protection</b>							
DC Polarity Reverse Connection Protection	Yes						
AC Output Overcurrent Protection	Yes						
AC Output Overvoltage Protection	Yes						
AC Output Short Circuit Protection	Yes						
Thermal Protection	Yes						
DC Terminal Insulation Impedance Monitoring	Yes						
DC Component Monitoring	Yes						
Ground Fault Current Monitoring	Yes						
Arc Fault Circuit Interrupter (AFCI)	Yes						
Power Network Monitoring	Yes						
Island Protection Monitoring	Yes						
Earth Fault Detection	Yes						
DC Input Switch	Yes						
Overvoltage Load Drop Protection	Yes						
Residual Current (RCD) Detection	Yes						
Surge Protection Level	TYPE II(DC), TYPE II(AC)						
<b>Certification and Standards</b>							
Grid Regulation	NRS 097-2-1, VDE4105, EN50549-1, AS 4777.2, GB / T 34120, GB / T 34133, GB / T 34129						
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2						
<b>General Data</b>							
Net Weight(KG)	48.7KG						
Gross Weight(KG)	60.2KG						
Product Dimension(MM)	750x450x268MM						
Package Dimension(MM)	889x566x397MM						
Protection Degree	IP65						
Communication with BMS	RS485/CAN						
Monitor Module	WiFi/4G						
Warranty	5 Years/10 Years The Warranty Period Donende tho Final Tnetallation Sito of Inverter More Info Please Refer to Warranty Policy						

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# High-voltage Hybrid Solar Inverter

T-REX Series | T-REX-10KHP3G01

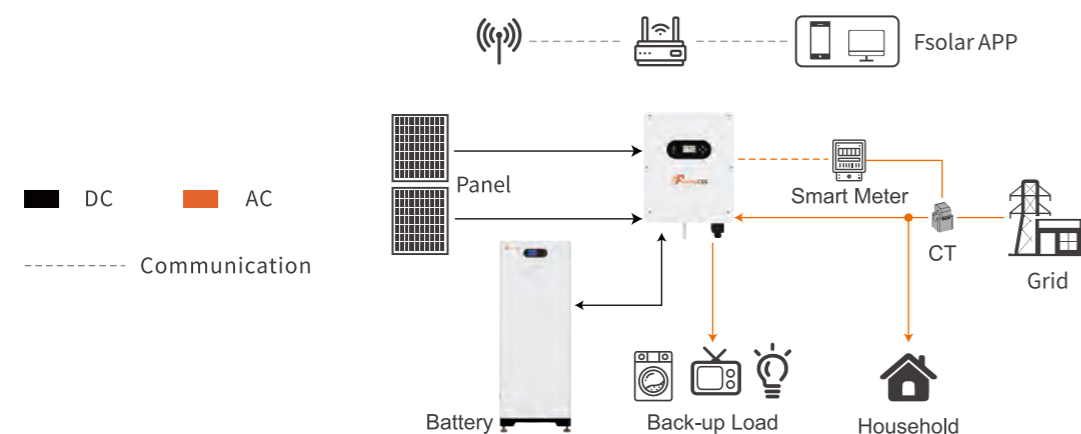
Three Phase



## Features

- Support WiFi for mobile monitoring.
- Max. charging / discharging current of 25A.
- AC couple to retrofit existing solar system.
- Customizable battery charge / discharge scheduling.
- Support storing energy from diesel generator.
- Switch power supply within 20ms.
- IP65 protection level.

## System Diagram



## Specifications

Model	T-REX-10KHP3G01
<b>Battery Input Data</b>	
Battery Voltage Range	180V~580V
Max. charging and discharging current	25A
Max. charging and discharging power	10000W
Battery type	Li-Ion / Lead-acid
<b>DC Input Data(PV side)</b>	
Max. Recommended PV Power	13000W (6500W for Single PV)
Max. PV Voltage	900V
Start Voltage	160V
PV Voltage Range	160V-900V
MPPT Voltage Range	200V-850V
MPPT Voltage Range for Full Load	450V-850V
Nominal Voltage	720V
Max. Input Current	15A/15A
Max. Shorted Current	18A/18A
Number of MPP Trackers / Strings Per MPP Tracker	2/1
<b>Grid Data</b>	
Nominal Input Voltage	L1/L2/L3/N/PE, 230/400Vac
Nominal Grid Frequency	50/60Hz
Max. Input Current	30A
Max. Charge Current	25A
Max. AC Output Power	10000W
AC Output Rated Current	14.5A
Max. Output Current	18A
Max. Continuous AC Passthrough	30A
Power Factor	>0.99
Displacement Power Factor	0.8(Leading) to 0.8(Lagging)
THDI	<3%
<b>AC Output Data(Back Up)</b>	
Rated Output Power	10000VA/10000W
Max. Output Current	30A
Rated AC Output Voltage	L1/L2/L3/N/PE, 230/400Vac
Rated AC Output Frequency	50/60Hz
<b>Protection</b>	
Output Over Current Protection	Integrated
Output Over Power Protection	Integrated
Output Short-Circuit Protection	Integrated
Anti-islanding Protection	Integrated
GFCI Protection	Integrated
Insulation Resistor Detection	Integrated
<b>General Data</b>	
Operating Temperature Range	-25°C~60°C,>45°C Derating
Protection Degree	IP65
Cooling Concept	Nature
Communication	RS232/RS485
BMS Communication	CAN/RS485
Monitor Module	WiFi/GPRS
Display	LCD+LED
Installation Style	Wall-mounted
Warranty	10 Years
Grid Regulation	VDE-AR-N 4105 EN50549-1
Safety Regulation	IEC 62109-1/-2
EMC	SZNTC2206135EV00 / EN IEC 61000-6-2: 2019 / EN IEC 61000-6-4: 2019 / EN IEC 61000-3-11: 2019 / EN 61000-3-12: 2011
Net Weight(KG)	35.3KG
Gross Weight(KG)	39.7KG
Product Dimension(MM)	533*431*213MM
Package Dimension(MM)	635*533*315MM

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# High-voltage Hybrid Solar Inverter

IVGM Series | IVGM25~50KHP3G2

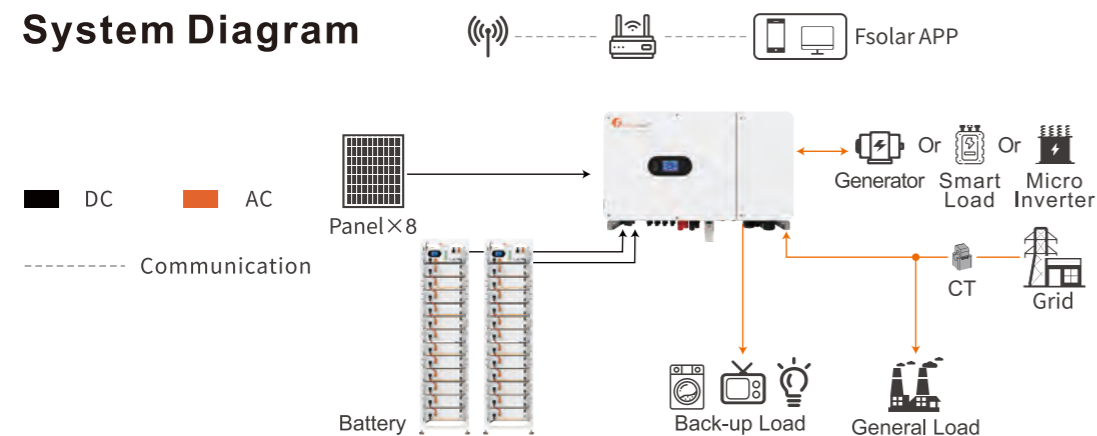
## Three Phase



### Features

- AI-powered forecasting, smart planning & personalized energy optimization.
- Supports WiFi monitoring and Fsolar smart cloud monitoring system.
- Customizable battery charge / discharge scheduling.
- Seamless power supply switching within 10ms.
- Configurable parameters and working mode via LCD touch screen.
- Programmable multiple operation modes: On grid, off grid and UPS.
- Programmable supply priority for battery or grid.
- 2 independent battery inputs, effectively reducing inter-cluster circulation.
- Multi-string PV input, 2 times over configuration capacity.
- Programmable generator port, support smart load and micro inverter access.
- IP65 protection level.
- 12 pcs in parallel maximum.
- Auto restart while AC is recovering.

### System Diagram



### Specifications

Model	IVGM50KHP3G2	IVGM40KHP3G2	IVGM30KHP3G2	IVGM29K9HP3G2	IVGM25KHP3G2
<b>Battery Input Data</b>					
Battery Type	LFP (LiFePO4)				
Battery Voltage Range	160~800Vdc				
Max. Charging Current	50+50(A)				
Max. Discharging Current	50+50(A)				
Number of Battery Input	2				
<b>PV String Input Data</b>					
Max. DC Access Power	100kW	80kW	60kW	59.8kW	50kW
Max. DC Input Power	80kW	64kW	48kW	47.84kW	40kW
Max. DC Input Voltage	1000Vdc				
Min. DC Input Voltage	150Vdc				
Start-up Voltage	180Vdc				
Rated DC Input Voltage	600Vdc				
MPPT Range	150~850Vdc				
Full Load DC Voltage Range	550~850Vdc	444~850Vdc	444~850Vdc	443~850Vdc	555~850Vdc
PV Input Current	36+36+36+36(A)		36+36+36(A)		36+36(A)
Max. PV Isc	55+55+55+55(A)		55+55+55(A)		55+55(A)
No. of MPP Trackers	4		3		2
No. of Strings Per MPP Tracker	2		2		2
<b>AC Output Data</b>					
Rated AC Output Power	50kW	40kW	30kW	29.9kW	25kW
Max. AC Output Power	55kW	44kW	33kW	29.9kW	27.5kW
AC Output Rated Current	72.5A	58A	43.5A	43.4A	36.3A
Max. AC Current	79.7A	63.8A	47.9A	43.4A	39.9A
Max. Output Overcurrent Protection (A)	192 (A)		144(A)		
Rated AC Voltage	220/380,230/400 Vac(-20%~+15%)				
AC Wiring Mode	3L+N+PE				
Rated AC Frequency	50 /60 Hz (45~55Hz/55~65Hz)				
THDI	<3% (At Rated Power)				
Power Factor	0.8( Leading) to 0.8( Lagging)				
<b>Safety and Standards</b>					
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Over Voltage Category	OVCI (DC), OVC III (AC)				
Grid Regulation	NRS 097-2-1, VDE4105, EN50549-1, AS 4777.2, GB/T 34120, GB/T 34133, GB/T 34129				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
<b>Protection</b>					
PV Input Lightning Protection	Integrated				
PV String Input Reverse	Integrated				
Polarity Protection	Integrated				
Battery Input Lightning Protection	Integrated				
AC Output Lightning Protection	Integrated				
Battery Input Reverse Polarity Protection	Integrated				
Insulation Resistor Detection	Integrated				
Residual Current Monitoring Unit	Integrated				
Output Over Current Protection	Integrated				
Output Short-Circuit Protection	Integrated				
Output Over Voltage Protection	Integrated				
Anti-islanding Protection	Integrated				
<b>General Data</b>					
Net Weight	87.1KG		80KG		
Gross Weight	107.1KG		101KG		
Product Dimension	940*582*340MM				
Package Dimension	1114*774*469MM				
Protection Degree	IP65				
Operating Temperature Range	-40 to 60°C(> 50°C Derating)				
Humidity	0~ 95 % (No Condensation)				
Cooling	Smart Cooling				
Communication with BMS	RS485,CAN				
Monitor Module	WiFi/GPRS				
Installation Style	Wall-mounted				
Warranty	10 Years				

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# LiFePO4 Battery

FLA Series | FLA12100~300PG2

Low-voltage



## Features

- Build-in WiFi / Bluetooth for real-time monitoring.
- Multiple protection with built-in smart BMS and fuse.
- LiFePO4: higher safe performance and longer cycle life.
- Max. 16 units in parallel.
- Compatible with leading inverter brands.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLA12100PG2	FLA12200PG2	FLA12300PG2
Battery Type	LiFePO4		
Energy	1.28kWh	2.56kWh	3.75kWh
Nominal Voltage	12.8V	12.8V	12.8V
Operating Voltage	11.2-14.4V	11.2-14.4V	11.2-14.4V
Max.Continuous Charge/Discharge Current[1]	100A	120A	150A
Peak Charge/Discharge Current(15s)	150A	200A	200A
Max.Charge/Discharge Power	1,250W	1,500W	1,875W
Depth of Discharge(DOD)	≥ 95%	≥ 95%	≥ 95%
Scalability	Up to 16 units in parallel(20.48kWh)	Up to 16 units in parallel(40.96kWh)	Up to 16 units in parallel(60kWh)
Max. Series Connections	4 Units		
Communication	CAN2.0/RS485/WIFI/Bluetooth		
Protection Level	IP21		
Cycle Life[2]	≥ 6,000 Cycles		
Charging Temperature Range	0-55 °C		
Discharging Temperature Range	-20-55 °C		
Display	LED		
Installation	Floor-Mounted		
Protection	Built-in smart BMS, Fuse		
Warranty	5 Years		
Net Weight	10.3kg	15.5kg	26kg
Gross Weight	12.3kg	18.5kg	29kg
Product Dimension	295×201×199MM	329×248×199MM	379×241×286MM
Package Dimension	357×263×261MM	391×310×257MM	438×300×344MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

[2] Test conditions: 0.2C Charging/Discharging @25°C,80% DOD






# LiFePO4 Battery

FLA Series | FLA24100~300WG2

Low-voltage



## Features

-  Build-in WiFi / Bluetooth for real-time monitoring.
-  Flexible installation: wall-mounted / floor-mounted.
-  LiFePO4: higher safe performance and longer cycle life.
-  Max. 15 units in parallel.
-  Compatible with leading inverter brands.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLA24100WG2	FLA24200WG2	FLA24250WG2	FLA24300WG2
Battery Type	LiFePO4			
Nominal Energy	2.56kWh	5kWh	6.4kWh	7.5kWh
Nominal Voltage	25.6V	25.6V	25.6V	25.6V
Operating Voltage	22.4-28.8V	22.4-28.8V	22.4-28.8V	22.4-28.8V
Max. Continuous Charge/Discharge Current[1]	100A	150A	175A	175A
Peak Charge/Discharge Current(15s)	200A	200A	300A	300A
Max. Charge/Discharge Power	2,500W	3,840W	4,480W	4,480W
Scalability	Max. 15 pcs in Parallel(38.4kWh)	Max. 15 pcs in Parallel(75kWh)	Max. 15 pcs in Parallel(96kWh)	Max. 15 pcs in Parallel(112.5kWh)
Depth of Discharge(DOD)	≥95%			
Communication	CAN2.0/RS485/WIFI/Bluetooth			
Protection Degree	IP21			
Cycle Life	≥6,000 Cycles			
Charging Temperature Range	0°C~+55 °C			
Discharging Temperature Range	-20°C~+55 °C			
Display Type	LCD+LED			
Installation	Wall-Mounted / Floor-Mounted			
Protection	Built-in Smart BMS, Fuse			
Warranty Period	7 Years			
Certification	UN38.3			
Product Weight	23KG	37KG	49.5KG	60KG
Package Weight	27KG	42KG	54.5KG	64KG
Product Dimension	325X400X180MM	445X433X194MM	400X402X275MM	400X475X269MM
Package Dimension	462X417X252MM	555X547X262MM	512X472X333MM	512X547X343MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Longer Lasting LiFePO4 Battery



Floor-mounted/ Wall-mounted Installations



Max. 15 Pcs in Parallel










Real-time Monitoring

# LiFePO4 Battery

FLA Series | FLA48100UG1



## Features

-  LiFePO4: higher safe performance and longer cycle life.
-  Max. 32 units in parallel.
-  Multiple installation choices: stack-mounted / wall-mounted / rack-mounted.
-  Max. 1C charge and discharge rate.
-  Equipped with over-voltage trip protection & fire protection module.
-  Easy fuse replacement design.
-  CCS Technology for better system performance.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLA48100UG1
Battery Type	LiFePO4
Nominal Energy	5.12kWh
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommend Charge/Discharge Current	50A
Max. Continuous Charge/Discharge Current[1]	100A
Peak Charge/Discharge Current(15s)	125A
Max. Charge/Discharge Power	5,000W
Peak Charge/Discharge Power(15s)	6,250W
Depth of Discharge(DOD)	≥95%
Scalability	Max. 32 pcs in Parallel(163.84kWh)
Communication	RS485/CAN
Protection Level	IP21
Cycle Life	≥ 6,000 Cycles (25°C±2°C,0.5C/0.5C,90%DOD,70%EOL)
Charging Temperature Range	0°C~+55°C
Discharging Temperature Range	-20°C~+55°C
Display Type	LED
Installation	Stacked Installation/Rack Installation/Wall-mounted Installation
Protection	Built-in Smart BMS, Breaker, Fuse
Warranty	10 Years
Net Weight	43KG
Gross Weight	47KG
Product Dimension	575X483X133MM
Package Dimension	642X542X241MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

\*Disclaimer: This product is currently in pilot production. Final specifications, design, and features may differ from those presented here.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Max. 32 units in parallel



Guaranteed safety, peace of mind



Max. 1C charge and discharge rate



Multiple installation choices, easy and convenient

# LiFePO4 Battery

FLA Series | FLA48100~48250

Low-voltage



(The battery's size varies according to its capacity.)

## Features

- Built-in fire protection system.
- Scalable expansion up to 15 pcs in parallel.
- Built-in WiFi for remote monitor the battery pack data.
- LiFePO4: Higher safe performance and longer cycle life.
- Multiple Protection with built-in smart BMS, breaker and fuse.
- Compatible with leading inverter brands.
- Up to 7-year long warranty.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLA48100	FLA48200	FLA48230	FLA48250
Battery Type	LiFePO4			
Nominal Energy	5.12kWh	10kWh	11.8kWh	12.5kWh
Nominal Voltage	51.2V	51.2V	51.2V	51.2V
Operating Voltage	44.8-57.6V	44.8-57.6V	44.8-57.6V	44.8-57.6V
Recommend Charge/Discharge Current[1]	≤100A	≤120A	≤150A	≤150A
Recommend Charge/Discharge Power[1]	≤5,000W	≤6,000W	≤7,500W	≤7,500W
Maximum Charge/Discharge Current(15s)	150A	150A	200A	200A
Maximum Charge/Discharge Power(15s)	7,500W	7,500W	10,000W	10,000W
Scalability	Max. 15 pcs in Parallel(76.8kWh)	Max. 15 pcs in Parallel(150kWh)	Max. 15 pcs in Parallel(176.6kWh)	Max. 15 pcs in Parallel(187kWh)
Depth of Discharge(DOD)	≥95%			
Communication	CAN2.0/RS485/WIFI/Bluetooth			
Protection Degree	IP21			
Cycle Life	≥ 6000 Cycles (25°C±2°C,0.5C/0.5C,90%DOD,70%EOL)			
Charging Temperature Range	0°C~+55 °C			
Discharging Temperature Range	-20°C~+55 °C			
Display Type	LCD+LED			
Installation	Wall-Mounted / Floor-Mounted			
Protection	Built-in smart BMS, Breaker, Fuse			
Warranty Period	7 Years			
Certification	UN38.3、CE-EMC、IEC 62619	UN38.3、CE-EMC、IEC 62619、CB	UN38.3、CB	UN38.3、CE-EMC、IEC 62619
Product Weight	48KG	68KG	92KG	97KG
Package Weight	55KG	88KG	115.6KG	115KG
Product Dimension	663X400X178MM	735X433X188MM	783X450X274MM	783X450X274MM
Package Dimension	782X522X262MM	849X550X362MM	900X570X450MM	900X570X450MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Built-in WiFi/Bluetooth for Remote Monitoring



Aerosol Fire Extinguishing System



Support Wall Mounted Installation



Wide Inverter Compatibility

# LiFePO4 Battery

FLA Series | FLA48300

Low-voltage



## Features

- LiFePO4: higher safe performance and longer cycle life.
- Multiple protection with built-in smart BMS, breaker and fuse.
- Flexible Installation: floor-mounted.
- Compatible with leading inverter brands.
- Scalable expansion up to 15 pcs in parallel.
- Built-in WiFi for remote monitor the battery pack data.
- Equipped with an aerosol fire extinguishing system.
- Easily replace the battery fuse when it blows.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLA48300
Battery Type	LiFePO4
Nominal Energy	15kWh
Nominal Capacity	300Ah
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommend Charge/Discharge Current	120A
Max. Continuous Charge/Discharge Current[1]	150A
Peak Charge/Discharge Current(15s)	200A
Scalability	Max. 15 pcs in Parallel(225kWh)
Depth of Discharge(DOD)	≥95%
Display Type	LCD
Protection Degree	IP21
Working Temperature Range	Charge: 0°C~55 °C
	Discharge: -20°C~55 °C
Storage Temperature Range	0°C~+35°C
Humidity	5%~95%
Altitude	≤ 2000m
Communication	CAN2.0/RS485/WIFI/Bluetooth
Cycle Life	≥ 6000 Cycles (25°C±2°C,0.5C/0.5C,90%DOD,70%EOL)
Installation	Floor-Mounted
Protection	Built-in Smart BMS, Breaker, Fuse
Warranty Period	7 Years
Certification	UN38.3、CE-EMC、IEC 62619
Product Weight	135KG
Package Weight	160KG
Product Dimension	480X1100X300MM
Package Dimension	1150X635X498MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Real-time status via LCD Display



Aerosol Fire Extinguishing System



Support 15 Pcs in Parallel



Built-in WiFi/Bluetooth for Remote Monitoring








# LiFePO4 Battery

FLA Series | FLA48100-EU

Low-voltage



## Features

-  Built-in fire protection system.
-  Scalable expansion up to 15 pcs in parallel.
-  Built-in WiFi for remote monitor the battery pack data.
-  LiFePO4: Higher safe performance and longer cycle life.
-  Multiple Protection with built-in smart BMS, breaker and fuse.
-  Compatible with leading inverter brands.
-  Up to 10-year long warranty.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLA48100-EU
Battery Type	
Nominal Energy	5.12kWh
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Max. Continuous Charge/Discharge Current [1]	100A
Peak Charge/Discharge Current (15s)	150A
Max. Charge/Discharge Power (15s)	7,500W
Scalability	Max. 15 pcs in Parallel(76.8kWh)
Depth of Discharge (DOD)	≥95%
Communication	CAN2.0/RS485/WIFI/Bluetooth
Protection Degree	IP21
Cycle Life	≥ 6000 Cycles
Charging Temperature Range	0°C~+55 °C
Discharging Temperature Range	-20°C~+55 °C
Display Type	LCD+LED
Installation	Wall-Mounted / Floor-Mounted
Protection	Built-in smart BMS, Breaker, Fuse
Warranty Period	10 Years
Certification	IEC 62619, IEC/EN 61000-6-1/2/3/4, UN38.3
Product Weight	55KG
Package Weight	77KG
Product Dimension	775X425X209MM
Package Dimension	892X545X385MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Built-in WiFi/Bluetooth for Remote Monitoring



Aerosol Fire Extinguishing System



Support Wall Mounted Installation



Wide Inverter Compatibility

# LiFePO4 Battery

FLA Series | FLA48280-EU

Low-voltage



## Features

- LiFePO4: higher safe performance and longer cycle life.
- Multiple protection with built-in smart BMS, breaker and fuse.
- Flexible Installation: floor-mounted.
- Compatible with leading inverter brands.
- Scalable expansion up to 15 pcs in parallel.
- Built-in WiFi for remote monitor the battery pack data.
- Equipped with an aerosol fire extinguishing system.
- Easily replace the battery fuse when it blows.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLA48280-EU
Battery Type	LiFePO4
Nominal Energy	14.3kWh
Nominal Capacity	280Ah
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Max. Continuous Charge/Discharge Current [1]	150A
Peak Charge/Discharge Current (15s)	300A
Max. Charge/Discharge Power (15s)	7,500W
Scalability	Max. 15 pcs in Parallel(214.5kWh)
Depth of Discharge (DOD)	≥95%
Display Type	LCD
Protection Degree	IP21
Working Temperature Range	Charge: 0°C~55 °C
	Discharge: -20°C~55 °C
Storage Temperature Range	0°C~+35°C
Humidity	5%~95%
Communication	CAN2.0/RS485/WIFI/Bluetooth
Cycle Life	≥ 6000 Cycles
Installation	Floor-Mounted
Protection	Built-in Smart BMS, Breaker, Fuse
Warranty Period	10 Years
Certification	UN38.3
Product Weight	135KG
Package Weight	160KG
Product Dimension	480X1100X300MM
Package Dimension	1150X635X498MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to FelicitySolar's Warranty Policy for applicable conditions.

## Product Display



Real-time status via LCD Display



Aerosol Fire Extinguishing System



Support 15 Pcs in Parallel



Built-in WiFi/Bluetooth for Remote Monitoring

# LiFePO4 Battery

FLA Series | FLA48314-EU

Low-voltage



## Features

- LiFePO4: higher safe performance and longer cycle life.
- Built-in WiFi / bluetooth for real-time monitoring.
- Enhanced safety with aerosol fire extinguishing system.
- Scalable expansion up to 15 pcs in parallel.
- Multiple protection with built-in smart BMS, breaker and fuse.
- Compatible with leading inverter brands
- External battery fuse design for easy replacement.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLA48314-EU
Battery Type	LiFePO4
Nominal Energy	16kWh
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Max. Continuous Charge/Discharge Current [1]	160A
Peak Charge/Discharge Current (15s)	300A
Max. Charge/Discharge Power (15s)	8,000W
Scalability	Max. 15 pcs in Parallel(240kWh)
Depth of Discharge (DOD)	≥95%
Communication	CAN2.0/RS485/WIFI/Bluetooth
Protection Degree	IP21
Cycle Life	≥ 8000 Cycles (25°C±2°C,0.5C/0.5C,90%DOD,70%EOL)
Charging Temperature Range	0°C~+55 °C
Discharging Temperature Range	-20°C~+55 °C
Display Type	LCD+LED
Installation	Floor-Mounted
Protection	Built-in smart BMS, Breaker, Fuse
Warranty Period	10 Years
Certification	UN38.3
Product Weight	121.5KG
Package Weight	143.5KG
Product Dimension	435X880X247MM
Package Dimension	960X555X450MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Built-in WiFi / Bluetooth for Remote Monitoring



Aerosol Fire Extinguishing System



External Battery Fuse Design



≥8000 High Cycle Life








# LiFePO4 Battery

FLA Series | FLA48314-PLUS

Low-voltage



## Features

-  LiFePO4: higher safe performance and longer cycle life.
-  IP65 protection level.
-  Build-in WiFi / Bluetooth for real-time monitoring.
-  External fuse design for easy replacement.
-  Equipped with aerosol fire extinguishing system.
-  Compatible with leading inverter brands.
-  Max. 32 units in parallel.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLA48314-PLUS
Battery Type	LiFePO4
Nominal Energy	16kWh
Nominal Capacity	314Ah
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Max. Continuous Charge/Discharge Current[1]	160A
Peak Charge/Discharge Current(15s)	300A
Scalability	Max. 32 pcs in Parallel(512kWh)
Depth of Discharge(DOD)	≥95%
Display Type	LED
Protection Degree	IP65
Working Temperature Range	Charge: 0°C~+55 °C
	Discharge: -20°C~+55 °C
Storage Temperature Range	0°C~+35°C
Humidity	5%~95%
Altitude	≤ 2000m
Communication	CAN2.0/RS485/WIFI/Bluetooth
Cycle Life	≥8,000 Cycles(25°C +2°C,0.5C/0.5C,90%DOD,70%EOL)
Installation	Floor-Mounted
Protection	Built-in smart BMS, Breaker, Fuse
Warranty Period[2]	7 Years
Certification	UN38.3
Product Weight	121KG
Package Weight	143KG
Product Dimension	450X895X235MM
Package Dimension	958X548X440MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

[2] Conditions apply, refer to Felicitysolar Warranty policy.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



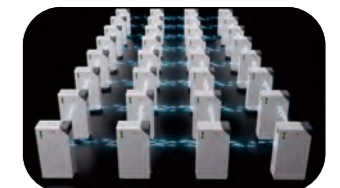
Patented External Fuse Design



8000 High Cycle Life



Built-in WiFi/Bluetooth for Remote Monitoring



Scalable expansion up to 32 pcs in parallel

# LiFePO4 Battery

FLA Series | FLA48300TG2

Low-voltage



## Features

- LiFePO4: higher safe performance and longer cycle life.
- Enhanced safety with aerosol fire extinguishing system.
- Multiple protection with built-in smart BMS, breaker and fuse.
- Built-in WiFi / bluetooth for real-time monitoring.
- Scalable expansion up to 15 pcs in parallel.
- Compatible with leading inverter brands
- External battery fuse design for easy replacement.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLA48300TG2
Battery Type	LiFePO4
Nominal Energy	15kWh
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommend Charge/Discharge Current	80A
Max. Continuous Charge/Discharge Current[1]	160A
Peak Charge/Discharge Current(15s)	230A
Max. Charge/Discharge Power	8,000W
Peak Charge/Discharge Power(15s)	11,500W
Scalability	Max. 15 pcs in Parallel(225kWh)
Depth of Discharge(DOD)	≥95%
Communication	CAN2.0/RS485/WIFI/Bluetooth
Protection Degree	IP21
Cycle Life	≥ 6000 Cycles (25°C±2°C,0.5C/0.5C,90%DOD,70%EOL)
Charging Temperature Range	0°C~+55 °C
Discharging Temperature Range	-20°C~+55 °C
Display Type	LCD+LED
Installation	Floor-Mounted
Protection	Built-in Smart BMS, Breaker, Fuse
Warranty Period	7 Years
Product Weight	118.5KG
Package Weight	140.5KG
Product Dimension	435X880X247MM
Package Dimension	960X555X450MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Built-in WiFi / Bluetooth for Remote Monitoring



Aerosol Fire Extinguishing System



External Battery Fuse Design



Support 15 Pcs in Parallel

# LiFePO4 Battery

FLA Series | FLA48350/500TG2

Low-voltage



## Features

- LiFePO4: higher safe performance and longer cycle life.
- Built-in WiFi / bluetooth for real-time monitoring.
- Enhanced safety with aerosol fire extinguishing system.
- Scalable expansion up to 15 pcs in parallel.
- Multiple protection with built-in smart BMS, breaker and fuse.
- Compatible with leading inverter brands
- External battery fuse design for easy replacement.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLA48350TG2	FLA48500TG2
Battery Type	LiFePO4	
Nominal Energy	17.5kWh	25kWh
Nominal Voltage	51.2V	
Operating Voltage	44.8-57.6V	
Max. Continuous Charge/Discharge Current[1]	175A	250A
Peak Charge/Discharge Current(15s)	300A	500A
Max. Charge/Discharge Power	8,750W	12,500W
Scalability	Max. 15 pcs in Parallel(262.5kWh)	Max. 15 pcs in Parallel(375kWh)
Depth of Discharge(DOD)	≥95%	
Communication	CAN2.0/RS485/WIFI/Bluetooth	
Protection Degree	IP21	
Cycle Life	≥ 8000 Cycles (25°C±2°C,0.5C/0.5C,90%DOD,70%EOL)	≥ 6000 Cycles (25°C±2°C,0.5C/0.5C,90%DOD,70%EOL)
Charging Temperature Range	0°C~+55 °C	
Discharging Temperature Range	-20°C~+55 °C	
Display Type	LCD+LED	
Installation	Floor-Mounted	
Protection	Built-in Smart BMS, Breaker, Fuse	
Warranty Period	7 Years	
Certification	UN38.3	
Product Weight	121.5KG	186.5KG
Package Weight	143.5KG	219.5KG
Product Dimension	435X880X247MM	570X250X980MM
Package Dimension	960X555X450MM	1135X690X465MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Built-in WiFi / Bluetooth for Remote Monitoring



Aerosol Fire Extinguishing System



Support 15 Pcs in Parallel



Wide Inverter Compatibility

# LiFePO4 Battery

FLA Series | FLA48500

Low-voltage



## Features

- Scalable expansion up to 375kWh in parallel.
- Flexible Installation: floor-mounted.
- LiFePO4: Higher safe performance and longer cycle life.
- Enhanced safety with aerosol fire extinguishing system.
- Multiple Protection with built-in smart BMS, breaker and fuse.
- Compatible with leading inverter brands.
- Up to 7-year long warranty.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLA48500
Battery Type	LiFePO4
Nominal Energy	25kWh
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommend Charge/Discharge Current[1]	≤200A
Recommend Charge/Discharge Power[1]	≤10000W
Maximum Charge/Discharge Current(15s)	300A
Maximum Charge/Discharge Power(15s)	15000W
Depth of Discharge(DOD)	≥95%
Scalability	Max.15 pcs in Parallel(375kWh)
Communication	RS485/CAN
Protection Degree	IP21
Cycle Life[2]	≥6,000 Cycles
Charging Temperature Range	0°C-55 °C
Discharging Temperature Range	-20°C-60 °C
Display	LCD+LED
Installation Style	Floor-Mounted
Protection	Built-in Smart BMS, Breaker, Fuse
Warranty	7 Years
Certification	UN38.3, CE-EMC, IEC 62619
Product Weight	218KG
Package Weight	248KG
Product Dimension	718X380X990MM
Package Dimension	825X498X1162MM

[1] Recommend Charge/Discharge Current/Power is Affected by Temperature and SOC.

[2] Test Conditions: 0.2C Charging/Discharging @25°C, 80% DOD.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Longer Lasting LiFePO4 Battery



Real-time Status via LCD Display



Support 15 Pcs in Parallel



Wide Inverter Compatibility

# LiFePO4 Battery

FLB Series | FLB48100/230WG1(-H) & FLB48314TG1(-H)

Low-voltage



## Features

- Remote monitoring of battery pack data via built-in WiFi / bluetooth.
- LiFePO4: higher safe performance and longer cycle life.
- High-rate charging/discharging delivers fast energy flow and sustained power.
- CCS welding lowers battery internal resistance for enhanced performance.
- Scalable expansion up to 32 pcs in parallel.
- Multiple protection with built-in smart BMS, breaker and fuse.
- Compatible with leading inverter brands.
- Resist harsh environment with IP65-rate protection.
- Easily replace the battery fuse when it blows.
- Equipped with an aerosol fire extinguishing system.
- Optional heating module for restoring battery to its working temp (FLB48100WG1-H~FLB48314TG1-H model).

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLB48100WG1/FLB48100WG1-H	FLB48230WG1/FLB48230WG1-H	FLB48314TG1/FLB48314TG1-H
Battery Type	LiFePO4		
Nominal Energy	5.12kWh	11.7kWh	16kWh
Nominal Capacity	100Ah	230Ah	314Ah
Nominal Voltage	51.2V		
Operating Voltage	44.8~57.6V		
Recommend Charge/Discharge Current	50A	100A	80A
Max. Continuous Charge/Discharge Current[1]	100A	150A	160A
Peak Charge/Discharge Current(15s)	150A	200A	200A
Scalability	Max. 32 pcs in Parallel(163.84kWh)	Max. 32 pcs in Parallel(374.4kWh)	Max. 32 pcs in Parallel(512kWh)
Depth of Discharge(DOD)	≥95%		
Display Type	LED		
Protection Degree	IP65		
Working Temperature Range	FLB48100WG1 Charge: 0°C~+55°C Discharge: -20°C~+55°C FLB48100WG1-H Charge/Discharge: -20°C~+55°C	FLB48230WG1 Charge: 0°C~+55°C Discharge: -20°C~+55°C FLB48230WG1-H Charge/Discharge: -20°C~+55°C	FLB48314TG1 Charge: 0°C~+55°C Discharge: -20°C~+55°C FLB48314TG1-H Charge/Discharge: -20°C~+55°C
Storage Temperature Range	0°C~+35°C		
Humidity	5%~95%		
Altitude	≤ 2000m		
Communication	CAN2.0/RS485/WIFI/Bluetooth		
Cycle Life	≥6,000 Cycles(25°C +2°C,0.5C/0.5C,90%DOD,70%EOL)		≥8,000 Cycles
Installation	Wall-Mounted / Floor-Mounted		Floor-Mounted
Protection	Built-in smart BMS, Breaker, Fuse		
Warranty Period	10 Years		
Certification	UN38.3		
Product Weight	48.5KG	91KG	121KG
Package Weight	53KG	111KG	143KG
Product Dimension	650X450X174MM	683X450X258MM	895X450X235MM
Package Dimension	752X552X253MM	778X548X438MM	958X548X424MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



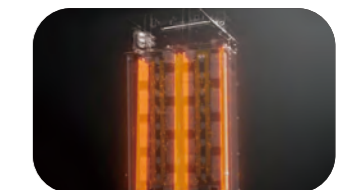
Aerosol Fire Extinguishing System



IP65 Protection Level



Scalable expansion up to 32 pcs in parallel



Optional Thermal Module (FLB48100WG1-H~FLB48314TG1-H model)

# LiFePO4 Battery

FLB Series | FLB48230WG1-AU

Low-voltage



## Features

- Remote monitoring of battery pack data via built-in WiFi / bluetooth.
- LiFePO4: higher safe performance and longer cycle life.
- High-rate charging/discharging delivers fast energy flow and sustained power.
- CCS welding lowers battery internal resistance for enhanced performance.
- Scalable expansion up to 32 pcs in parallel.
- Multiple protection with built-in smart BMS, breaker and fuse.
- Compatible with leading inverter brands.
- Resist harsh environment with IP65-rate protection.
- Easily replace the battery fuse when it blows.
- Equipped with an aerosol fire extinguishing system.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLB48230WG1-AU
Battery Type	LiFePO4
Nominal Energy	11.7kWh
Nominal Capacity	230Ah
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommend Charge/Discharge Current	100A
Max. Continuous Charge/Discharge Current[1]	150A
Peak Charge/Discharge Current(15s)	200A
Scalability	Max. 32 pcs in Parallel(374.4kWh)
Depth of Discharge(DOD)	≥95%
Display Type	LED
Protection Degree	IP65
Working Temperature Range	Charge: 0°C~+55 °C ; Discharge: -20°C~+55 °C
Storage Temperature Range	0°C~+35°C
Humidity	5%~95%
Altitude	≤ 2000m
Communication	CAN2.0/RS485/WIFI/Bluetooth
Cycle Life	≥6,000 Cycles(25°C +2°C,0.5C/0.5C,90%DOD,70%EOL)
Installation	Wall-Mounted / Floor-Mounted
Protection	Built-in smart BMS, Breaker, Fuse
Warranty Period[2]	10 Years
Product Weight	91KG
Package Weight	102KG
Product Dimension	715X450X258MM
Package Dimension	808X546X352MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

[2] Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Patented External Fuse Design



Aerosol Fire Extinguishing System



Built-in WiFi/Bluetooth for Remote Monitoring



6000 High Cycle Life

# LiFePO4 Battery

FLB Series | FLB48279/48280TG1-AU

Low-voltage



## Features

- Remote monitoring of battery pack data via built-in WiFi / bluetooth.
- LiFePO4: higher safe performance and longer cycle life.
- High-rate charging/discharging delivers fast energy flow and sustained power.
- CCS welding lowers battery internal resistance for enhanced performance.
- Scalable expansion up to 32 pcs in parallel.
- Multiple protection with built-in smart BMS, breaker and fuse.
- Compatible with leading inverter brands.
- Resist harsh environment with IP65-rate protection.
- Easily replace the battery fuse when it blows.
- Equipped with an aerosol fire extinguishing system.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLB48279TG1-AU	FLB48280TG1-AU
Battery Type	LiFePO4	
Nominal Energy	14.3kWh	14.3kWh
Nominal Voltage	51.2V	
Operating Voltage	44.8-57.6V	
Max. Charge/Discharge Current[1]	Charge 150A Discharge 150A	
Peak Charge/Discharge Current	300A @ 15s	
Max. Charge/Discharge Power	Charge 7680W Discharge 7680W	
Depth of Discharge(DOD)	95%	
Scalability	Up to 32 units in parallel	
Communication	CAN2.0/RS485/WIFI/Bluetooth	
Protection Level	IP65	
Cycle Life	≥6000@ 25°C	
Operating Temperature	Charge 0~55°C Discharge -20~55 °C	
Display	LED	
Installation	Floor-Mounted	
Protection	BMS, Fuse, Breaker, MX+OF	
Warranty[2]	10 Years	
Net Weight	118kg	
Gross Weight	128.5kg	
Product Dimension	895×450×235MM	
Package Dimension	1013×588×342MM	

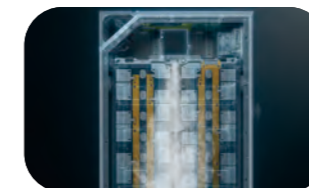
[1] The current is affected by temperature and SOC.

[2] Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Patented External Fuse Design



Aerosol Fire Extinguishing System



Built-in WiFi/Bluetooth for Remote Monitoring



6000 High Cycle Life

# LiFePO4 Battery

FLS Series | FLS48100SG2

Low-voltage



## Features

- External fuse design for easy replacement.
- Build-in aerosol fire extinguishing system.
- Build-in WiFi for real-time monitoring.
- Equipped with over-voltage trip protection.
- Flexible installation: stack-mounted or floor-mounted.
- LiFePO4: higher safe performance and longer cycle life.
- Max. 8 units in parallel.
- Compatible with leading inverter brands.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	FLS48100SG2							
Battery Type	LiFePO4							
Module Nominal Energy	5.12kWh							
Module Nominal Capacity	100Ah							
Module Nominal Voltage	51.2V							
Number of Battery Modules	1	2	3	4	5	6	7	8
System Nominal Energy	5.12kWh	10.24kWh	15.36kWh	20.48kWh	25.6kWh	30.72kWh	35.84kWh	40.96kWh
System Nominal Voltage	51.2V							
System Operating Voltage	44.8-57.6V							
Recommend Charge/Discharge Current	50A	100A	150A	200A	250A	300A	350A	400A
Max. Continuous Charge/Discharge Current[1]	60A	120A	180A	240A	300A	360A	400A	400A
Peak Charge/Discharge Current(15S)	100A	200A	300A	400A	500A	600A	700A	800A
Scalability	Max.8 pcs in Parallel(40.96kWh)							
Depth of Discharge(DOD)	≥95%							
Display Type	Control Module: LCD/Battery Module: LED*4							
Protection Level	IP21							
Working Temperature Range	Charge: 0°C~55 °C							
	Discharge: -20°C~55 °C							
Storage Temperature Range	0°C~+35°C							
Humidity	5%~95%							
Altitude	≤ 2000M							
Communication	CAN2.0/RS485/WIFI/Bluetooth							
Cycle Life[2]	≥ 6000 Cycles							
Installation	Stack-Mounted/Floor-Mounted							
Protection	Built-in Smart BMS, Breaker, Fuse							
Warranty Period[3]	10 Years							
Control Module FLS48100SCG2	Product Weight Approximate	46KG						
	Package Weight Approximate	60KG						
	Product Dimension	600X450X180 MM						
	Package Dimension	712X562X333 MM						
Battery Module FLS48100SMG2	Product Weight Approximate	46KG						
	Package Weight Approximate	50KG						
	Product Dimension	600X450X180 MM						
	Package Dimension	712X562X298 MM						

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

[2] Test Conditions: 0.2C Charging/Discharging @25°C, 80% DOD.

[3] Conditions apply, refer to Felicitysolar Warranty policy.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Multiple Protections



Real-time Monitoring



External Fuse Design



Max.8 Pcs in Parallel

# LiFePO4 Battery

LPBA Series | LPBA12100/200WG1

Low-voltage



## Features

- LiFePO4: Higher safe performance and longer cycle life.
- Build-in WiFi / Bluetooth for real-time monitoring.
- Max. 16 units in parallel.
- Compatible with leading inverter brands.
- Flexible Installation: Wall-mounted / floor-mounted / stack-mounted.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	LPBA12100WG1	LPBA12200WG1
Battery Type	LiFePO4	
Nominal Energy	1.28kWh	2.56kWh
Nominal Voltage	12.8V	
Operating Voltage	11.2-14.4V	
Max. Charge/Discharge Current[1]	Charge 100A Discharge 120A	Charge 150A Discharge 150A
Peak Charge/Discharge Current	150A @ 15s	200A @ 15s
Max. Charge/Discharge Power	Charge 1300W Discharge 1500W	Charge 1900W Discharge 1900W
Depth of Discharge(DOD)	95%	
Scalability	Up to 16 units	
Series Connection	Up to 4 units per string	
Communication	CAN2.0/RS485/WIFI/Bluetooth	
Protection Level	IP21	
Cycle Life	≥6000@ 25°C	
Operating Temperature	Charge 0~55°C Discharge -20~55°C	
Display	LED	
Installation	Wall-Mounted, Floor-Mounted, Stack-Mounted	
Protection	BMS, Fuse	
Warranty[2]	5 Years	
Net Weight	14KG	22.7KG
Gross Weight	16KG	25.2KG
Product Dimension	295X263X162MM	295X288X237MM
Package Dimension	352X352X250MM	352X352X320MM

[1] The current is affected by temperature and SOC.

[2] Refer to Felicitysolar's Warranty Policy for applicable conditions.






# LiFePO4 Battery

LPBA Series | LPBA24100/200WG1

Low-voltage



## Features

-  LiFePO4: Higher safe performance and longer cycle life.
-  Build-in WiFi / Bluetooth for real-time monitoring.
-  Max. 32 units in parallel.
-  Compatible with leading inverter brands.
-  Flexible Installation: Wall-mounted / floor-mounted.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

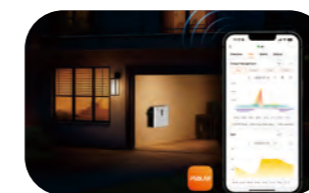
## Specifications

Model	LPBA24100WG1	LPBA24200WG1
Battery Type	LiFePO4	
Nominal Energy	2.56kWh	5.12kWh
Nominal Voltage	25.6V	
Operating Voltage	22.4-28.8V	
Max. Charge/Discharge Current[1]	Charge 100A Discharge 120A	Charge 180A Discharge 180A
Peak Charge/Discharge Current	150A @ 15s	250A @ 15s
Max. Charge/Discharge Power	Charge 2600W Discharge 3100W	Charge 4600W Discharge 4600W
Depth of Discharge(DOD)	95%	
Scalability	Up to 32 units in parallel	
Communication	CAN2.0/RS485/WIFI/Bluetooth	
Protection Level	IP21	
Cycle Life	≥6000@ 25°C	
Operating Temperature	Charge 0~55°C Discharge -20~55°C	
Display	LED	
Installation	Wall-Mounted, Floor-Mounted	
Protection	BMS, Fuse	
Warranty[2]	7 Years	
Net Weight	27KG	45KG
Gross Weight	31KG	50KG
Product Dimension	390×350×188mm	410X390X266MM
Package Dimension	472×427×261mm	509X494X338MM

[1] The current is affected by temperature and SOC.

[2] Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Built-in WiFi / Bluetooth for Remote Monitoring



Longer Lasting LiFePO4 Battery



Wall-mounted / Floor-mounted Installation



≥6000 High Cycle Life

# LiFePO4 Battery

LPBA Series | LPBA48100/200WG1

Low-voltage



## Features

- Build-in WiFi / Bluetooth for real-time monitoring.
- Max. 32 units in parallel.
- Compatible with leading inverter brands.
- Flexible Installation: Wall-mounted or floor-mounted.
- Equipped with over-voltage trip protection.
- Equipped with Fire Protection Module (LPBA48200WG1 Model).

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

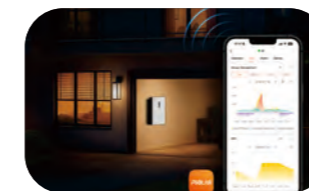
## Specifications

Model	LPBA48100WG1	LPBA48200WG1
Battery Type	LiFePO4	
Nominal Energy	5.12kWh	10.24kWh
Nominal Voltage	51.2V	
Operating Voltage	44.8~57.6V	
Max. Charge/Discharge Current[1]	Charge 100A Discharge 120A	Charge 180A Discharge 180A
Peak Charge/Discharge Current	150A @ 15s	250A @ 15s
Max. Charge/Discharge Power	Charge 5100W Discharge 6100W	Charge 9200W Discharge 9200W
Depth of Discharge(DOD)	95%	
Scalability	Up to 32 units in parallel	
Communication	CAN2.0/RS485/WIFI/Bluetooth	
Protection Level	IP21	
Cycle Life	≥6000@ 25°C	
Operating Temperature	Charge 0~55°C Discharge -20~55°C	
Display	LED	
Installation	Wall-Mounted, Floor-Mounted	
Protection	BMS, Fuse, MX+OF	
Warranty[2]	7 Years	
Net Weight	48KG	82KG
Gross Weight	54KG	103KG
Product Dimension	565×390×182MM	625X390X259MM
Package Dimension	664×494×261MM	744X514X436MM

[1] The current is affected by temperature and SOC.

[2] Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Real-time Monitoring



Max. 32 Pcs in Parallel



Over-voltage Trip Protection



Longer Lasting LiFePO4 Battery

# LiFePO4 Battery

LPBA Series | LPBA350TG1

Low-voltage



## Specifications

Model	LPBA48350TG1
Battery Type	LiFePO4
Nominal Energy	17.92kWh
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Max. Charge/Discharge Current[1]	Charge 175A Discharge 250A
Peak Charge/Discharge Current	300A @ 15s
Max. Charge/Discharge Power	Charge 9kW Discharge 13kW
Depth of Discharge(DOD)	95%
Scalability	Up to 32 units in parallel
Communication	CAN2.0/RS485/WIFI/Bluetooth
Protection Level	IP21
Cycle Life	≥6000@ 25°C
Operating Temperature	Charge 0~55°C Discharge -20~55 °C
Display	LED
Installation	Floor-Mounted
Protection	BMS, Fuse, Breaker, MX+OF
Warranty[2]	7 Years
Net Weight	120KG
Gross Weight	142KG
Product Dimension	865X400X235MM
Package Dimension	949X524X436MM

[1] The current is affected by temperature and SOC.

[2] Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Features

- Build-in WiFi / Bluetooth for real-time monitoring.
- Equipped with over-voltage trip protection.
- Enhanced safety with fire protection module.
- Max. 32 units in parallel.
- Compatible with leading inverter brands.

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms







# LiFePO4 Battery

LPBF Series | LPBF48250~350 & LPBF48300-II

Low-voltage



## Features

-  High-quality lithium iron phosphate battery.
-  Big capacity with small volume for household.
-  ≥6000 times deep cycle charge and discharge.
-  High class of safety with built-in BMS protection.
-  Scalable expansion up to 6 pcs in parallel.
-  Up to 5-year long warranty.  
(LPBF48300-II optimizes wiring ports)

## Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

## Specifications

Model	LPBF48250	LPBF48300	LPBF48300-II	LPBF48350
Battery Type	LiFePO4			
Nominal Energy	12.5kWh	15kWh	15kWh	17.5kWh
Nominal Voltage	51.2V			
Operating Voltage	48-57.6V			
Recommend Charge/Discharge Current[1]	≤120A	≤120A	≤160A	≤200A
Maximum Charge/Discharge Current(15s)	200A	200A	200A	250A
Recommend Charge/Discharge Power[1]	≤6,000W			
Maximum Charge/Discharge Power(15s)	10,000W			
Depth of Discharge(DOD)	≥95%			
Scalability	Max. 6 pcs in Parallel (75kWh)	Max. 6 pcs in Parallel (90kWh)	Max. 6 pcs in Parallel (90kWh)	Max. 6 pcs in Parallel (105kWh)
Communication	RS485/CAN			
Protection Degree	IP21			
Cycle Life[2]	≥6,000 Cycles			
Charging Temperature Range	0°C-55 °C			
Discharging Temperature Range	-20°C-60 °C			
Display	LED	LED	LED	LCD+LED
Installation Style	Floor-Mounted			
Protection	Built-in Smart BMS, Breaker, Fuse			
Warranty	5 Years			
Certification	UN38.3、CE-EMC、IEC 62619	UN38.3、CE-EMC、IEC 62619	UN38.3	UN38.3、CE-EMC、IEC 62619
Product Weight	154KG	154KG	155.5KG	162KG
Package Weight	177KG	177KG	178.5KG	185KG
Product Dimension	615x350x955MM	615x350x955MM	615x350x955MM	622x350x955MM
Package Dimension	718x450x1112MM	718x450x1112MM	718x450x1112MM	718x450x1112MM

[1] Recommend charge/discharge current/power is affected by temperature and SOC.

[2] Test conditions: 0.2C Charging/Discharging @25°C, 80% DOD.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to FelicitySolar's Warranty Policy for applicable conditions.

## Product Display



Real-time status via LCD Display



Support 6 Pcs in Parallel



LPBF48300/48350 Wire Ports (LPBF48300-II optimizes port placement compared to the LPBF48300 model.)



LPBF48300-II Wire Ports

# LiFePO4 Battery

FLH Series | FLH48100UG2

High-voltage



## Features

- Supports WiFi monitoring and Fsolar smart cloud monitoring system.
- Enhanced safety with aerosol fire extinguishing system.
- Automatically identifies virtual addresses without DIP switch settings.
- Quickly identify faulty battery module on LCD screen.
- Rack-mounted design, available in multiple layers with integrated grounding.
- CCS Technology for better system performance.
- Per cluster: 16 battery packs in series (81.92 kWh).
- System max: Up to 16 clusters in parallel (1.3 MWh).

## Scenarios



Small and Mid-sized Factories



Community Hospitals



Neighborhood Supermarkets



Farms



Hotels

## Specifications

Model	FLH48100UG2			
Battery Type	LiFePO4			
Nominal Energy	5.12kWh			
Nominal Voltage	51.2V			
Nominal Capacity	100Ah			
Number of Battery Modules	5(Min)	8	12	16(Max) <sup>[1]</sup>
System Nominal Voltage	256V	409.6V	614.4V	819.2V
System Operating Voltage	232~288V	371.2~460.8V	556.8~691.2V	742.4~921.6V
System Energy	25.6kWh	40.96kWh	61.44kWh	81.92kWh
System Usable Energy	23.04kWh	36.86kWh	55.3kWh	73.73kWh
Rated DC Power	25.6kW	40.96kW	61.44kW	81.92kW
Recommend Charge/Discharge Current	50A			
Max. Continuous Charge/Discharge Current[2]	100A			
Depth of Discharge(DOD)	90%			
Display Type	LED+LCD(Touch)			
IP Rating of Enclosure	IP21			
Working Temperature Range	Charge:0°C~+55°C			
	Discharge:-20°C~+55°C			
Storage Temperature Range	0°C~+35°C			
Humidity	5%~95%			
Altitude	≤3000M			
Cycle Life[3]	≥ 6000 Cycles			
Installation	Rack-Mounting			
Protection	Built-in Smart BMS, Breaker, Fuse			
Communication Port	CAN2.0/RS485/WIFI/Bluetooth			
Warranty Period[4]	10 Years			
Certification	CE/IEC 62619/UN38.3			
Control Module FLH48100UCG2	Product Dimension	482.6x565x150MM		
	Package Dimension	687x562x269MM		
	Product Weight Approximate	17.5KG		
	Package Weight Approximate	24.7KG		
Battery Module FLH48100UMG2	Product Dimension	482.6x565x133MM		
	Package Dimension	687x562x250MM		
	Product Weight Approximate	42.5KG		
	Package Weight Approximate	46KG		
	Battery Designation[5]	IFpP/54/150/120/[(1P16S)NS]M/-20+50/90		
Rack FLH48100R13G2	Product Dimension	590×532×2087.5MM (13th Floor)		
	Package Dimension	657×138×2167MM		
	Product Weight Approximate	49KG		
	Package Weight Approximate	57KG		
Rack FLH48100R9G2	Product Dimension	590×532×1515.5MM (9th Floor)		
	Package Dimension	657×138×1595MM		
	Product Weight Approximate	37.7KG		
	Package Weight Approximate	43.2KG		

[1] Currently, The Battery Supports a Maximum of 16 BMUs. For the Entire Energy Storage System, Confirm the Inverter's Maximum Supported Voltage Range to Determine the Maximum Number of BMUs that Can Be Installed

[2] Max. Continuous Charge/Discharge Current/Power is Affected by Temperature and SOC.

[3] Test Conditions: 0.5C Charging/Discharging @25±2°C, EOL70%.

[4] Refer to Felicitysolar's Warranty Policy for applicable conditions.

[5] "N" Means the Number of Battery Packs Connected Series and Should not Exceed 16. (N≤16)

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

# LiFePO4 Battery

FLH Series | FLH96050SG2(-H)

High-voltage



## Features

- Built-in WiFi / bluetooth: remote monitoring of battery pack data.
- Up to 6 units in series per cluster(30.72kWh), max 16 clusters in parallel(491.52kWh).
- Optional heating module for restoring battery to its working temp (FLH96050SG2-H model).
- Equipped with an aerosol fire extinguishing system.
- Suitable for outdoor use with IP65 protection level.
- Battery modules automatic addressing without manual dip-switch setup.
- 12V debug port for safer and faster repair.
- USB & WiFi maintenance options for convenient after-sales support.
- Integrated grounding design without multiple grounding cables.
- Equipped with balancing module to keep new and old batteries consistent.
- Wide Compatibility: Compatible with leading inverter brands.

## Scenarios



Small and Mid-sized Factories



Community Hospitals



Neighborhood Supermarkets



Farms



Hotels

## Specifications

Model	FLH96050SG2/FLH96050SG2-H				
Battery Type	LiFePO4				
Module Energy	5.12kWh				
Module Capacity	50Ah				
Module Nominal Voltage	102.4V				
Number of Battery Modules	2	3	4	5	6
System Energy	10.24kWh	15.36kWh	20.48kWh	25.6kWh	30.72kWh
System Usable Energy	9.21kWh	13.82kWh	18.43kWh	23.04kWh	27.64kWh
System Nominal Voltage	204.8V	307.2V	409.6V	512V	614.4V
System Operating Voltage	185.6-230.4V	278.4-345.6V	371.2-460.8V	464-576V	556.8-691.2V
Recommend Charge/Discharge Current	25A	25A	25A	25A	25A
Max. Continuous Charge/Discharge Current[1]	50A	50A	50A	50A	50A
Depth of Discharge(DOD)	90%				
Display Type	LED+LCD(Touch)				
IP Rating of Enclosure	IP65				
Operating Temperature Range	Charge: 0°C~+55 °C				
	Discharge: -20°C~+55 °C				
Storage Temperature Range	0°C~+35°C				
Humidity	5%~95%				
Altitude	≤ 2000M				
Cycle Life[2]	≥ 6000 Cycles				
Installation	Stacking-Mounting/Floor-Mounting				
Protection	Built-in Smart BMS, Breaker				
Communication	CAN2.0/RS485/WIFI/Bluetooth				
Warranty Period[3]	10 Years				
Certification	UN38.3, IEC 62619, IEC 60730-1, IEC 62040-1, IEC/EN 61000-6-1/2/3/4				
Control Module FLH96050SCG2 FLH96050SCG2-H	Net Weight	12.5KG			
	Gross Weight(with base)	24.5KG			
	Product Dimension	600x385x200MM			
Battery Module FLH96050SMG2 FLH96050SMG2-H	Package Dimension(with base)	712x497x352MM			
	Battery Designation[4]	IFpP/41/150/102/[(1P32S)NS]M/-10+50/90			
Battery Module FLH96050SMG2 FLH96050SMG2-H	Net Weight	57.5KG			
	Gross Weight	62KG			
	Product Dimension	600x385x260MM			
Package Dimension(with base)	712x497x378MM				

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

[2] Test Conditions: 0.2C Charging/Discharging @25°C, 80% DOD.

[3] Conditions Apply, Refer to Felicitysolar Warranty Policy.

[4] "N" Means the Number of Battery Packs Connected Series and Should not Exceed 6. (N≤6)

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Built-in WiFi / Bluetooth for Remote Monitoring



Optional Heating Modules (FLH96050SG2-H model)



Support 6 Pcs in Series, Max. 16 Clusters in Parallel



High-efficiency New and Old Modules Balancing

# Household Energy Storage System

## LFP Battery-Inverter Integrated System



### Features

- Wide PV voltage input range (90VDC-450VDC).
- Maximum PV input current increases to 25A.
- Battery charging current up to 100A.
- Pure sine wave output.
- Built-in MPPT solar charge controller.
- Compatible to mains voltage or generator power.
- Auto restart while AC is recovering.
- Overload / over temperature/ short circuit protection.
- Supports parallel connection of one to four battery packs (AI100-B5) for expansion.
- External WIFI for mobile monitoring (requires APP).
- Support parameters setting via LCD screen (input voltage/charging current/charge mode).

### Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

### Specifications

Model	AI100-5048 ESS
<b>Inverter Parameters</b>	
Rated Output Power	5000VA 5000W
Nominal DC Input Voltage	48V
Nominal Input Voltage	230Vac
Nominal Input Frequency	50Hz/60Hz(Auto detection)
Parallel Capability	Yes, up to 12 units
PCS (In Progress)	CE-EMC、CE-LVD
<b>Utility Charge Mode Specifications</b>	
Nominal Input Voltage	230Vac
Nominal Output Voltage	230Vac
Input Voltage Range	90~280Vac
Max. Charge Current	100A
<b>Solar Charging &amp; Grid Charging</b>	
Max. PV Open Circuit Voltage	500V
Max. Input Power	6000W
Max. Solar Charging Current	100A
Max. Charging Current(PV+Grid)	100A
Max. Input Current	25A
<b>General Specifications</b>	
Protection Level	IP20
Net Weight (KG)	17.8KG
Product Size(D*W*H)	710x350x180MM
Package Dimension(D*W*H)	792x507x278MM
<b>Battery Parameters</b>	
Capacity	5.12kWh
Battery Type	LiFePO4
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommend Charge/Discharge Current [1]	≤100A
Recommend Charge/Discharge Power [1]	≤5,000W
Maximum Charge/Discharge Current (15s)	150A
Maximum Charge/Discharge Power (15s)	7,500W
Depth of Discharge (DOD)	≥95%
Scalability	Max. 15 pcs in Parallel(76.8kWh)
Communication	RS485/CAN
Protection Level	IP21
Cycle Life [2]	≥6,000 Cycles
Display	LED
Installation	Wall-Mounted/Floor-Mounted
Protection	Built-in smart BMS, Breaker, Fuse
Warranty	5 Years
Certification	UN38.3
Net Weight	45KG
Gross Weight	49.5KG
Product Dimension	660X420X180MM
Package Dimension	822X522X278MM

[1] Recommend Charge/Discharge Current/Power is Affected by Temperature and soc.

[2] Test Conditions: 0.2C Charging/Discharging @25°C, 80% DOD.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# Household Energy Storage System

## LFP Battery-Inverter Integrated System



### Features

- Pure sine wave inverter.
- Built-in MPPT solar charge controller (Supports 2 strings of solar input).
- Built-in Wi-Fi for mobile monitoring (APP is required).
- Compatible to mains voltage or generator power.
- Equipped with dual-output (Single machine mode).
- The second path of the AC output can set the output time.
- Auto restart while AC is recovering.
- Overload / over temperature/ short circuit protection.
- Inverter running without battery.
- Parallel connection quantity up to 6 units(Battery must be connected).
- Supports parallel connection of one to four battery packs (AI100-B5) for expansion.
- Support parameters setting via LCD screen (input voltage/charging current/charge mode).

### Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

### Specifications

Model	AI100-8048 ESS
<b>Inverter Parameters</b>	
Rated Output Power	8000VA 8000W
Nominal DC Input Voltage	48V
Nominal Input Voltage	230Vac
Nominal Input Frequency	50Hz/60Hz(Auto detection)
Parallel Capability	Yes, up to 6units
PCS (In Progress)	CE-EMC、CE-LVD
<b>Utility Charge Mode Specifications</b>	
Nominal Input Voltage	230Vac
Nominal Output Voltage	230Vac
Input Voltage Range	90~280Vac
Max. Charge Current	150A
<b>Solar Charging &amp; Grid Charging</b>	
Max. PV Open Circuit Voltage	500V
Max. Input Power	10000W (5000W for Single PV)
Max. Solar Charging Current	150A
Max. Charging Current(PV+Grid)	150A
Max. Input Current	20A×2(MAX40A)
<b>General Specifications</b>	
Protection Level	IP20
Net Weight (KG)	26.8KG
Product Size(D*W*H)	660x500x180MM
Package Dimension(D*W*H)	792x657x278MM
<b>Battery Parameters</b>	
Capacity	5.12kWh
Battery Type	LiFePO4
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommend Charge/Discharge Current [1]	≤100A
Recommend Charge/Discharge Power [1]	≤5,000W
Maximum Charge/Discharge Current (15s)	150A
Maximum Charge/Discharge Power (15s)	7,500W
Depth of Discharge (DOD)	≥95%
Scalability	Max. 15 pcs in Parallel(76.8kWh)
Communication	RS485/CAN
Protection Level	IP21
Cycle Life [2]	≥6,000 Cycles
Display	LED
Installation	Wall-Mounted/Floor-Mounted
Protection	Built-in smart BMS, Breaker, Fuse
Warranty	5 Years
Certification	UN38.3
Net Weight	45KG
Gross Weight	49.5KG
Product Dimension	660X420X180MM
Package Dimension	822X522X278MM

[1] Recommend Charge/Discharge Current/Power is Affected by Temperature and soc.

[2] Test Conditions: 0.2C Charging/Discharging @25°C, 80% DOD.

\*Product specifications may vary during continuous improvements. Please contact us for latest details.









\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# C&I Energy Storage System

IVGM Series 50kW inverter & FLH Series 60kWh high-voltage LFP battery



## Features

-  Cabinet-based BESS with inverter connection interface.
-  Remote monitoring via Fsolar APP.
-  Fire protection module / smoke and temp detector / exhaust system
-  Built-in air-conditioning system, better thermal management
-  Auxiliary protection with external firefighting water inlet
-  Max. energy storage capacity reaching 720kWh
-  Supports single-phase input, three-phase output
-  150% unbalanced three-phase output

## Scenarios



Small and Mid-sized Factories



Community Hospitals



Neighborhood Supermarkets



Farms



Hotels

## Specifications

Model	FLH-E60
<b>System Specification</b>	
Nominal Input/Output Power	50 kW
AC Input/Output	50 /60 Hz; 3L+N+PE; 220/380,230/400 Vac
System Energy	61.44 kWh
System Usable Energy	55.3kWh
Module Capacity	100 Ah
AC Input/Output Rated Current	72.5 A
System Operating Voltage	556.8~691.2V
Number of Battery Modules	12
Humidity	5%~95%
Altitude	≤3000m
IP Rating of Enclosure	IP55
Dimension (W*D*H)	780*1056*2235mm(no contain inverter)
Weight Approximate (kg)	949kg(no contain inverter)
Installation Style	Floor-Mounted
Warranty	10 Years
<b>Battery Technical Specification</b>	
Battery Chemistry	LiFePO4
Battery Module Energy	5.12 kWh
Battery Module Nominal Voltage (V)	51.2 V
Recommend Charge/Discharge current (A)	50 A
Max.continuous Charge/Discharge current (A)	100 A
Battery Communication	CAN2.0/RS485/WIFI/Bluetooth
Storage Temperature (°C)	0~35°C
Operating Temperature Range	Charge: 0~55°C
	Discharge: -20~55°C
Depth of Discharge	90%
Cycle Life	≥6000 (0.5C Charging / Discharging@25±2°C), EOL70%
Battery Module Certification	CE, IEC62619, UN38.3

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

## Product Display



Real-time Monitoring



Built-in Air-conditioning System



Firefighting External Water Inlet



Outdoor Installation

# C&I Energy Storage System

## Liquid Cooling System



### Features

- ☀️ ≥ 6000 long cycle life.
- 📊 High Efficiency: battery 94%, system 87%.
- 🔧 Easy maintenance with self diagnosis and fault location.
- 🔄 User-friendly experience with ready to work, auto switch on grid mode.
- 🛡️ High Safety: no parallel connection, no loop current, dual fire protection

### Scenarios



Small and Mid-sized Factories



Community Hospitals



Neighborhood Supermarkets



Farms



Hotels

### Specifications

Model	FLS-ES232LC-G
<b>DC side parameter</b>	
Battery Type	Lithium Iron Phosphate Battery 280Ah
Voltage Scope	650~949V
Pack Capacity and Configuration	46.59kWh / 1P52S
Protective Measures	Circuit Breaker + Fuse
PACK protection grade	IP67
System Capacity and Configuration	232.96KWh/1P260S
Rated Current	140A
Charge/Discharge Rate	0.5Cp
DC Side Efficiency	94%
<b>AC side parameter (On Grid)</b>	
Rated Power	100KW
Grid Voltage Range	AC340V~460V
Power Factor Adjustable Range	-0.99~0.99
Rated Current	145A
Grid Frequency	50Hz/60Hz
Connection Method	3P+N+PE (Non Isolated)
<b>System parameter</b>	
Overall System Efficiency	87%&0.5P, Under Standard Conditions
Communication Mode	LAN, Modbus TCP
Fire Suppression System	Aerosol+ Water Fire Protection
DOD	5~95%
Charging/Discharging Rate	0.5Cp
Maximum Refrigerating Capacity	2.4kW
Cooling	Liquid Cooling (50% Glycol Aqueous Solution)
Rated Refrigerating Capacity	5.9kW@W18/L35
Operation Temperature	-20°C~55°C (Derating if the Temperature >45°C)
Cabinet Ingress Protection Grade	Electrical Compartment IP54, Battery Compartment Ip55
Relative Humidity Range	5~95%RH (no Condensing)
Noise	<75dB
Weight	2,800KG
Altitude	≤2,000M
Size (MM)	1400 (L) × 1400 (D) × 2200 (H)
Certification	Battery: UN38.3 PCS: EN 50549-1、EN 50549-10、IEC 62116、IEC 61727、IEC 62477-1、TOR & OVE、AS/NZS 4777.2、C10/11、NC RfG(Poland)、EN 50549-1(France)、EN 50549-10(France)、VDE 4105、PPDS、NRS 097-2-1、NA/EEA-NE7-CH(Switzerland)、G99、NTS & UNE217001 & UNE217002、CE-EMC、CE-LVD







\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# C&I Energy Storage System

## Air Cooling System



### Features

-  ≥ 6000 long cycle life.
-  Easy expansion with module design.
-  BMS, PCS and EMS integration, enhanced energy management.
-  Equipped with fire extinguishing functions of battery system.
-  Strong load adaptability with built-in isolation transformer.
-  User-friendly experience with auto switch on grid / off grid mode.

### Scenarios



Small and Mid-sized Factories



Community Hospitals



Neighborhood Supermarkets



Farms



Hotels

### Specifications

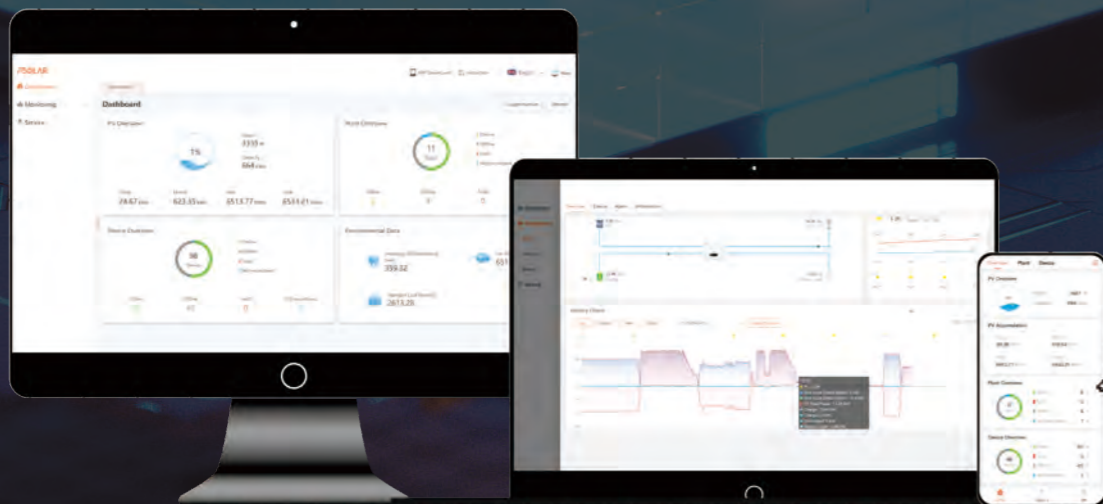
Model	FLS-MES215AC-S
<b>DC side parameter</b>	
Battery Type	Lithium Iron Phosphate Battery 3.2V/280Ah
Voltage Range	DC 600~876V
Pack Capacity /Arrangement	14.336kWh / 1P16S
Protective Measures	Isolation Switch + Fuse
System Capacity and Configuration	215kWh/1P240S
Rated Current	140A
Charge/Discharge Rate	0.5Cp@°25
DC Side Efficiency	92%
<b>PV Input Parameters</b>	
Maximum Input Power	240kWp
MPPT Input Voltage Range	DC 250V-850V
Maximum PV Input Voltage	DC 1000V
Maximum Current	120x2
PV Shortcircuit Current (Isc)	130A*2
<b>AC side parameter (On Grid)</b>	
Rated Power	100kW
Rated Voltage	AC 400V, 3W+N+PE
Voltage Range	AC 320V-460V
Rated Current	144A
Rated Frequency	50Hz/60Hz
THDI	<3%
Power Factor	1 (0.8 Leading~0.8 Lagging Configurable)
<b>AC side parameter (Off Grid)</b>	
Rated Power	100kW
Rated Voltage	AC 400V, 3W+N+PE
THDU	<2% Linear
Rated Current	144A
Rated Frequency	50Hz/60Hz
Overload Capacity	110% long-term Overload
<b>System parameter</b>	
Overall System Efficiency	87%&0.5P, Under Standard Conditions
Communication Mode	CAN, ModbusTCP, Modbus RTU
Fire Suppression System	Perfluorohexanone + Active Early warning + Water fire Suppression
DOD	5~95%
Charging/Discharging Rate	0.5Cp
Refrigerating Capacity	2 kW
Cooling	Intelligent Temperaturecontrolled air Cooling
Operation Temperature	-20°C~55°C (Derating if the Temperature >45°C)
Cabinet Ingress Protection Grade	IP54
Warranty Period	5 Years
Relative Humidity Range	5~95%RH (no Condensing)
Noise	<75dB
Weight	4,200KG
Altitude	≤2,000M
Size (MM)	2490(L)×1400(D)×2350(H)
Certification	Battery: UN38.3 PCS: EN 50549-1、EN 50549-10、CE-EMC、CE-LVD

\*Refer to FelicitySolar's Warranty Policy for applicable conditions.

# FSOLAR Smart Energy Management Platform



The FSOLAR smart energy management platform is designed to provide comprehensive monitoring, analysis, and management of your energy systems. It allows you to maximize energy efficiency, optimize usage, and enhance system performance.



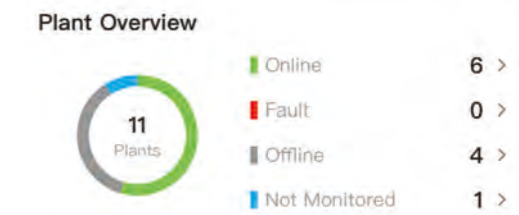
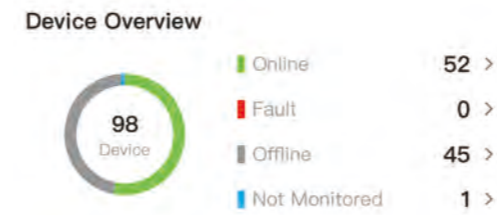
## 1. Real-time Data Insight

- Track daily, monthly, yearly and cumulative energy generation of all systems and individual units.
- Access battery pack details, including current, voltage, SOC, etc.



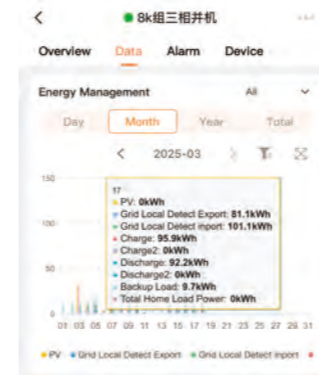
## 2. System and Device Status Monitoring

- Real-time devices status: online, offline, faulty, or unmonitored.
- Easily identify the current health and operational status of your system.



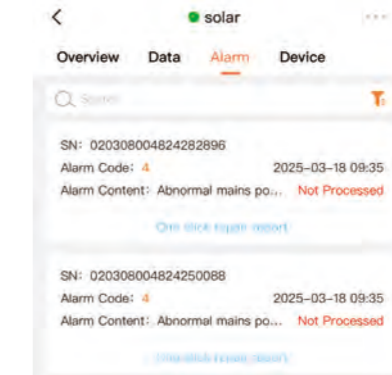
## 3. Historical Data Analysis

- Use data insights to optimize energy usage and improve efficiency.
- Export historical data for further analysis and record-keeping.



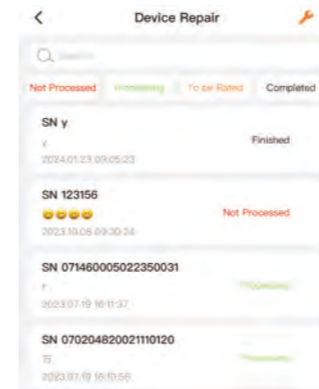
## 4. Immediate Alerts for Abnormal Situations

- Receive instant alerts for system malfunctions or abnormal conditions.
- Take immediate actions to prevent potential losses and downtime.



## 5. After-Sales Support

- Submit a request, and our support team will reply within 12 hours, offer solution within 24 hours.
- Local service points deployment for fast on-site inspection and repair services.



## 6. Open API

- Comprehensive Data Access: battery SOC, temp, device status, etc.
- Real-Time Monitoring & Alerts: empower third-party devices to build dynamic dashboards for live insights and configure automated alert.

## APP Download



# Smart WiFi DTU-S Module

2.4G WiFi



## Features

- Provides access to historical system data through centralized cloud storage
- Supports real-time data transmission to the FSOLAR platform
- Enables remote inverter monitoring and control via the FSOLAR mobile app

Note: Sold separately; not included with inverter packages.

## Product Introduction

The Smart WiFi DTU-S module enables wireless communication between off-grid inverters and the FSOLAR monitoring platform. It provides real-time alerts and detailed system insights. Compatible with Felicitysolar's inverter series: IVPM, IVPS, and IVEM-LV Series.

## Specifications

Model	IOTH2406	IOTH2407
<b>General Data</b>		
Product Dimensions (W × H × T)	98.5 × 103.2 × 27 mm	
Packaging Dimensions (W × H × T)	153 × 171 × 56 mm	
Net Weight	136.5 g	
Gross Weight	320 g	
<b>WiFi Performance</b>		
Wireless Standards	802.11b/g/n	
Working Frequency	2400-2483.5MHz	
Output Power	802.11b: 18 ± 2dBm	
	802.11g: 16 ± 2dBm	
	802.11n: 15 ± 2dBm	
Receive Sensitivity	CCK, 1 Mbps: -96 ± 2dBm	
	CCK, 11 Mbps: -85dBm	
	6 Mbps (1/2 BPSK): -88dBm	
	54 Mbps (3/4 64-QAM): -70dBm	
	HT20(MCS7): -73 ± 2dBm	
<b>Electrical Parameters</b>		
Operating Voltage	12V	
Maximum Current	500mA	
<b>Working Environment</b>		
Protection Level	IP20	
Operating Temperature	-40°C to +85°C / -40°F to +185°F	
Storage Temperature	40°C to +125°C / 104°F to 257°F, <90% RH	
<b>Application Parameters</b>		
Communication with Server	MQTT	
Supported Network	2.4G	
User Configuration Interface	FSolar APP or Website	
Data Upload Cycle	5 Minutes	
Server Domain Name	https://shine.felicitysolar.com	

## Instructions

Model	IOTH2406	IOTH2407
NAME	Smart WiFi-M	Smart WiFi-S
WiFi NETWORK	2.4G WiFi	
<b>LED status</b>		
PWR	ON — Power Supply Normal	
COM	ON — Communication Normal	
NET	ON — Connected to Data Server	

\*Product specifications may change as part of ongoing improvements. Please contact us for the latest information.








\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# MPPT Solar Charge Controller

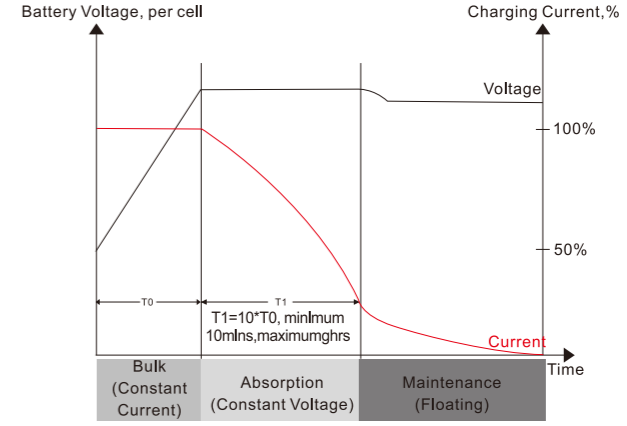
SCCM Series | SCCM15048



## Features

-  Built-in Bluetooth and WiFi.
-  IP54 protection level.
-  Max. charging current up to 150A.
-  Supports communication between battery and controller via RS485/CAN.
-  Compatible with LFP, lead-acid, AGM, and GEL batteries.
-  Automatic battery voltage detection for lead-acid, AGM, and GEL batteries.
-  Protections: PV overvoltage, battery overvoltage, and over-temperature.

## Specifications

Model	SCCM15048
<b>Electrical Specifications</b>	
Maximum Charge Current	150Amps
Nominal System Voltage	48V
Maximum Solar Input Voltage	500V
PV Start-up Voltage	120V
MPPT Voltage Range	150-450Vdc
PV Limiting Current	30A
Maximum Input Power	9000W
Transient Surge Protection	2* rated power for 5s
Protections	Solar high voltage disconnect Solar high voltage reconnect Battery high voltage disconnect Battery high voltage reconnect High temperature disconnect High temperature reconnect
<b>Battery Charging</b>	
Charging Algorithm	3-Step
Charging Stages	Bulk, Absorption, Float
Charging Curve	
<b>Mechanical and Environment</b>	
Product Size (WxHxD, mm)	422x370x140
Product Weight (KG)	9.7 KG
Outer Carton Size (W x H x D,mm)	485x464x198
Outer Carton Weight (KG)	12 (1PCS)
Warranty Period	2 Years
Ambient Temperature Range	0 °C to +55 °C
Storage Temperature	-25 °C to +75 °C
Humidity	0%-90%RH(No Condensing)
Enclosure	IP54

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# MPPT Solar Charge Controller

SCCM-III Series | SCCM6048~12048-III



## Features

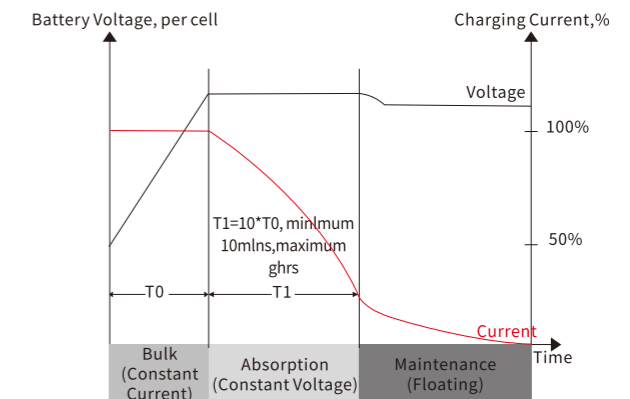
- Support parallel operation via CAN communication.
- Communicate with battery packs via RS485 communication.
- Built-in WiFi enabling remote monitoring through the app.
- Maximum efficiency up to 98%.
- Enhanced battery performance with three-stage charging.
- Efficiency increasing 25%~30% with intelligent maximum powerpoint tracking technology.

## Specifications

Model	SCCM6048-III	SCCM10048-III	SCCM12048-III
<b>Electrical Specifications</b>			
PV Start-up Voltage	20V		
Maximum Charge Current	60Amps	100Amps	120Amps
Nominal System Voltage	12V, 24V, 48V (Auto Detection)		
Maximum Solar Input Voltage	145V	165V	
MPPT Voltage Range	12Vdc/24Vdc/48Vdc	12Vdc/24Vdc/48Vdc	
	18-125Vdc/35-125Vdc 65-125Vdc	18-145Vdc/35-145Vdc 65-145Vdc	
Maximum Input Power	12V - 825W	12V - 1375W	12V - 1650W
	24V - 1650W	24V - 2750W	24V - 3300W
	48V - 3300W	48V - 5500W	48V - 6600W

<b>Battery Charging</b>	
Charging Algorithm	3-Step
Charging Stages	Bulk, Absorption, Float
Temperature Compensation Coefficient	-5 mV / °C / cell (25°Cref.)
Temperature Compensation Range	0 °C to +50 °C

Charging Curve



<b>Mechanical and Environment</b>			
Product Size (WxHxD, mm)	276.4x184.4x100	329x219x118.5	329x219x118.5
Product Weight(KG)	3.3 KG	5.2 KG	5.2 KG
Inner Box Size (W x H x D, mm)	308x212x125	370x250x156	370x250x156
Inner Box Weight (KG)	3.7 KG	5.9 KG	5.9 KG
Outer Carton Size (W x H x D, mm)	635x440x268	758x518x172	758x518x172
Outer Carton Weight (KG)	31(8PCS)	25.3(4PCS)	25.3(4PCS)
Ambient Temperature Range	0 °C to +55 °C		
Storage Temperature	-25 °C to +75 °C		
Humidity	0%-90%RH(No Condensing)		
Enclosure	IP20(Indoor & Vented)		





\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

# PV Combiner Box

PVCB0601/0801



## Features

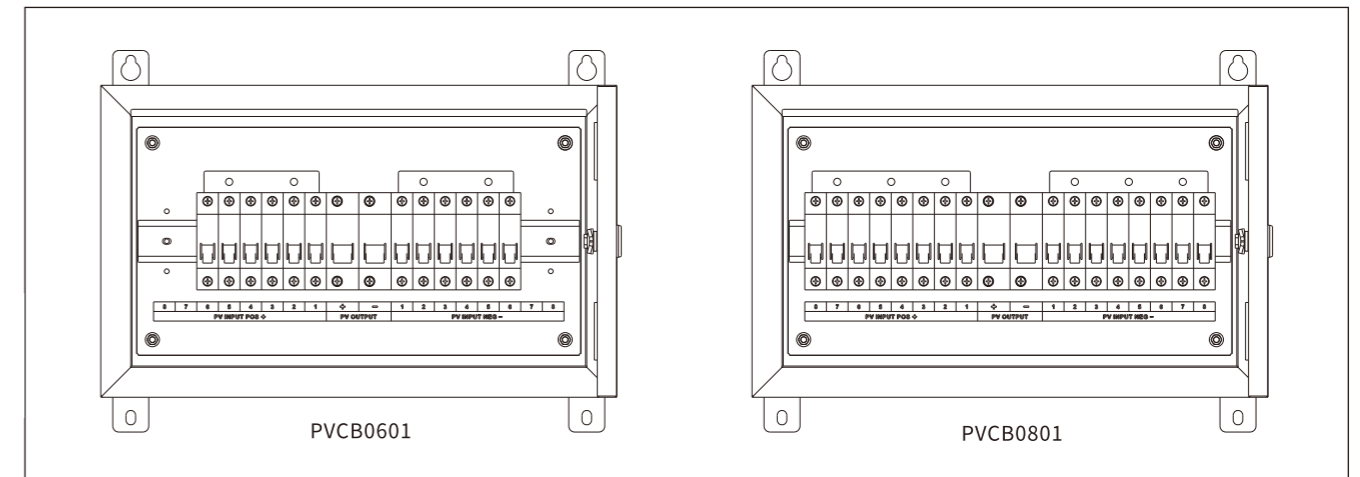
-  Electric energy gathering.
-  Group string protection.
-  Detection and protection.
-  Electricity transmission.

## Specifications

Model	PVCB0601	PVCB0801
Max. Input Voltage	500V	500V
Max. Number of Input Paths	6	8
Max. Allowable Input Current of Branch	15A	15A
Max. Output Current	100A	100A
Lightning Protection Device	Surge Switch	
Shell Material	Metal Chassis	
Input Cable Diameter	4~8mm <sup>2</sup>	
Output Cable Diameter	5~10mm <sup>2</sup>	
Protection Level	IP54	
Operating Temperature Range	-10°C~40°C	
Net Weight(KG)	5.8KG	6.3KG
Gross Weight(KG)	6.7KG	7.2KG
Product Dimension(MM)	430×260×118MM	430×260×118MM
Package Dimension(MM)	487×337×179MM	487×337×179MM

\*Refer to Felicitysolar's Warranty Policy for applicable conditions.

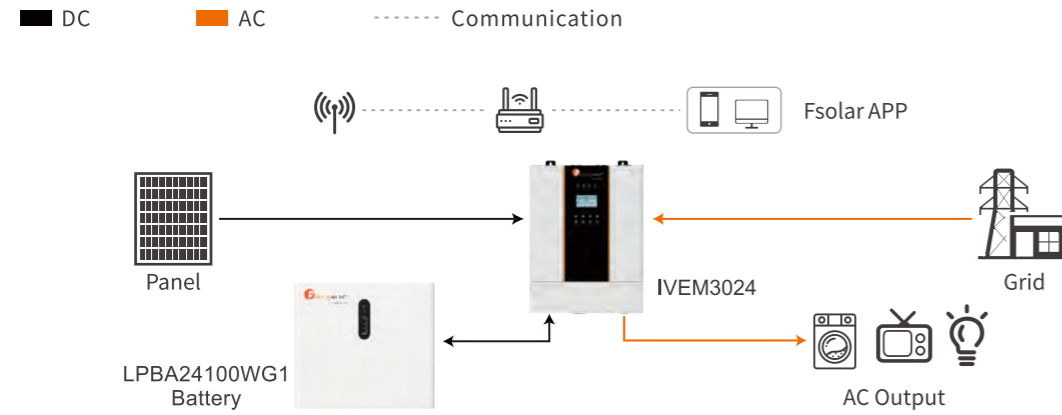
## Internal Schematic Diagram of the Product



# Solar Energy Storage Solutions

## Off-grid Residential Energy Storage System

System Configuration: **3kW**



Islands



Houses



Small-size Stores

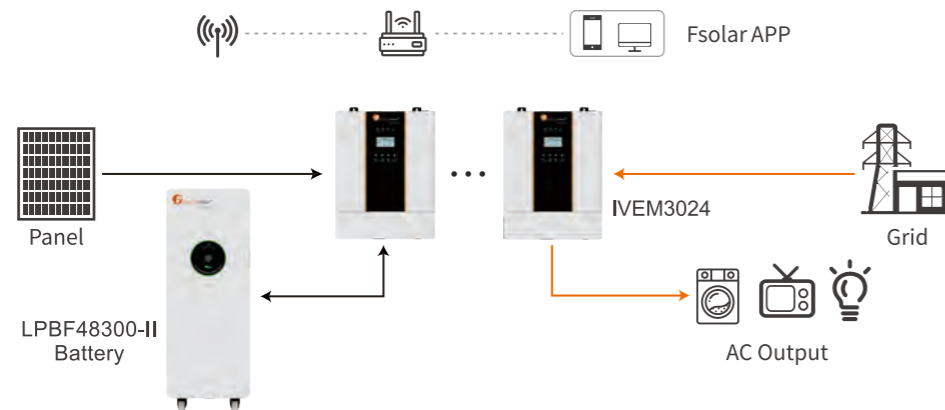
### Benefits:

- Self-generation and Self-consumption.
- Easy Maintenance & Reduced Operational Costs.
- Reliable Power Supply with Emergency Backup.

## Off-grid Residential Energy Storage System

System Configuration: **5kW**

Legend: ■ DC ■ AC - - - - - Communication



Islands



Houses



Small-size Stores

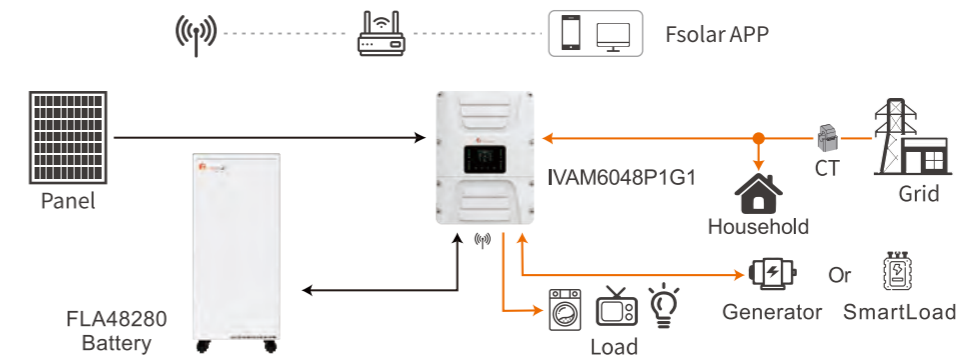
### Benefits:

- Self-generation and Self-consumption.
- Easy Maintenance & Reduced Operational Costs.
- Reliable Power Supply with Emergency Backup.
- Flexible Configuration Based on Power Demands and Site Conditions.
- Reliable Power Supply with Emergency Backup.

## Off-grid Residential Energy Storage System

System Configuration: **6kW**

Legend: ■ DC ■ AC - - - - - Communication



Islands



Houses



Offices



Stores

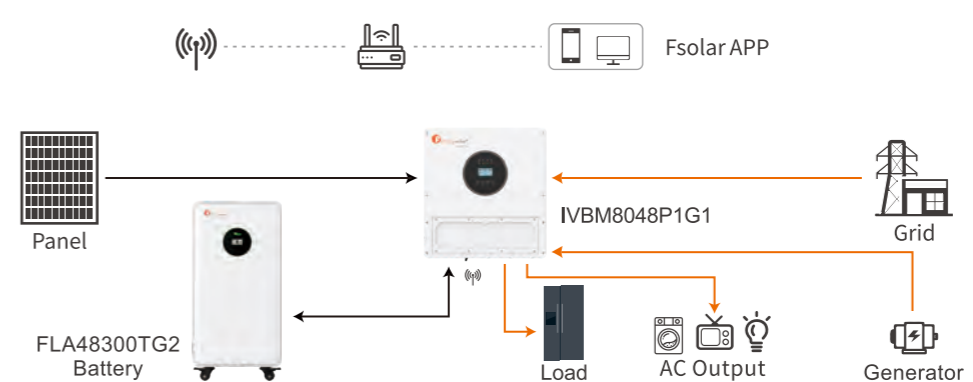
### Benefits:

- Easy Maintenance & Reduced Operational Costs.
- Reliable Power Supply with Emergency Backup.
- Remotely Monitor and Control the System via FsolAR App.
- Flexible Configuration Based on Power Demands and Site Conditions.
- Supports Smart Load Connection with Programmable GEN Port.

## Off-grid Residential Energy Storage System

System Configuration: **8kW**

Legend: ■ DC ■ AC - - - - - Communication



Houses



Offices



Stores



Warehouses

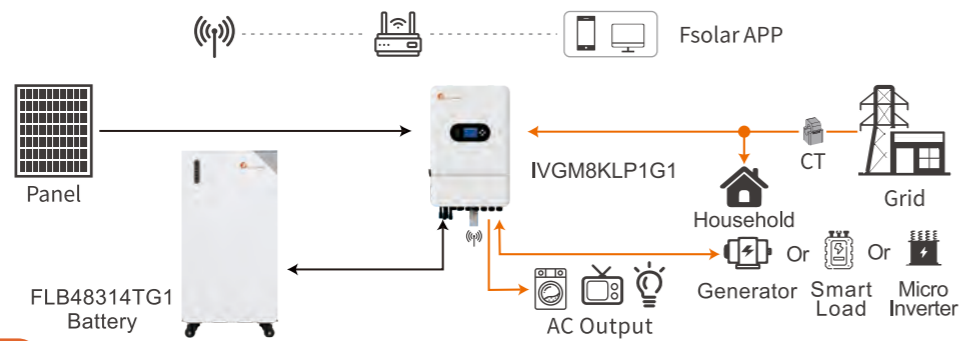
### Benefits:

- Easy Maintenance & Reduced Operational Costs.
- Reliable Power Supply with Emergency Backup.
- Flexible Configuration Based on Power Demands and Site Conditions.
- Remotely Monitor and Control the System via FsolAR App.
- Customizable Smart Load's Output Duration Time.

# Solar Energy Storage Solutions

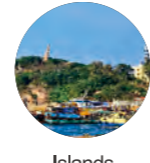
## Hybrid Residential Energy Storage System

System Configuration: **8kW**      DC      AC      Communication



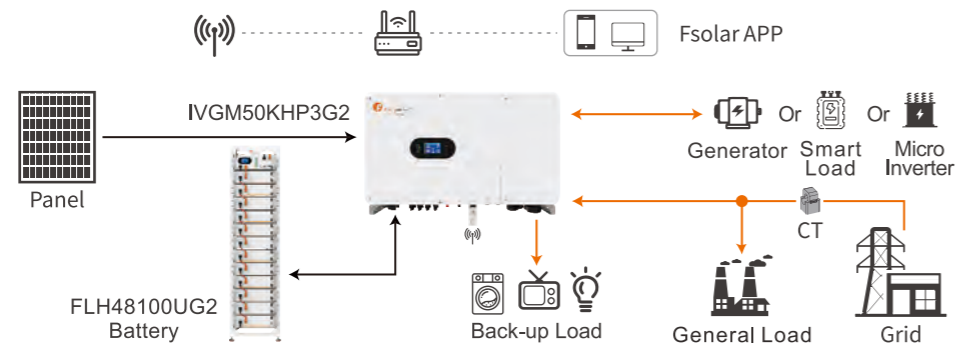
### Benefits:

- Dual-Mode Power Supply, Seamless Switching between Grid-tied and Off-grid Modes.
- Easy Maintenance & Reduced Operational Costs.
- Flexible Configuration Based on Power Demands and Site Conditions.
- Remotely Monitor and Control the System via FSOLAR App.
- Time of Use Function to Save on Electricity Cost.
- Standalone Generator Interface for Automatic Power Switching.
- Customizable Smart load' s Output Duration Time.
- AC Coupling Functionality: supports connection with grid-tied systems.



## Hybrid C&I Energy Storage System

System Configuration: **50kW**      DC      AC      Communication



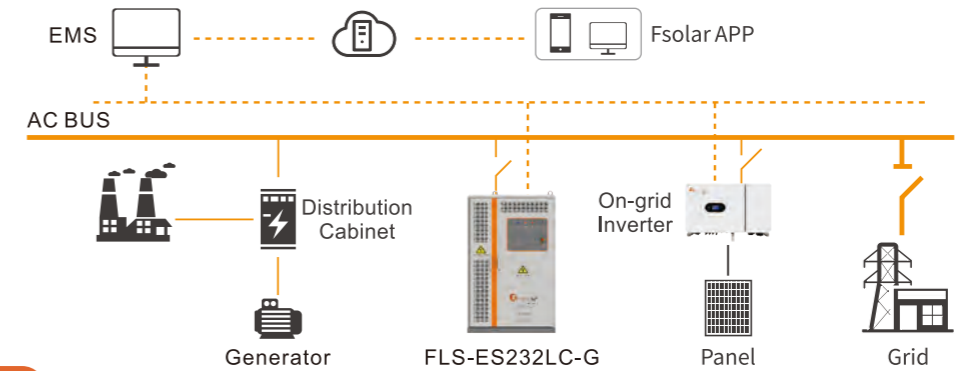
### Benefits:

- Dual-Mode Power Supply, Seamless Switching between Grid-tied and Off-grid Modes.
- Easy Maintenance & Reduced Operational Costs.
- Flexible Configuration Based on Power Demands and Site Conditions.
- Remotely Monitor and Control the System via FSOLAR App.
- Standalone Generator Interface for Automatic Power Switching.
- Customizable Smart load' s Output Duration Time.
- AC Coupling Functionality: supports connection with grid-tied systems.



## All-in-One C&I Grid-Tied Energy Storage System

System Configuration: **100kW Liquid Cooling System**



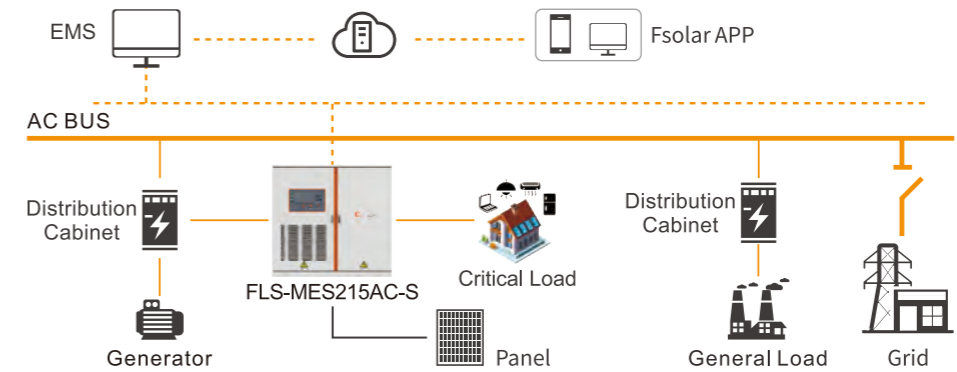
### Benefits:

- **Peak Shaving & Valley Filling:** store energy during low-price periods and release it during high-price periods to lower electricity costs.
- **Emergency Backup:** provides temporary power during grid failures or outages, ensuring continuous supply for critical equipment.
- **Demand Capacity Expansion:** enables rapid charging when short-term power demand exceeds transformer capacity, delaying costly distribution system upgrades.



## All-in-One C&I Hybrid Energy Storage System

System Configuration: **100kW Air Cooling System**



### Benefits:

- **Maximized Self-Consumption:** harnesses solar energy efficiently, prioritizes stored power usage, and supplies energy during low sunlight or peak demand.
- **Peak Shaving & Valley Filling:** store energy during low-price periods and release it during high-price periods to lower electricity costs.
- **Emergency Backup:** provides temporary power during grid failures or outages, ensuring continuous supply for critical equipment.
- **Demand Capacity Expansion:** enables rapid charging when short-term power demand exceeds transformer capacity, delaying costly distribution system upgrades.



# USER CASES

## Residential Solar Energy Storage System



**Guinea**

» House » 24kW+52.5kWh



**Yemen**

» House » 24kW+30kWh



**Senegal**

» Office Building » 40kW+125kWh



**South Africa**

» Office » 24kW+15.36kWh



**England**

» House » 5kW+5.12kWh



**Thailand**

» House » 20kW+45kWh



**Saudi Arabia**

» House » 15kW+45kWh



**Senegal**

» Villa » 24kW+60kWh

# USER CASES

## Residential Solar Energy Storage System



**Ghana**

» House      » 40kW+60kWh



**South Africa**

» House      » 12kW+25kWh



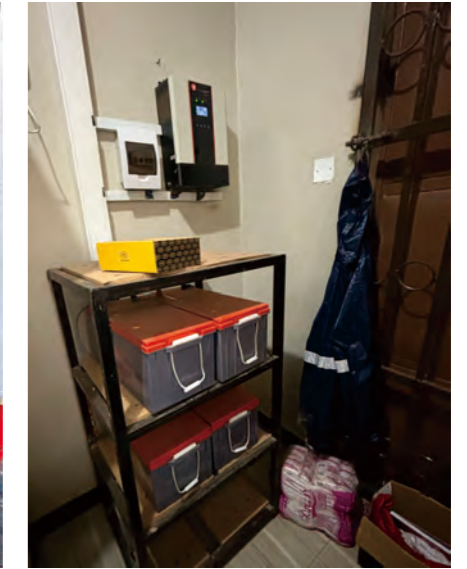
**Iraq**

» House      » 6kW+20kWh



**Mexico**

» House      » 5kW+5.12kWh



**Uganda**

» Community Bank      » 3kW+200Ah\*4



**DRC**

» House      » 18kW+80kWh



**South Africa**

» Villa      » 12kW+40.96kWh

# USER CASES

## Small to Medium C&I Solar Energy Storage System



**Mali** Paper Mills  
» 150kW+184.32kWh



**Iraq** Warehouse  
» 100kW+245.76kWh



**Nigeria** Small-size Factory  
» 50kW+122.88kWh



**Poland** Warehouse & Office  
» 100kW+122.88kWh



**South Africa** Hardware Store  
» 100kW+122.88kWh



**Thailand** Entertainment Center  
» 300kW+720kWh



**Mexico** Hotel  
» 100kW+163.84kWh

# USER CASES

## Large-size C&I Solar Energy Storage System



**Burkina Faso**

- Farm
- 100kW+215kWh



**China**

- Industrial Park
- 1MW+2.33MWh