felicitysolar®

Make life full of hope

Linktree

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felicitysolar®

Make life full of hope



SOLAR ENERGY STORAGE SOLUTIONS

Make life full of hope, make the world better

the Americas Version

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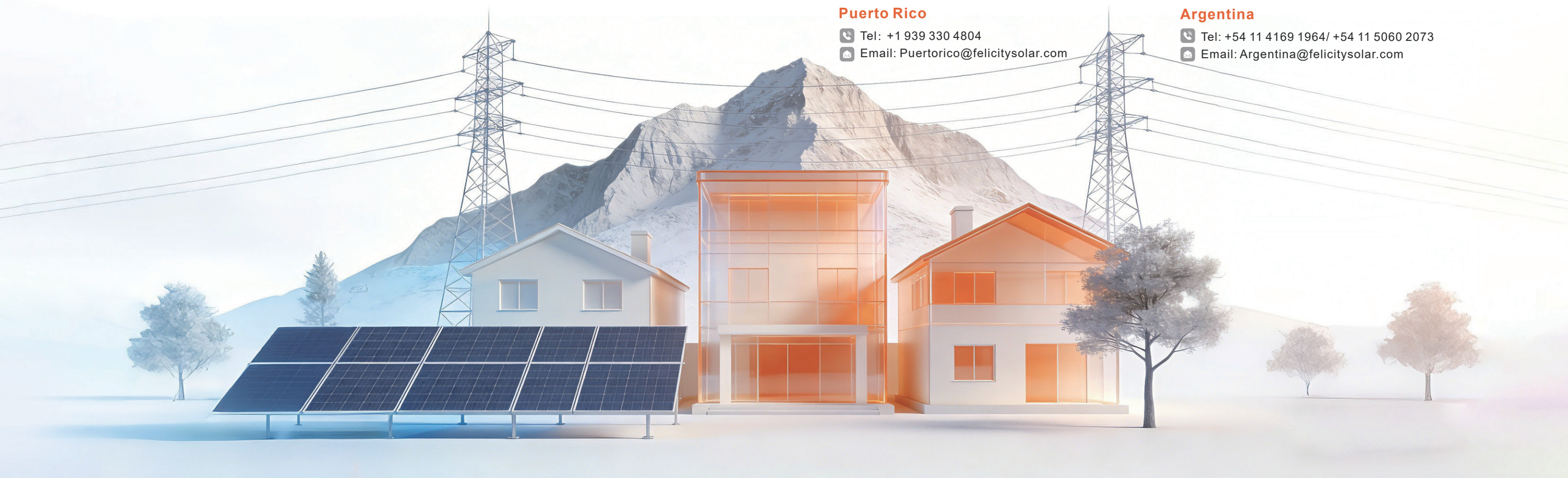
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ABOUT US

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

60+
Overseas Branches

150+
Countries & Regions Market

10%+
Technical Investment

400+
R&D Teammates



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

Green power

One-stop solutions

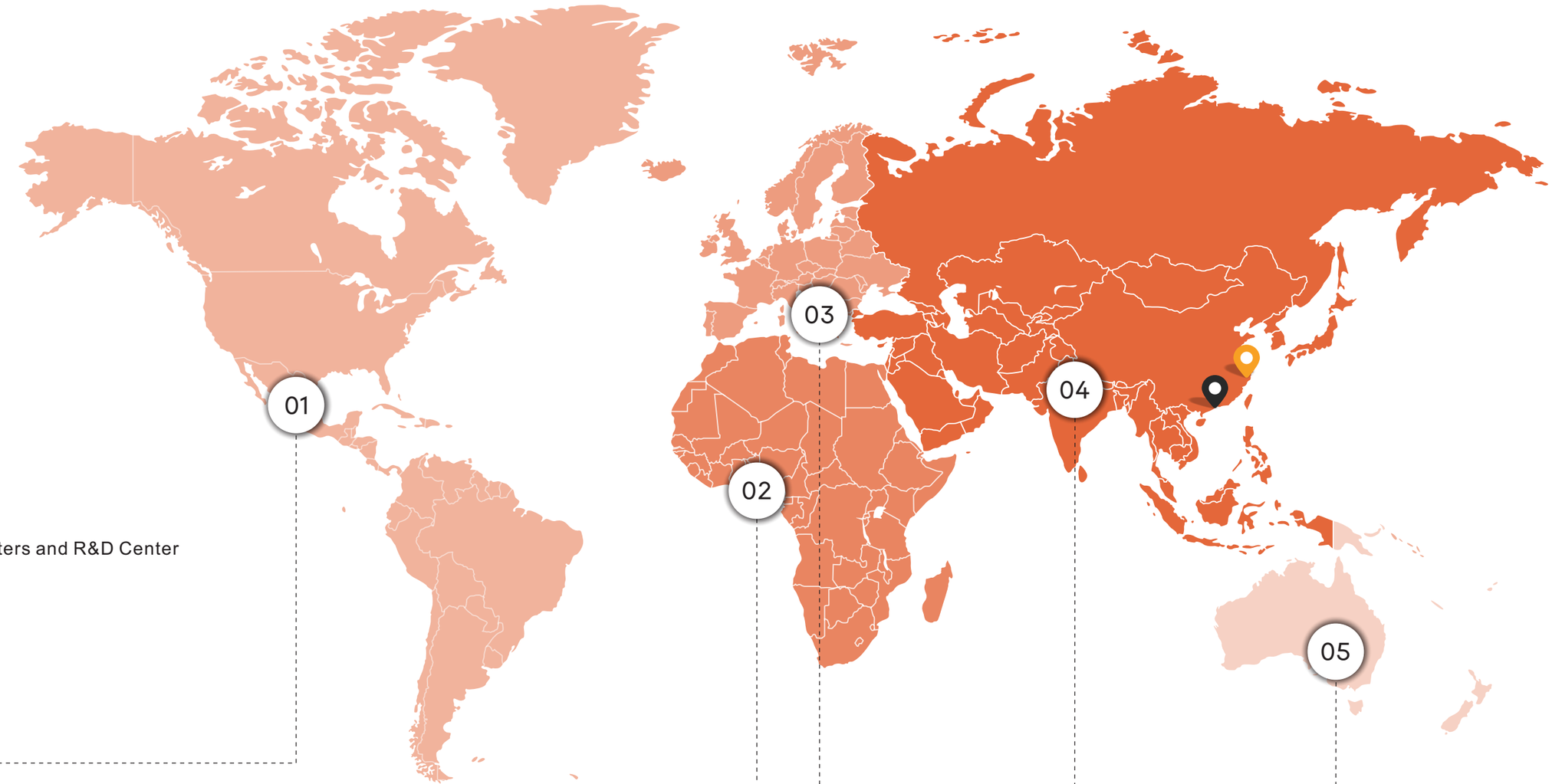
Service first

On-time support

Local service

Area-focused

Reliable 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

SUPERIORITY

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.



INVERTER COMPATIBILITY LIST



Off-grid High-frequency Solar Inverter

IVCM-LV Series | IVCM1012/2024-LV

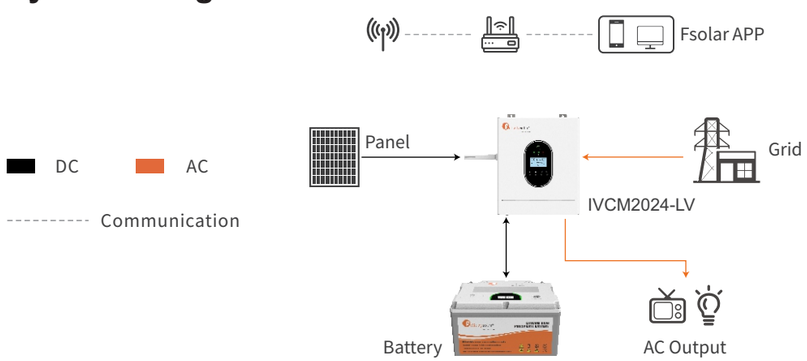
AC-110/120V



Features

- 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.
- Auto restart while AC is recovering.
- Cold start function.

System Diagram



Specifications

Model	IVCM1012-LV	IVCM2024-LV
Line Mode Specifications		
Rated Output Power	1000VA/1000W	2000VA/2000W
Nominal DC Input Voltage	12V	24V
Input Voltage Wave form	Sinusoidal (Utility or Generator)	
Nominal Input Voltage	110/120Vac	
Nominal Input Frequency	50Hz/ 60Hz(Auto Detection)	
Output Voltage Waveform	As Same as Input Waveform	
Max. Bypass Overload Current	14A	24A
Max. Inverter/Rectifier Current	10A/1000W	20A/2000W
Utility Charge Mode Specifications		
Nominal Input Voltage	110/120Vac	
Input Voltage Range	65-140Vac	
Nominal Output Voltage	Dependent on Battery Type	
Max. Charge Current	10A	15A
Over Charge Protection	Yes	
Solar Charging & Grid Charging		
Max. PV Open Circuit Voltage	105V	145V
Operating Voltage Range	15-90V	30-120V
Max. Input Power	800W	1600W
Max. Solar Charging Current	60A	
Max. Charging Current(PV+Grid)	70A	75A
Max. Input Current	35A	
General Specifications		
Operating Temperature	-10°C~55°C	
Range Storage Temperature	-15°C~60°C	
Net Weight(KG)	5.5KG	6.5KG
Product Size (D*W*H)	340x248x107MM	340x290x124MM
Package Dimension (D*W*H)	422x330x181MM	422x372x198MM

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

Off-grid High-frequency Solar Inverter

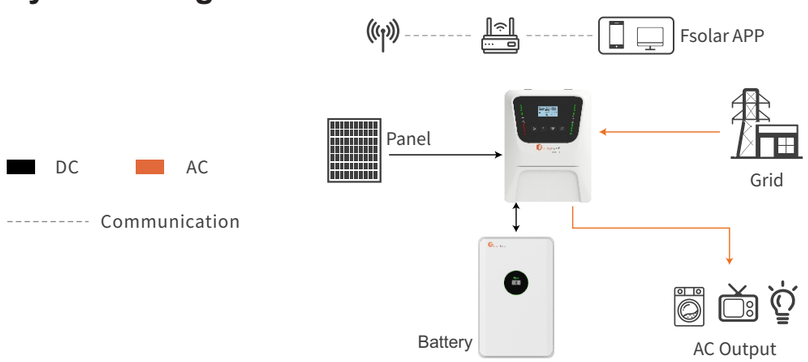
IVCM Series | IVCM1612P1G2-LV



Features

- Max. 120A charging current.
- Compatible with mains voltage or generator power.
- Built-in MPPT solar charge controller.
- Support parameters setting via LCD screen (input voltage/charging current/charge mode).
- Build-in WiFi for real-time monitoring.
- Optional Working Modes Setting: Backup mode / intelligent mode / economic mode.
- Runs on Solar or Grid, No Battery.
- Cold start function.

System Diagram



Specifications

Model	IVCM1612P1G2-LV
Line Mode Specifications	
Rated output Power	1600VA/1600W
Input Voltage waveform	Sinusoidal (utility or generator)
Nominal Input Voltage	120Vac/127Vac
Nominal Input Frequency	50Hz/ 60Hz
Output Voltage Waveform	As same as input waveform
Output Short Circuit Protection	Battery mode: Electronic Circuits
Transfer Time (Single unit)	4ms typical (UPS); 20ms typical (Appliances)
Max Bypass Overload Current	25A
Max Inverter/Rectifier Current	25A/3000W
Utility Charge Mode Specifications	
Nominal Input Voltage	120Vac/127Vac
Input Voltage Range	65~140Vac
Max Charge Current	120A
Charge Current Regulation	0~120A (Adj 5A)
Over Charge Protection	Yes
Solar Charging & Grid Charging	
Max PV Open Circuit Voltage	105V
MPPT Voltage Range	30~90V
Max Input Power	800W
Max Battery Charging Current	60A
Max Charging Current (PV + Grid)	120A
Max Shorted Current	20A
General Specifications	
Operating Temperature	-10°C ~55°C
Range Storage Temperature	-15°C ~60°C
Net Weight (Kg)	6.5kg
Product Size (D*W*H)	356x276x128MM
Package Dimension (D*W*H)	438x358x202MM

Off-grid High-frequency Solar Inverter

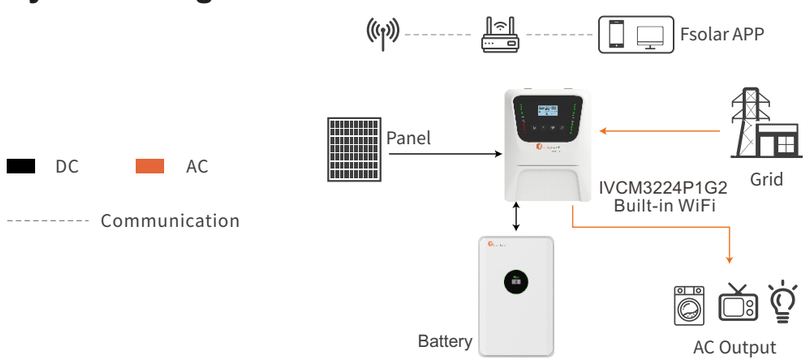
IVCM Series | IVCM2012/3224P1G2



Features

- Max. 120A charging current.
- Compatible with mains voltage or generator power.
- Built-in MPPT solar charge controller.
- Support parameters setting via LCD screen (input voltage/charging current/charge mode).
- Build-in WiFi for real-time monitoring.
- Optional Working Modes Setting: Backup mode / intelligent mode / economic mode.
- Runs on Solar or Grid, No Battery.
- Cold start function.

System Diagram



Specifications

Model	IVCM2012P1G2	IVCM3224P1G2
Line Mode Specifications		
Rated Output Power	2000VA/2000W	3200VA/3200W
Input Voltage Waveform	Sinusoidal (utility or generator)	
Nominal Input Voltage	230Vac	
Low Line Voltage Disconnect	170Vac±7V(UPS);90Vac±7V(Appliances)	
Low Loss Voltage Re-connect	180Vac±7V(UPS);100Vac±7V(Appliances)	
High Line Voltage Disconnect	280Vac±7V	
High Line Voltage Re-connect	270Vac±7V	
Nominal Input Frequency	50Hz/60Hz	
Low Line Frequency Disconnect	40Hz±1	
Low Line Frequency Re-connect	42Hz±1	
High Line Frequency Disconnect	65Hz±1	
High Line Frequency Re-connect	63Hz±1	
Output Voltage Waveform	As same as input waveform	
Output Short Circuit Protection	Battery mode: Electronic Circuits	
Transfer Time (Single Unit)	4ms typical (UPS); 20ms typical (Appliances)	
Max Bypass Overload Current	25A	
Max Inverter/Rectifier Current	15A/3450W	25A/5750W
Utility Charge Mode Specifications		
Nominal Input Voltage	230Vac	
Input Voltage Range	90-280Vac	
Nominal Output Voltage	Dependent on Battery Type	
Max. Charge Current	120A	
Charge Current Regulation	0-120A (Adj 5A)	
Over Charge Protection	Yes	
Solar Charging & Grid Charging		
Max. PV Open Circuit Voltage	105V	
MPPT Voltage Range	30-90V	
Max. Input Power	800W	1600W
Max. Solar Charging Current	60A	
Max. Charging Current(PV+Grid)	120A	
General Specifications		
Operating Temperature	-10°C~55°C	
Range Storage Temperature	-15°C~60°C	
Net Weight(KG)	6.5KG	
Product Size (D*W*H)	356x276x128MM	
Package Dimension (D*W*H)	438x358x202MM	

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

Off-grid High-frequency Solar Inverter

IVCM-PRO Series | IVCM1012/2024/3024PRO

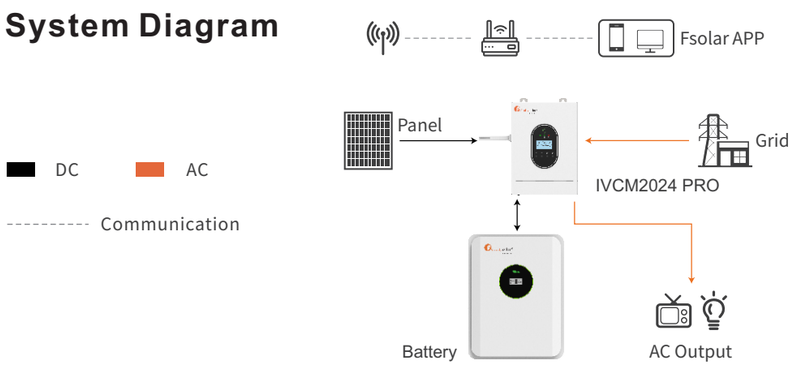
AC-230V



Features

- Enables real-time monitoring via WiFi.
- Depending on the model, Turbo mode can be enabled in APL mode to use up to three times the maximum rated load.
- Support parameters setting via LCD screen (input voltage/charging current/charge mode).
- Overload / overtemperature / short circuit / PV string input reverse polarity protection.
- Compatible with mains voltage or generator power.
- Built-in MPPT solar charge controller.
- Auto restart while AC is recovering.
- Cold start function.

System Diagram



Specifications

Model	IVCM1012 PRO	IVCM2024 PRO	IVCM3024 PRO
Line Mode Specifications			
Rated Output Power	1000VA/1000W	2000VA/2000W	3000VA/3000W
Instant Output Power (Turbo Mode)	3000W	4000W	4500W
Nominal DC Input Voltage	12V	24V	24V
Input Voltage Wave form	Sinusoidal (Utility or Generator)		
Nominal Input Voltage	230Vac		
Nominal Input Frequency	50Hz/ 60Hz(Auto Detection)		
Max. Bypass Overload Current	10A	15A	30A
Max. Inverter/Rectifier Current	5A/1000W	10A/2000W	15A/3000W
Utility Charge Mode Specifications			
Nominal Input Voltage	230Vac		
Input Voltage Range	90-280Vac		
Nominal Output Voltage	Dependent on Battery Type		
Max. Charge Current	20A	20A	30A
Charge Current Requlation	10-20A (Adj 10A)	20-30A (Adj 10A)	20-30A (Adj 10A)
Over Charge Protection	Yes		
Solar Charging & Grid Charging			
Max. PV Open Circuit Voltage	105V	145V	145V
Operating Voltage Range	15-90V	30-120V	30-120V
Max. Input Power	800W	1600W	1600W
Max. Solar Charging Current	60A		
Max. Charging Current(PV+Grid)	80A	80A	90A
Max. Input Current	35A		
General Specifications			
Operating Temperature	-10°C~55°C		
Range Storage Temperature	-15°C~60°C		
Net Weight(KG)	5.5KG	6.5KG	6.5KG
Product Size (D*W*H)	340x248x107MM	340x248x107MM	340x290x124MM
Package Dimension (D*W*H)	422x330x181MM	422x330x181MM	422x372x198MM

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

Off-grid High-frequency Solar Inverter

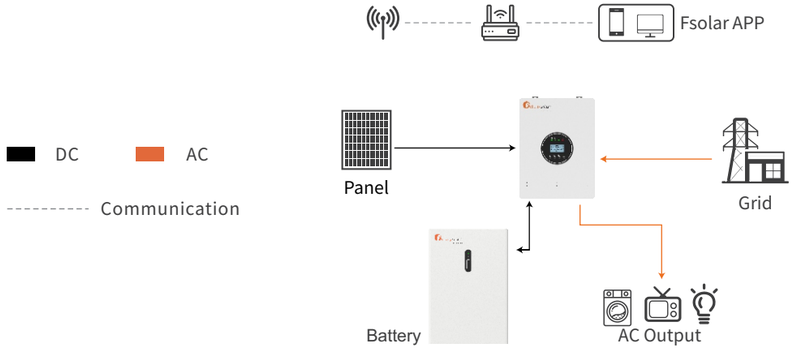
IVEM-LV Series | IVEM3048/5048-LV



Features

- Support 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.
- Runs on Solar or Grid, No Battery.

System Diagram



Specifications

Model	IVEM3048-LV	IVEM5048-LV
Line Mode Specifications		
Rated Output Power(VA)	3000VA	5000VA
Rated Output Power(W)	3000W	5000W
Nominal DC Input Voltage	48V	48V
Input Voltage Waveform	Sinusoidal (Utility or Generator)	
Nominal Input Voltage	110/120Vac	
Nominal Input Frequency	50Hz / 60Hz (Auto Detection)	
Max. Bypass Overload Current	40A	63A
Max. Inverter/Rectifier Current	30A/3000W	50A/5000W
Utility Charge Mode Specifications		
Nominal Input Voltage	110Vac	
Input Voltage Range	65-140Vac	
Nominal Output Voltage	Dependent on BatteryType	
Max. Charge Current	60A	100A
Solar Charging & Grid Charging		
Max. PV Open Circuit Voltage	500V	
PV Voltage Range	90V-500V	
Max. PV Input Power	4000W	6000W
Max. PV Charging Current	60A	100A
Max. Charging Current(PV+Grid)	60A	100A
Max. PV Input Current	15A	20A
Min. Startup Voltage	100V	
Inverter Mode Specifications		
Output Voltage Waveform	Pure Sine Wave	
Nominal Output Voltage	110Vac+5%	
Nominal Output Frequency(Hz)	50±0.3Hz/60Hz±0.3Hz(Adjustable)	
Parallel Capability	No	Yes, Up to 6 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	
General Specifications		
Operating Temperature	-10°C~+50°C	
Range Storage Temperature	-15°C~+60°C	
Net Weight(KG)	11.9KG	13.1KG
Gross Weight(KG)	14.2KG	15KG
Product Dimension(MM)	440*328*130MM	460*343*137MM
Package Dimension(MM)	542*430*224MM	562*443.5*231MM
Certification	CE-EMC、IEC 62109-1/2、Colombia RETIE	

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

Off-grid High-frequency Solar Inverter

IVEM-SALV Series | IVEM5048-SALV

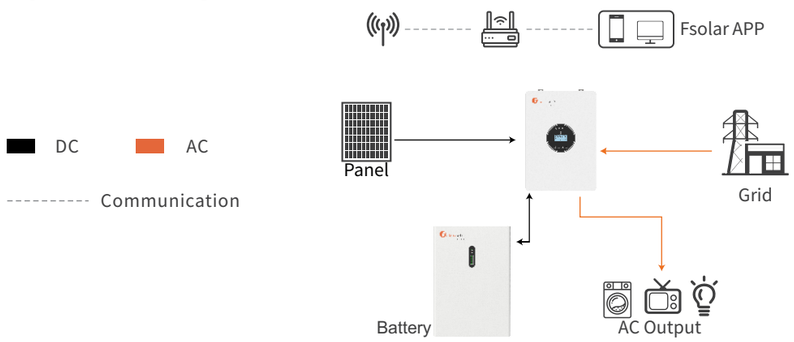


*** Spanish and portuguese versions available**

Features

- Support parameters setting via LCD screen (input voltage/charging current/charge mode).
- Compatible with mains voltage or generator power.
- Built-in MPPT solar charge controller.
- Intelligent fan control for quieter operation.
- Lithium battery activation function.
- Auto restart while AC is recovering.
- Runs on Solar or Grid, No Battery.

System Diagram



Specifications

Model	IVEM5048-SALV
Line Mode Specifications	
Rated Output Power(VA)	5000VA
Rated Output Power(W)	5000W
Nominal DC Input Voltage	48V
Input Voltage Waveform	Sinusoidal (Utility or Generator)
Nominal Input Voltage	127Vac
Nominal Input Frequency	60Hz
Pass Through Without Battery	Yes
Max. Bypass Overload Current	63A
Max. Inverter/Rectifier Current	50A/5000W
Utility Charge Mode Specifications	
Nominal Input Voltage	127Vac
Input Voltage Range	65-140Vac
Nominal Output Voltage	Dependent onbattery type
Max. Charge Current	100A
Charging Current Regulation Range	10–100A (Adjustable unit is 1A)
Overload Protection	Yes
Solar Charging & Grid Charging	
Max. PV Open Circuit Voltage	500V
PV Voltage Range	120V-450V
Max. PV Input Power	6000W
Max. PV Charging Current	100A
Max. Charging Current(PV+Grid)	100A
Max. PV Input Current	20A
Min. Startup Voltage	100V
Inverter Mode Specifications	
Output Voltage Waveform	Pure Sine Wave
Nominal Output Voltage	127Vac+5%
Nominal Output Frequency(Hz)	60Hz±0.3Hz
Parallel Capability	Yes, Up to 6 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
General Specifications	
Operating Temperature	-10°C~+50°C
Range Storage Temperature	-15°C~+60°C
Ingress Protection	IP21
Net Weight(KG)	14.9KG
Gross Weight(KG)	17.3KG
Product Dimension(MM)	487.4*343*137MM
Package Dimension(MM)	589*443*231MM

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

Off-grid High-frequency Solar Inverter

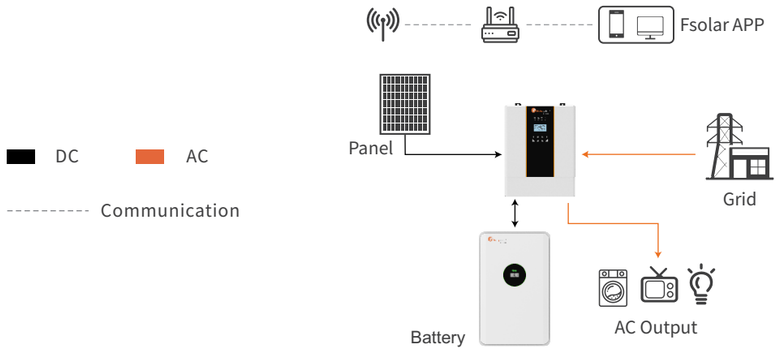
IVEM Series | IVEM3024



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.
- Runs on Solar or Grid, No Battery.
- Cold start function.

System Diagram



Specifications

Model	IVEM3024
Line Mode Specifications	
Rated Output Power(VA)	3000VA
Rated Output Power(W)	3000W
Nominal DC Input Voltage	24V
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
Utility Charge Mode Specifications	
Nominal Input Voltage	230Vac
Input Voltage Range	90-280Vac
Max. Charge Current	100A
Over Charge Protection	Yes
Solar Charging & Grid Charging	
Max. PV Open Circuit Voltage	500V
PV Voltage Working Range	120V-500V
Max. Input Power	4000W
Max. Solar Charging Current	100A
Max. Charging Current(PV+Grid)	100A
Max. Input Current	15A
Min. Startup Voltage	125V
Inverter Mode Specifications	
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
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
General Specifications	
Operating Temperature	0°C~55°C
Range Storage Temperature	-15°C~60°C
Net Weight(KG)	10.8KG
Product Dimension(MM)	395*295*129MM
Package Dimension(MM)	472*372*202MM
Certification	CE-EMC、IEC 62109-1/2、IEC 63027

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

Off-grid High-frequency Solar Inverter

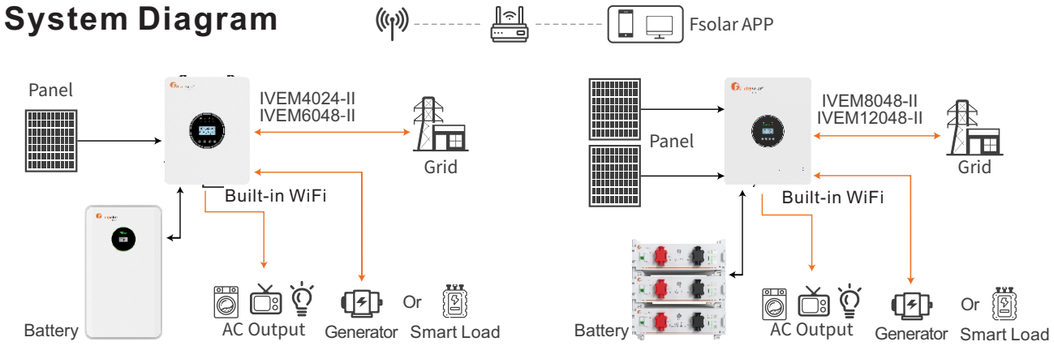
IVEM-II Series | IVEM4024/6048/8048/12048-II



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 12 units in parallel (6kW) / 6 units (8kW & 12kW) in parallel (Battery must be connected).
- Supports generator input port reconfiguration to smart output port with customizable duration.
- Compatible with mains voltage or generator power.
- Built-in MPPT solar charge controller.
- Lithium battery activation function.
- Runs on Solar or Grid, No Battery.
- Auto restart while AC is recovering.
- Cold start function.

System Diagram



Specifications

Model	IVEM4024-II	IVEM6048-II	IVEM8048-II	IVEM12048-II
Line Mode Specifications				
Rated Output Power(VA)	4000VA	6000VA	8000VA	12000VA
Rated Output Power(W)	4000W	6000W	8000W	12000W
Nominal DC Input Voltage	24V	48V	48V	48V
Nominal Input Voltage	230Vac			
Max. AC Input Voltage	280Vac			
Nominal Input Frequency	50Hz / 60Hz (Auto Detection)			
Pass Through Without Battery	Yes			
Utility Charging Mode Specifications /Generator Charging Mode Specinications				
Nominal Input Voltage	230Vac			
Input Voltage Range	90-280Vac			
Max. Charge Current	120A	120A	150A	240A
Charge Current Regulation	10-120A (Adjustable Unit is 1A)	10-120A (Adjustable Unit is 1A)	10-150A (Adjustable Unit is 1A)	10-240A (Adjustable Unit is 1A)
Over Charge Protection	Yes			
Solar Charging & Grid Charging or GEN Charging				
Max.PV Open Circuit Voltage	500V			
PV Voltage Working Range	60V-500V	90V-450V	90V-450V	90V-450V
Max. Input Power	6000W	7500W	10000W(5000W for single PV)	15000W(7500W for Single PV)
Max. Solar Charging Current	120A	120A	150A	240A
Max. Charging Current(PV+Grid or GEN)	120A	120A	150A	240A
Max. Input Current	27A	27A	20A X 2(MAX 40A)	27A X 2(MAX 54A)
Min. Startup Voltage	60V	95V	100V	100V
Inverter Mode Specifications				
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	Yes, Up to 6 Units	
Capable of Starting Electric	Yes			
Output Short Circuit Protection	Yes			
General Specifications				
Operating Temperature	-10°C~50°C			
Range Storage Temperature	-15°C~60°C			
Net Weight(KG)	10.4KG	12.5KG	23.7KG	26.8KG
Product Dimension(MM)	430*310*120MM	420*335*142MM	607*464*141MM	634*476*141MM
Package Dimension(MM)	507*387*197MM	512*417*216MM	712*582*259MM	726*594*258MM
Certification	CE-EMC、IEC 62109-1/2	CE-EMC、IEC 62109-1/2	CE-EMC、IEC 62109-1/2	CE-EMC、IEC 62109-1/2

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

Off-grid High-frequency Solar Inverter

IVEM-SAII Series | IVEM4024/6048-SAII

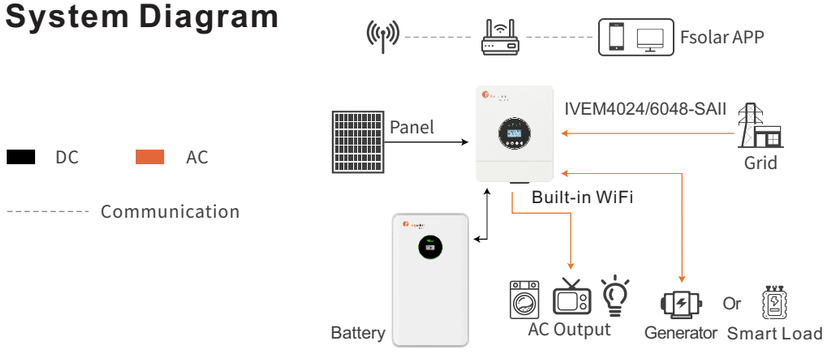


*** Spanish and portuguese versions available**

Features

- Built-in WiFi for mobile monitoring (APP is required).
- Support parameters setting via LCD screen (input voltage/charging current/charge mode).
- 6kW model supports up to 12 units in parallel (Battery must be connected).
- Supports generator input port reconfiguration to smart output port with customizable duration.
- Compatible with mains voltage or generator power.
- Built-in MPPT solar charge controller.
- Lithium battery activation function.
- Runs on Solar or Grid, No Battery.
- Auto restart while AC is recovering.
- Cold start function.

System Diagram



Specifications

Model	IVEM4024-SAII	IVEM6048-SAII
Line Mode Specifications		
Rated Output Power	4000VA / 4000W	6000VA / 6000W
Rated DC Input Voltage	24V	48V
Input Voltage Waveform	Pure sine wave (Utility grid or generator)	
Rated AC Input Voltage	220VAC	
Rated Input Frequency	50Hz	
Output Short-Circuit Protection	Line mode: Circuit breaker Battery mode: Electronic protection	
Efficiency (Line Mode)	>93% (Resistive load at nominal load, battery fully charged)	>95% (Resistive load at nominal load, battery fully charged)
Transfer Time (Single Unit)	10 ms typical (UPS mode) 20 ms typical (Appliance mode)	
Operation Without Battery	Yes	
Transfer Time (parallel)	/	50ms typical
Maximum Bypass Overload Current	30A	40A
Maximum Inverter/Charger Current	30A / 4000W	40A / 6000W
Grid Charging Mode Specifications		
Rated AC Input Voltage	220VAC	
AC Input Voltage Range	90–280Vac (Appliance mode) 180–280Vac (Computer mode)	90-280Vac
Rated Output Voltage	Depends on battery type	
Maximum Charging Current	120A	
Charging Current Regulation Range	10–120A (Adjustable in 1A increments)	
Overload Protection	Yes	
Solar & Utility Charging		
Maximum PV Open-Circuit Voltage	500V	
PV Operating Voltage Range	60–500V	90–450V
Maximum PV Input Power	6000W	7500W
Maximum Solar Charging Current	120A	
Maximum Charging Current (PV + Utility)	120A	
Maximum Input Current	27A	
Minimum Start-up Voltage	60V	95V
General Specifications		
Operating Temperature	-10°C ~ 50°C	
Storage Temperature Range	-15°C ~ 60°C	
Net Weight	10.4KG	12.5KG
Product Dimensions (L × W × H)	430*310*120MM	420*330*142MM
Package Dimensions (L × W × H)	507*387*197MM	512*417*216MM

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

Off-grid High-frequency Solar Inverter

IVAM Series | IVAM6048-12048P1G1

AC-230V



IVAM6048P1G1



IVAM8048P1G1

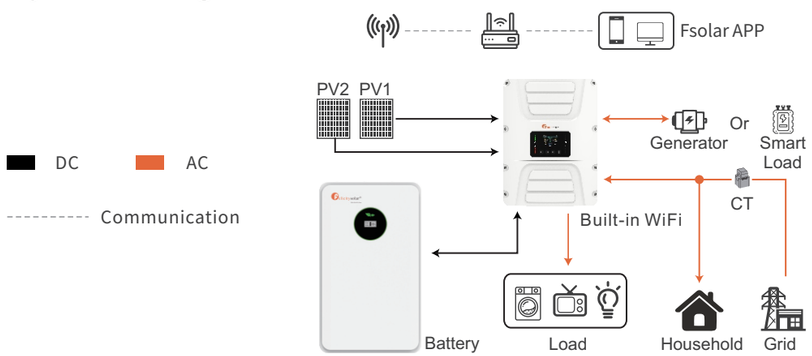


IVAM12048P1G1

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.
- 5-year Warranty
- 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.
- Clear Setup Wizard for Quick Installation.

System Diagram



Specifications

Model			
Battery Input Data	**IVAM6048P1G1**	**IVAM8048P1G1**	**IVAM12048P1G1**
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range(V)	40~60		
Max. Charging Current/Max. Discharging Current(A)	135	190	250
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
Number of Battery Input	1		2
PV String Input Data			
Max. PV Access Power(W)	12000	16000	24000
Max. PV Input Power(W)	9600	12800	19200
Max. PV Input Voltage(V)	500		
Start-up Voltage(V)	90		
PV Input Voltage Range(V)	90~500		
MPPT Voltage Range(V)	90~425		
Full Load MPPT Voltage Range(V)	300~425	200~425	200~425
Rated PV Input Voltage(V)	370	370	370
Max. Operating PV Input Current(A)	20+20	27+27	32+32
Max. Input Short-Circuit Current(A)	27+27	40+40	48+48
No. of MPP Trackers/No. of Strings MPP Tracker	2/1+1	2/2+2	2/2+2
AC Output Data			
Rated AC Output Power(VA/W)	6000	8000	12000
Max. AC Output Power(VA/W)	6000	8000	12000
Max. AC Output Current(A)	26.1	34.8	52.2
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		
AC Input Data(Grid and Generator)			
Max. Input Power to Battery(W)	6000	8000	12000
Rated Input Voltage(V)	230		
Rated Input Frequency	50Hz/60Hz		
Grid Input Frequency Range(Hz)	40~65		
Transfer Time (Single unit)	10ms(UPS);20ms(APL)		
Grid Input Current(A)	35	50	60
Generator Input Current(A)	35	50	60
Equipment Protection			
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)		
General Data			
Display	LCD+LED		
Communication Interface	RS485, CAN		
Monitor Mode	WIFI/LAN (Optional)		
General Data			
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	14. 5kg	21.4kg
Product Dimension	435x320x183mm	456.5x362x183.2mm	594x385x203mm
Package Dimension	532x412x270mm	552x447x270mm	752x507x348mm
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

IVAM Series | IVAM6048P2G1-US,IVAM6048P2G1-BR

AC-230V

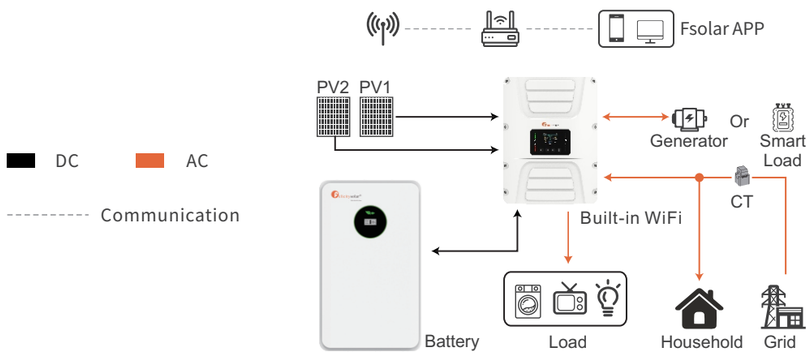


IVAM6048P2G1

Features

- 6kW Split-Phase Hybrid Inverter
- Dual MPPT and up to 160% PV oversizing
- Under 4ms transfer
- 2x overload capacity for 5 seconds
- Up to 135A battery charge and discharge
- Built-in AFCI Protection
- Multiple Safety Protections
- IP65 Protection
- 5-Year Warranty

System Diagram



Specifications

Model	IVAM6KP2G1-US	IVAM6KP2G1-BR
Rated Output Power	6kW	
Short-Term Overload Capability	12,000 VA (5 s)	
Nominal Output Voltage	120/240 V	127/220V
Rated Output Current	25A	27.3A
Wiring Configuration	2L+N+PE	
Configurable Phase Angle	L1-L2 = 120; L1-L2 = 180° (default)	
Output Waveform	Pure Sine Wave	
Power Factor	1	
Output Frequency	50 Hz/ 60 Hz (default)	
Transfer Time	Grid: <4 ms (typical) for a single unit; <20 ms (typical) in parallel operation	
Total Harmonic Distortion (THD)	Resistive load: 3%	
AC Input		
Maximum AC Input Power	9,000 W	
Rated Voltage	120/240 V (split-phase)	127/220 V (2/3-phase)
Maximum Grid Bypass Current	40A	
Maximum Generator Input Current	40A	
Maximum Hardware Input Voltage Range	L-N: 45-140 V; L-L: 90-280 Vac	
AC Overvoltage/Undervoltage Range	L-N: 85-140 V;L-L: 170-280 Vac	
Weak-Grid Compatibility (Without Voltage Regulation)	Wide AC Input Range with Adjustable Loss/Return Thresholds and Hysteresis; Switches to SBU Mode When Limits Are Exceeded	
Battery		
Battery Type	Lithium-ion/ Lead-acid /Batteryless operation	
Nominal Battery Voltage	48V	
Battery Voltage Range	40-60V	
Rated Charging Power	6kW	
Maximum Battery Charge Current	135A	
Rated Discharge Power	6,000 W	
Maximum Battery Discharge Current	135A	
Grid Charge Current	115A	
Standard Combined PV + AC Charge Current	135A	
PV Input		
No. of MPPTs/ No. of PV Strings	2/1+1	
MPPT Tracking Efficiency	99.90%	
Maximum PV Input Power	9,600 W	
Maximum PV Input Current	20A	
Maximum PV Short-Circuit Current	25A	
Maximum PV Open-Circuit Voltage	500V	
Start-up Voltage	120V	
MPPT Voltage Range	90-425V	
Protection		
Ingress Protection Rating	Ip65	
AFCI	Supported	Supported
Rapid Shutdown (RSD)	Supported	
DC Insulation Monitoring	Supported	
Neutral-to-Ground (N-G) Relay	Built-in as standard	
General		
Operating Temperature Range	-20°C to 60°C; derating above 40°C	
Noise Level	40 dB in Quiet Mode	
Parallel Expansion	Up to 6 units (parallel communication cable only)	
Cooling Method	Forced-air cooling	
Altitude	Up to 3,000 m; derating above 2,000 m	
Warranty	5 years	
Wi-Fi	Standard	
Communication	BMS, RS485 and Parallel Communication	
Display	2.4-inch Touchscreen and Status LEDs	
Installation Method	Wall-mounted	

Off-grid High-frequency Solar Inverter

IVAM Series | IVAM12048P1G1-BR,IVAM12048P1G1-SA

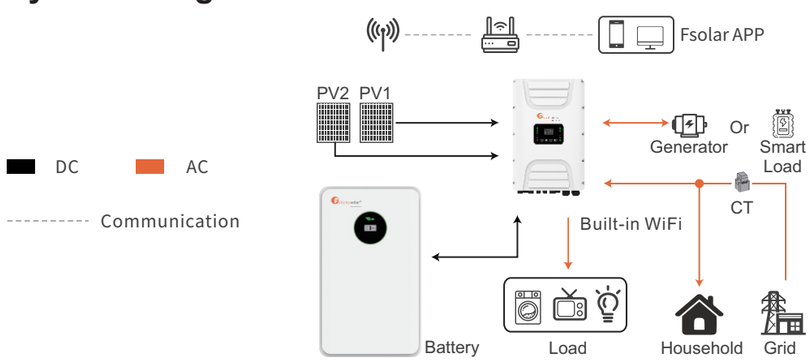


IVAM12048P1G1

Features

- IP65-rated protection
- Wide Operating Range from -40°C to 60°C
- 2x surge power for demanding loads Dual MPPTs 4 PV string inputs
- Up to 19.2 kW PV input for greater solar utilization
- Up to 6 units in parallel for flexible system expansion
- 5-year warranty

System Diagram



Specifications

Model	IVAM12048P1G1-SA	IVAM12048P1G1-BR
Default Output Frequency	50 Hz/60 Hz (50 Hz default)	50 Hz/60 Hz (60 Hz default)
Battery Input Data		
Battery Type	Lead-acid /Lithium-ion /Battery-free operation	
Nominal Battery Voltage	48V	
Battery Voltage Range	40-60 V	
Max Battery Charging Power	12kW	
Max Battery Charging Current	250A	
Max. Battery Discharging Power	12 kW	
Max Battery Discharging Current	250A	
Max Grid Charging Power / Current	11 kW/230 A	
Number of Battery Inputs	2 sets	
PV String Input Data		
Max PV Array Power	24 kW	
Max PV Input Power	19.2 kW	
Max PV Input Voltage	500V	
Start-up Voltage	90V	
MPPT Voltage Range	90-425V	
Rated MPPT Voltage	370V	
Max Operating PV Input Current	32+32A	
Max PV Input Short-circuit Current	48+48A	
MPPT Trackers / Strings per Tracker	212+2	
MPPT Tracking Efficiency	99.90%	
AC Output Data		
Rated AC Output Power	12 kW	
Rated Apparent Power	12 kVA	
Rated Output Voltage	220 V (default)/230 V	
Rated Output Current	54.5Aat 220V	
Output Wiring	L+N+PE	
Output Voltage Waveform	Pure sine wave	
Power Factor	1.0	
Peak Power	2x rated power for 10 s	
Transfer Time*	<10 ms single unit/<20 ms parallel	
THDi*	3%	
AC Input Data Grid and Generator		
Rated Grid Input Power	13.86 kW	
Rated Grid Apparent Power	13.86 kVA	
Rated Grid Input Voltage	220V/230V	
Max Grid Input Current	63A	
Grid Input Voltage Range	90-264 VAC	
Normal Grid Operating Range	0.85 Un-1.10 Un	
Continuous Bypass Current	63A	
Generator Input Power /Voltage	12 kW/220V	
System Protection and Connectivity		
ngress Protection*	IP65	
Arc-fault Circuit Interrupter AFCI	Standard	
DC Insulation Monitoring	Yes	
N-PE Relay	Built-in, standard	
Mireless Connectivity	Wi-Fi and Bluetooth, standard	
Communication Interfaces	Parallel x2, battery comm. x1, RS485 x1, meter x1, CT x1, generator dry contact x1, USB-C x1	
Display and Controls	2.4-inch touchscreen, status LEDs, function key and power switch	
General Data		
Operating Temperature Range*	-40°C to +60°C; derating above 40°C	
Storage Temperature Range	-30°Cto +60°C	
Noise Level*	<55 dB normal mode/<40 dB quiet mode	
Maximum Relative Humidity*	100%	
Maximum Operating Altitude	3,000 m; derating above 2,000 m	
Cooling	Air cooling	
Maximum Parallel Units	6	
Parallel Configuration	Single-phase/Three-phase	
Installation	Wall-mounted	
Warranty	5 years	

Low-voltage Hybrid Solar Inverter

IVGM Series | IVGM6KLP1G2

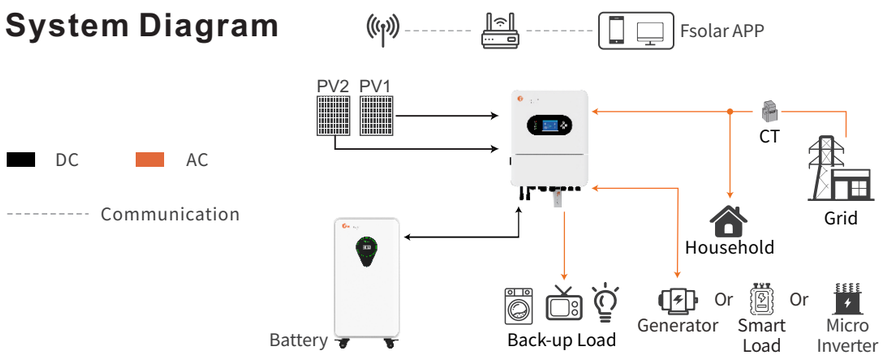
Single Phase



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 135A.
- 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, 1.6 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	IVGM6KLP1G2
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range	40 V~60 V
Max. Charging and Discharging Current	135 A/135 A
Charging Strategy for Li-ion Battery	Self-adaption to BMS
Number of Battery Input	1
PV String Input Data	
Max. PV Access Power	12000 W
Max. PV Input Power	9600 W
Max. PV Input Voltage	500 V
Start-up Voltage	125 V
MPPT Voltage Range	150 V-425 V
Rated PV Input Voltage	370 V
Max. Input Short-Circuit Current	27 A+27 A
Max. Operating PV Input Current	18 A+18 A
No. of MPP Trackers/No.of String Per MPP Tracker	2/1+1
Grid Data	
Rated AC Input/Output Active Power	6000 W
Max. AC Input/Output Apparent Power	6600 VA
Peak Power (off-grid)(W)	2 Times of Rated Power, 10s
Rated AC Input/Output Current	27.3 A/26.1A
Max. AC Input/Output Current	30 A/28.7 A
Max. Continuous AC Passthrough (grid to load)	40 A
Rated Input/Output Voltage/Range	220V/230 0.85Un-1.1Un
Grid Connection Form	L+N+PE
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz
Efficiency	
Max. Efficiency	97.6 %
Euro Efficiency	96.5%
MPPT Efficiency	99 %
Equipment Protection	
DC Reverse Polarity Protection	Integrated
AC Output Overcurrent Protection	Integrated
Thermal Protection	Integrated
AC Output Overvoltage Protection	Integrated
AC Output Short Circuit Protection	Integrated
DC Component Monitoring	Integrated
Arc Fault Circuit Interrupter (optional)	Integrated
Anti-islanding Protection	Integrated
DC Switch	Integrated
Insulation Impedance Detection	Integrated
Residual Current Detection	Integrated
Surge Protection Level	Integrated
Interface	
Communication Interface	RS485/RS232/CAN
Monitor Mode	WIFI/Bluetooth
General Data	
Operating Temperature Range	-40°C~+60°C, >45°C Derating
Protection Degree	IP65
Over Voltage Category	OVC II(DC), OVC III(AC)
Net Welght	19.8 KG
Gross Weight	24.5 KG
Product Dimension	470x376x250.75 MM
Package Dimension	598x454x348 MM
Warranty	10 Years
Type of Cooling	natural cooling
Grid Regulation	IEC 61727,IEC 62116,CEI 0-21,EN 50549,NRS 097,RD 140, UNE 217002,OVE-Richtlinie R25,G98,G99,VDE-AR-N 4105
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

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

Low-voltage Hybrid Solar Inverter

IVGM Series | IVGM8KLP1G1

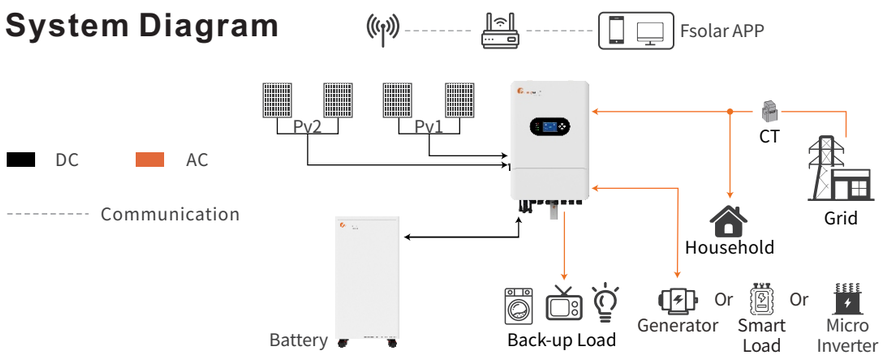
Single Phase



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 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	IVGM8KLP1G1
Battery Input Data	
Battery Voltage Range	40V~60V
Max. Charging and Discharging Current	190A/190A
Max. Charging and Discharging Power	8000W
Battery Type	Li-Ion /Lead-acid
DC Input Data(PV side)	
Max. Recommended PV Power	12000W
Max. PV Voltage	500V
Start Voltage	100V
PV Voltage Range	90V-500V
MPPT Voltage Range	120V-425V
MPPT Voltage Range for Full Load	230V-425V
Nominal Voltage	380V
PV Input Current	26A+26A
Max. Shorted Current	44A+44A
Number of MPP Trackers / Strings Per MPP Tracker	2/2
Grid Data	
Nominal Input Voltage	220/230Va.c (Single Phase)
Nominal Grid Frequency	50/60Hz
Max. AC Output Power	8800W
AC Output/Input Rated Current	34.8A
Max. Output Current	38.3A
Max. Continuous AC Passthrough	50A
AC Output Data(Back Up)	
Rated Output Power	8000W
Max. Output Current	40A
Rated AC Output Voltage	220/230Vac (Single Phase)
Rated AC Output Frequency	50/60Hz
Protection	
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)	Optional
Insulation Resistor Detection	Integrated
General Data	
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

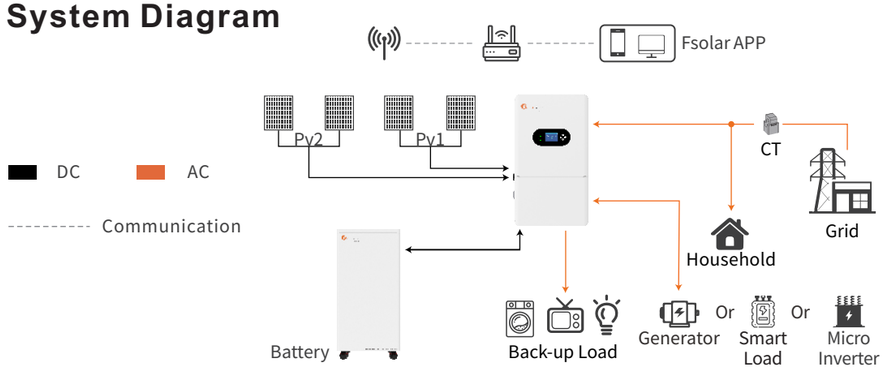
IVGM Series | IVGM8/12/16KLP2G1-US

Split Phase



- 8-16kW Split-Phase Hybrid Inverter
- 2-3 MPPTs with flexible PV string
- Up to 290A battery charge and discharge current
- Smart Control. Flexible Expansion
- NEMA 4X Outdoor Protection
- 10-Year Warranty

System Diagram



Specifications

Model	IVGM8KLP2G1-US	IVGM12KLP2G1-US	IVGM16KLP2G1-US
Battery Input			
Battery Type	Li-ion /Lead-acid	Li-ion / Lead-acid / Battery-free	Li-ion / Lead-acid / Battery-free
Battery Voltage Range	40-60 V	40-60 V	40-60 V
Max. Charging/ Discharging Power	8/8kW	12/12kW	16/16 kW
Max. Charging / Discharging Current	180/180 A	220/220 A	290/290 A
Battery Input Terminals	/	2 groups	2 groups
PV Input			
Max. PV Input Power	12 kW	24 kW	32 kW
PV Oversizing Ratio	150%	200%	200%
Max. PV Generation Power	/	19.2 kW	25.6 kW
Max. PV Voltage	500 V	500V	500V
Start Voltage	100 V	125 V	125V
MPPT Voltage Range	120-425 V	150-425 V	150-425 V
MPPT Trackers/ PV Strings	2/4 (2+2)	3/6 (2+2+2)	3/6 (2+2+2)
Max. PV Input Current	26A+26 A	26 A+26 A+26 A	26 A+26 A+26 A
Max. PV Short-Circuit Current	44A+44A	44A+44A+ 44A	44A+44A+44A
MPPT Efficiency	99.9%	99.9%	99.9%
AC Output/Grid / Generator			
Rated AC Output Power	8kW	12 kW	16 kW
Rated AC Output Voltage	120/240 Vac (split phase): 208Vac (2/3 phase); 220/230 Vac(single phase)	120/240 Vac (split phase)	120/240 Vac (split phase)
Rated Output Current at 240 V	33.3 A	50A	66.7 A
Max. AC Output Power	8.8 kW	/	/
Max. Continuous AC Passthrough	50A	100 A	100 A
Short-Time Overload	/	2x rated power for 10 s	2x rated power for 10 s
Generator Input Power	/	12 kVA	16 kVA
Rated Backup Output Power	8kW	12 kW	16 kW
Key Functions			
Hybrid Energy Management	PV / Battery / Grid / Generator	PV / Battery / Grid /Generator	PV / Battery / Grid / Generator
Operating Modes	On-grid / Off-grid / UPS Backup	On-grid / Offi-grid / UPS Backup	On-grid / Offi-grid / UPS Backup
AC Coupling	Supported	Supported	Supported
TOU & Energy Priority	Supported	Supported	Supported
Zero Export	Supported	Supported	Supported
Maximum Parallel Units	6 units	6 units	6 units
AFCI	Integrated	Integrated	Integrated
Remote Monitoring	Wi-Fi/ GPRS data logger; Fsolar remote monitoring	External Wi-Fi data logger included; Fsolar remote	External Wi-Fi data logger included: Fsolar remote
General Data			
Protection Degree	IP65 / NEMA 4X	IP66 /NEMA 4X	IP66 / NEMA 4X
Operating Temperature Range	-25 to 60°C; derating above 45°C	-25 to 60°C; derating above 45°C	-25 to 60°C; derating above 45°C
Cooling	Smart cooling	Air cooling	Air cooling
Noise	<35dB	<50 dB normal; <40 dB silent	<50 dB normal; <40 dB silent DRMS
Communication	RS232/RS485	Parallel x2; BMS; Modbus; Meter; DRMS	Parallel x2; BMS; Modbus; Meter; DRMS
BMS Communication	CAN/ RS485	CAN / RS485	CAN / RS485
Display	LCD+LED	3.5-inch touchscreen + statusLED	3.5-inch touchscreen + status LED
Installation	Wall-mounted	Wall-mounted	Wall-mounted
Warranty	10 years	10 years (5+5)	10 years (5+5)
Product Dimensions	430 x 769 x 250 mm	760 x 450 x 285 mm	760 x 450 x 285 mm
Net Weight	33.5 kg	/	/
Surge Protection	DC Type II / AC Type III	DC Type II/ AC Type II	DC Type II/ AC Type II

Low-voltage Hybrid Solar Inverter

IVGM Series | IVGM16KLP1G1

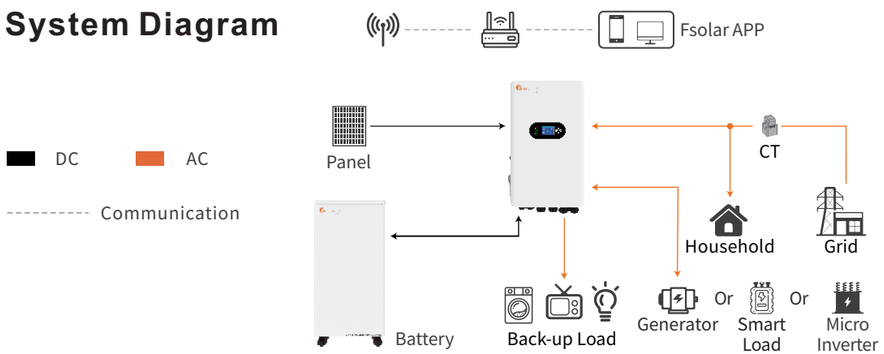
Single Phase



Features

- Configurable parameters and working mode by LCD touch screen.
- Supporting WiFi monitoring and Fsolar smart cloud monitoring system.
- Supports high current for battery charging/discharging.
- 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 multiple MPPTs for enhanced PV input capability.
- Programmable generator port, support smart load and micro inverter access.
- Max. 6 units in parallel.

System Diagram



Specifications

Model	IVGM16KLP1G1
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range	40V~60V
Max. Charging and Discharging Current	290A/290A
Charging Strategy for Li-ion Battery	Self-adaption to BMS
Number of Battery Input	2
PV String Input Data	
Max. PV Access Power	32000W
Max. PV Input Power	25600W
Max. PV Input Voltage	500V
Start-up Voltage	125V
MPPT Voltage Range	150V-425V
Rated PV Input Voltage	370V
Max Input Short-Circuit Current	44A+44A+44A
Max Operating PV Input Current	26A+26A+26A
No.of MPP Trackers/No.of String Per MPP Tracker	3/2+2+2
Grid Data	
Rated AC Input/Output Active Power	16000W
Max. AC Input/Output Apparent Power	17600VA
Peak Power (off-grid)(W)	2 Times of Rated Power, 10s
Rated AC Input/Output Current	72.7A/69.6A
Max. AC Input/Output Current	80A/76.5A
Max. Continuous AC Passthrough (grid to load)	100A
Rated Input/Output Voltage/Range	220V/230V 0.85Un-1.1Un
Grid Connection Form	L+N+PE
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz
Power Factor Adjustment Range	0.8 Leading to 0.8 Lagging
Total Current Harmonic Distortion THDi	<3% (of Nominal Power)
DC Injection Current	<0.5% In
Protection	
DC Reverse Polarity Protection	Integrated
AC Output Overcurrent Protection	Integrated
Thermal Protection	Integrated
AC Output Overvoltage Protection	Integrated
AC Output Short Circuit Protection	Integrated
DC Component Monitoring	Integrated
Arc Fault Circuit Interrupter (optional)	Integrated
Anti-islanding Protection	Integrated
DC Switch	Integrated
Insulation Impedance Detection	Integrated
Residual Current Detection	Integrated
Surge Protection Level	(TYPE II(DC), TYPE II(AC))
Interface	
Communication Interface	RS485/RS232/CAN
Monitor Mode	WIFI/Bluetooth
General Data	
Operating Temperature Range	-25°C~60°C, >45°C Derating
Ingress Protection (IP) Rating	IP65
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II(DC), OVC III(AC)
Net Weight	53 kg
Gross Weight	63,6 kg
Product Dimension	760*450*285 mm
Package Dimension	895*570*419 mm
Type Of Cooling	Intelligent air Cooling
Warranty	10 Years
Grid Regulation(In progress)	IEC61727, IEC62116, NRS097
Safety Regulation & EMC	IEC/EN61000-6-1/2/3/4, IEC/EN62109-1, IEC/EN62109-2

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

Low-voltage Hybrid Solar Inverter

IVGM Series | IVGM12KLP3G2

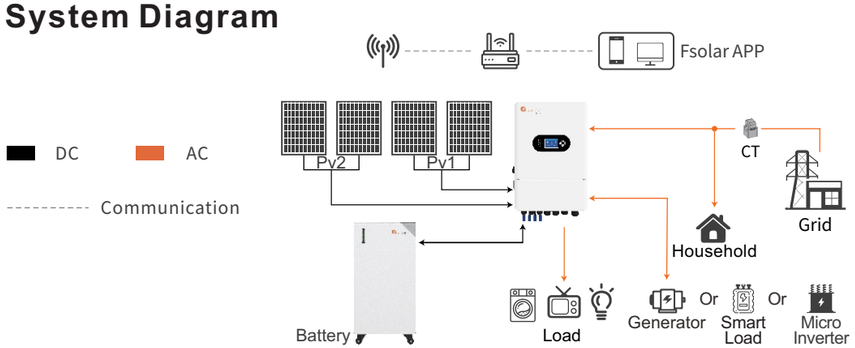
Three Phase



Features

- Supports WiFi monitoring and Fsolar 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.
- 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	IVGM12KLP3G2
Battery Input Data	
Battery Type	Li-Ion / Lead-acid
Battery Voltage Range	40V~60V
Max. Charging/Discharging Current	240A
PV String Input Data	
Max. PV Input Power	18kW
Max. PV Input Voltage	800V
Start-up Voltage	160V
MPPT Voltage Rang	200V-650V
Rated DC Input Voltage	550V
Full Load DC Voltage Range	350~650V
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
AC Input/Output Data	
Rated AC Input/Output Active Power	12kW
Max. AC Input/Output Apparent Power	13.2kVA
Peak Power (Off-grid)	2 Times of Rated Power, 10s
Rated AC Input/Output Current	17.4A
Max. AC Input/Output Current	19.2A
Max. Continuous AC Passthrough (Grid to Load)	45A
Max. Output Overcurrent Protection	52A
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)
Equipment Protection	
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	TYPE II(DC), TYPE II(AC)
Certification and Standards	
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
General Data	
Net Weight(KG)	37.8KG
Gross Weight(KG)	47.4KG
Product Dimension(MM)	634x444.5x255.2MM
Package Dimension(MM)	771x526x398MM
Protection Degree	IP65
Communication with BMS	RS485/CAN
Monitor Module	WiFi/4G
Warranty	10 Years

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

Low-voltage Hybrid Solar Inverter

IVGM Series | IVGM20KLP3G1

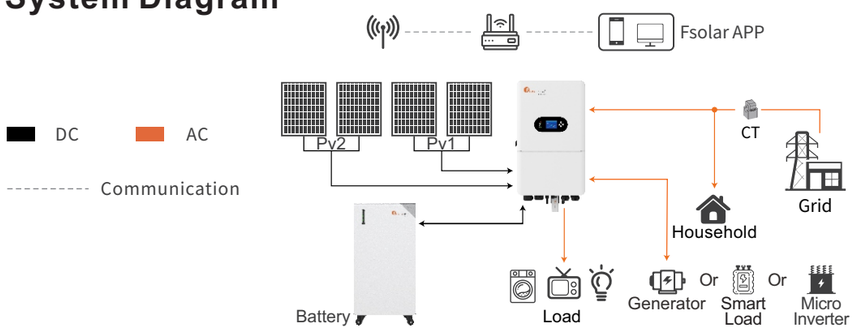
Three Phase



Features

- Supports WiFi monitoring and Fsolar 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
Battery Input Data	
Battery Type	Li-Ion / Lead-acid
Battery Voltage Range	40V~60V
Max. Charging/Discharging Current	350A
PV String Input Data	
Max. PV Input Power	32kW
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
Max. Operating PV Input Current	36+36(A)
Max. Input Short-Circuit Current	54+54(A)
No. of MPP Trackers /No. of Strings MPP Tracker	2/2+2
AC Input/Output Data	
Rated AC Input/Output Active Power	20kW
Max. AC Input/Output Apparent Power	22kVA
Peak Power (Off-grid)	2 Times of Rated Power, 10s
Rated AC Input/Output Current	28.9A
Max. AC Input/Output Current	31.9A
Max. Continuous AC Passthrough (Grid to Load)	70A
Max. Output Overcurrent Protection	92A
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)
Equipment Protection	
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)
Certification and Standards	
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
General Data	
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	10 Years

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

High-voltage Hybrid Solar Inverter

IVGM Series | IVGM25KHP3G3

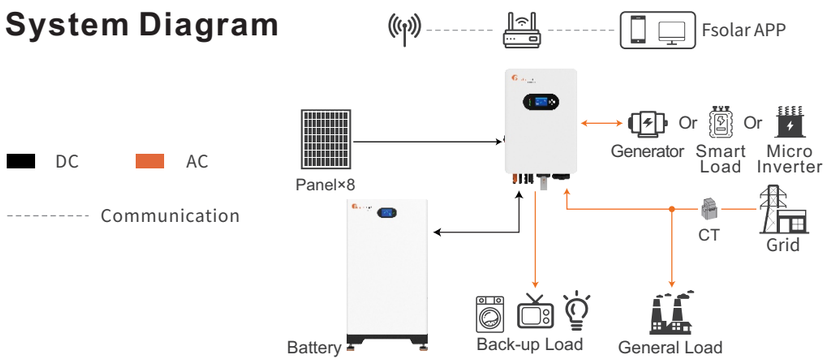
Three Phase



Features

- Configurable parameters and working mode by LCD touch screen.
- Supporting WiFi monitoring and Fsolar smart cloud monitoring system.
- Prevent grid overload with built-in limit function.
- 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. 1.6 times over configuration capacity.
- Programmable generator port, support smart load and micro inverter access.
- Max. 12 units in parallel.

System Diagram



Specifications

Model	IVGM25KHP3G3
Battery Input Data	
Battery Voltage Range	160~700Vdc
Max. Charging and Discharging Current	50A/50A
Max. Charging and Discharging Power	25kW
Battery Type	LFP(LiFePO4)
DC Input Data(PV side)	
Max. Recommended PV Power	50kW
Max. PV Voltage	1000V
Start Voltage	200V
MPPT Voltage Range	200V-850V
Nominal Voltage	600V
PV Input Current	30A+30A
Number of MPP Trackers / Strings Per MPP Tracker	2/2+2
Grid Data	
Nominal Input Voltage	220/380Vac, 230/400Vac (-20%~+15%)
Nominal Grid Frequency	50/60Hz (45~55Hz/55~65Hz)
Max. AC Output Power	27.5kVA
AC Output/Input Rated Current	36.3A
Max. Output Current	39.8A
Max. Continuous AC Passthrough	80 A
AC Output Data (Back Up)	
Rated Output Power	25kW
Max. Output Current	39.8A
Rated AC Output Voltage	220/380Vac, 230/400Vac (-20%~+15%)
Rated AC Output Frequency	50/60Hz (45~55Hz/55~65Hz)
Protection	
DC Polarity Reverse Connection Protection	Integrated
AC Output Overcurrent Protection	Integrated
AC Output Overvoltage Protection	Integrated
AC Output Short Circuit Protection	Integrated
Thermal Protection	Integrated
DC Terminal Insulation Impedance Monitoring	Integrated
DC Component Monitoring	Integrated
Ground Fault Current Monitoring	Integrated
Arc fault circuit interrupter (AFCI)	Integrated
Power Network Monitoring	Integrated
Island Protection Monitoring	Integrated
Earth Fault Detection	Integrated
DC input Switch	Integrated
Overvoltage Load Drop Protection	Integrated
Residual Current (RCD) Detection	Integrated
Surge Protection Level (TYPE II(DC), TYPE II(AC))	Integrated
General Data	
Operating Temperature Range	-40 to +60°C, >45°C Leistungsminderung
Protection Degree	IP65
Cooling Concept	Smart Cooling
Communication with BMS	CAN / RS485
Monitor Module	WiFi / 4G
Display	LCD + LED
Installation Style	Wall-mounted
Warranty	10 Years
Grid Regulation	NRS 097-2-1, VDE 4105, EN 50549-1,AS 4777.2,GB/T 34120,GB/T 34133,GB/T 34129
Safety Regulation & EMC	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
Net Weight	39.4 kg
Gross Weight	48.6 kg
Product Dimension	642x445x237.5 mm
Package Dimension	789x568x367 mm

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

High-voltage Hybrid Solar Inverter

IVGM Series | IVGM25~50KHP3G2

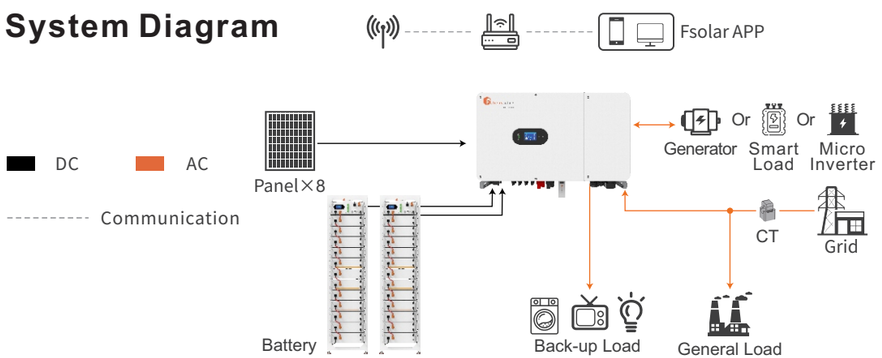
Three Phase



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
Battery Input Data					
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				
PV String Input Data					
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
AC Output Data					
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)				
Safety and Standards					
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Over Voltage Category	OVCII (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				
Protection					
PV Input Lightning Protection	Integrated				
PV String Input Reverse 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				
General Data					
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.

High-voltage Hybrid Solar Inverter

IVGM Series | IVGM20~60KHP3G2-US

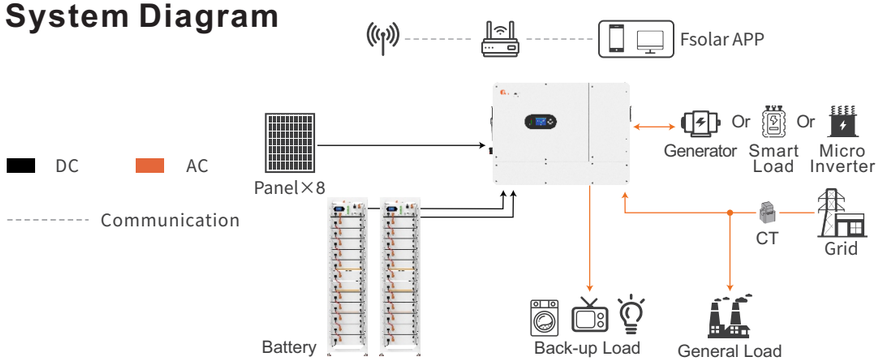
Three Phase



Features

- 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.
- Multi-string PV input, maximum solar energy harvest.
- Programmable supply priority for battery or grid.
- 2 independent battery inputs, effectively reducing inter-cluster circulation.
- Wide battery voltage input and high battery charge and discharge current up to 100A(50A+50A).
- 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	IVGM60KHP3G2-480-US	IVGM50KHP3G2-480-US	IVGM40KHP3G2-480-US	IVGM30KHP3G2-208-US	IVGM20KHP3G2-208-US
Battery Input Data					
Battery Type	LFP (LiFePO4)				
Battery Voltage Range	160~800Vd.c.				
Max. Charging/Discharging Current	50+50(A)				
Number of Battery Input	2				
BMS Communication	CAN/RS485				
PV String Input Data					
Max. PV Input Power	80kW				
Max. PV Input Voltage	1000Vd.c.				
Min. PV Input Voltage	150Vd.c.				
Start-up Voltage	180Vd.c.				
Rated DC Input Voltage	600Vd.c.				
MPPT Range	150~850Vd.c.				
Full Load DC Voltage Range	555~850Vd.c.	555~850Vd.c.	555~850Vd.c.	555~850Vd.c.	555~850Vd.c.
PV Input Current	36+36+36+36(A)				
Max. PV Isc	55+55+55+55(A)				
No.of MPP Trackers	4				
No.of Strings Per MPP Tracker	2				
AC Input/Output Data					
Max. AC Input/Output Power	60 kW	50 kW	40 kW	30 kW	20 kW
Max. AC Input/Output Current	72.2 A	60.2 A	48.1 A	83.3 A	55.5 A
Max. AC Coupled Input	60 kVA			30 kVA	
Rated AC Voltage	277/480 Vac (-20%~+15%)			120/208 Vac (-20%~+15%)	
AC Wiring Mode	3L+N+PE				
Rated AC Frequency	50 /60 Hz (45~55Hz/55~65Hz)				
Peak Power (off-grid)(W)	1.5 time of rated power, 10S				
Backup Transfer Time	10ms(adjustable)				
Max. AC Passthrough Current (grid to load)(A)	200 (A)				
Parallel Compatible	Up to 12 in parallel				
Safety and Standards					
Surge Protection Level	TYPE II(DC), TYPE III(AC)				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Certification Standard	UL 1741-2021 (UL1741SB), CSA C22.2 No 107.1-16, IEEE 1547-2018 & 1547a-2020 & 1547.1-2020 (SRD V2.0), UL 1741 CRD-PCS, UL1699B, CEC, SGIP, CSIP				
Protection					
PV Input Lightning Protection	Integrated				
PV String Input Reverse Polarity Protection	Integrated				
PV DC Disconnect Switch — NEC 240.15	Integrated				
PV Rapid Shutdown Control — NEC 690.12	Integrated				
PV Arc Fault Detection — NEC 690.11	Integrated				
Battery Input Lightning Protection	Integrated				
Battery Input Reverse Polarity Protection	Integrated				
Ground Fault Detection — NEC 690.41	Integrated				
Residual Current Monitoring Unit	Integrated				
Output Over Current Protection	Integrated				
Output Shorted Protection	Integrated				
Output Over Voltage Protection	Integrated				
Anti-islanding Protection	Integrated				
AC Output Lightning Protection	Integrated				
General Data					
Net Weight	93.5 KG				
Gross Weight	115.5 KG				
Product Dimension	975.5*705*324mm				
Package Dimension	1,118*855*470mm				
Protection Degree	NEMA 4X/IP65				
Operating Temperature Range	-40 to 60 °C (>45 °C derating)				
Humidity	0 ~ 95 % (No Condensation)				
Cooling	Smart Cooling				
Altitude	3000 m (> 2000 m derating)				
Monitor Module	WiFi/GPRS				
Installation Style	Wall-mounted				
Warranty	10 Years				

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

High-voltage Hybrid Solar Inverter

IVGM Series | IVGM125KHP3G1

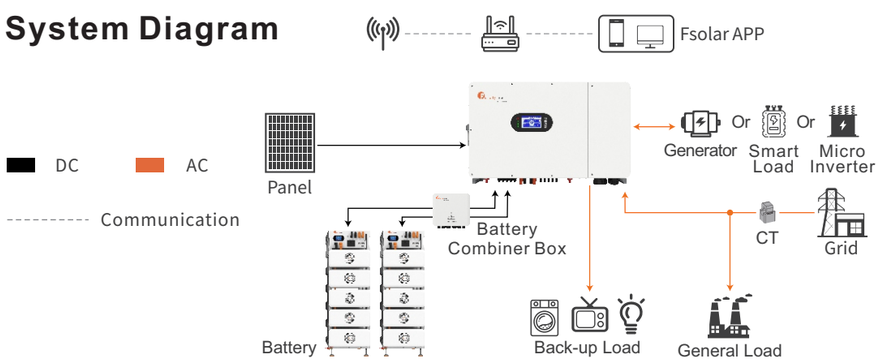
Three Phase



Features

- 0ms grid-to-off-grid transfer.
- Supports single-phase input, three-phase output.
- Active PID recovery function for long-term energy yield.
- Remote monitoring via Fsolar APP.
- Max. 12 units in parallel.
- 2× PV input oversizing.
- Dual independent batteries for stable high-power operation.
- Wide grid standard compatibility.
- IP66-rated protection.
- Generator / smart load / microinverter compatible.

System Diagram



Specifications

Model	IVGM125KHP3G1
Battery Input Data	
Battery Type	LFP (LiFePO4)
Battery Voltage Range	160~950Vd.c.
Max. Charging / Discharging Current	120+120(A)
Number of Battery Input	2
PV String Input Data	
Max. DC Input Power	250kW
Max. DC Input Voltage	1000Vd.c.
Start-up Voltage	180Vd.c.
Rated DC Input Voltage	600Vd.c.
MPPT Range	150~950Vd.c.
Full Load DC Voltage Range	555~950Vd.c.
PV Input Current	10x45(A)
Max. PV Isc	10x68(A)
No.of MPP Trackers	10
No.of Strings Per MPP Tracker	2
AC Input/Output Data	
Rated AC Input/Output Power	125kW
Max. AC Input/Output Power	137kVA
Max. AC Input/Output Current	198.6A
Max. Output Overcurrent Protection (A)	270 A
Max. AC Bypass (grid to load)	270 A
Single Phase Peak Power (off-grid)	1.5 times of rated power, 10s
Rated AC Voltage	220/380,230/400 Vac (-20%~+15%)
AC Wiring Mode	3L+N+PE
Rated AC Frequency	50 /60 Hz (45~55 Hz/55~65 Hz)
Safety and Standards	
Surge Protection Level	TYPE II(DC), TYPE III(AC)
Over Voltage Category	OVC II(DC), OVC III(AC)
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4110
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
Protection	
PV Input Lightning Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
Battery Input Lightning Protection	Integrated
Battery Input Reverse Polarity Protection	Integrated
DC Component Detection	Integrated
Insulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
Arc Fault Monitoring (optional)	Integrated
Output Over Current Protection	Integrated
Output Shorted Protection	Integrated
Output Over Voltage Protection	Integrated
Remaining Current (RCD) Monitoring	Integrated
Overheat Protection	Integrated
Anti-islanding Protection	Integrated
AC Output Lightning Protection	Integrated
General Data	
Protection Degree	IP66
Operating Temperature Range	-40 to 60 °C (> 45 °C derating)
Humidity	0~100 % (No condensation)
Cooling	Smart cooling
Altitude	4000 m
Inverter Topology	Non-isolated
Parallel Compatible	Up to 12 in parallel
LCD/LED Display	LCD+LED
Communication With BMS	RS485/CAN
Monitor Module	WIFI/Bluetooth/4G/LAN(optional)
Installation Style	Wall-mounted
Warranty	10 Years
Net Weight / Gross Weight (KG)	155.5KG / 198KG
Product Dimension(MM)	1271*810*364MM
Package Dimension(MM)	1410*960*646MM

*Product specifications may vary during continuous improvements. Please contact us for latest details.
*Refer to Felicitysolar's warranty policy for applicable conditions.

Portable Power Station

HOPE Series | HOPE1000

Low-voltage



Features

- 3-in-1 Design: inverter, LFP battery, and MPPT controller in one unit.
- Long-term investment: achieve energy freedom and enjoy brighter life.
- Portable and Light: only 8.7kg, easy to carry and use anywhere.
- Long Battery Life: 8,000 cycles for lasting performance.
- Extended Runtime: powers small to medium devices for 2–3 days with 1kWh capacity.
- Plug & Play: just connect your devices and use instantly.
- Effective Heat Dissipation: equipped with ventilation holes.
- Dual Charging Options: charge via grid power or solar PV.
- Quiet and Eco-friendly: clean power without noise or pollution.

Scenarios



Small Households



Camping



Small Stores

Specifications

Model	HOPE1000
Rated Power	250W
Rated Battery Capacity	1kWh
AC Input Voltage	150-264Vac
AC Input Frequency	45~55Hz
AC Charging Power	250W
AC Output Voltage	230Vac±10%
Operating Frequency	50Hz
PV Input Voltage	12-36V
Max. PV Input Power	200W
Battery	LiFePO4
Battery Capacity	314Ah
Shelf Time	1 Year (Fully-charged)
Weight	8.7kg
Dimension	210x130x288mm
Operating Temperature	0-45°C
Operating Altitude	<2000m
Humidity	95%
IP Level	IP20
Certifcatlon	UN38.3
Protection	Overcharge and overdischarge protection Overcurrent protection Overload protection Short circuit protection Fault protection

*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



3-in-1 Design



Easy to Carry and Use Anywhere



Dual Charging via Grid Power or PV



AC Bypass Mode

LiFePO4 Battery

FLA Series | FLA12100PG2

Low-voltage



Features

- Scalable expansion up to 16 pcs in parallel.
- Flexible Installation: floor-mounted.
- LiFePO4: higher safe performance and longer cycle life.
- Multiple protection with built-in smart BMS, and fuse.
- Compatible with leading inverter brands.
- Up to 5-year long warranty.

Scenarios



RV



Small Boat



Small Stores



Small Offices



Small Farms

Specifications

Model	FLA12100PG2
Battery Type	LiFePO4
Energy	1.28kWh
Nominal Voltage	12.8V
Operating Voltage	11.2-14.4V
Recommended Charge/Discharge Current	50A
Recommended Charge/Discharge Power	625W
Max. Continuous Charge/Discharge Current[1]	100A
Max. Charge/Discharge Power	1,250W
Depth of Discharge(DOD)	⩾ 95%
Scalability	Up to 16 units in parallel(20.48kWh)
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
Gross Weight	12.3kg
Product Dimension	295x201x199mm
Package Dimension	357x263x261mm

[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 | FLA12171PG2

Low-voltage



Features

- 2.18kWh capacity and 1.5kW power
- Supports up to 16 units in parallel for 34.88kWh
- Up to 4 units in series for flexible configuration
- > 95% DOD while > 6,000 cycles support long-term performance
- Smart BMS, built-in fuse and RS485/CAN
- 1.5 kW Max. Power
- 120 A Max. Continuous Charge/Discharge
- 5-Year Warranty

Scenarios


RV


Small Boat


Small Stores


Small Offices


Small Farms

Specifications

Model	FLA12171PG2
Energy	2.18kWh
Battery Type	LiFePO4
Nominal Voltage	12.8V
Operating Voltage	11.2-14.4V
Recommended Charge/Discharge Current	50A
Recommended Charge/Discharge Power	625W
Max.Continuous Charge/Discharge Current[1]	120A
Max.Charge/Discharge Power	1,500W
Depth of Discharge(DOD)	295%
Scalability	Up to 16 units in parallel(34.88kWh)
Max. Series Connections	4 Units
Communication	RS485/CAN
Protection Level	IP21
Cycle Life[2]	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	14.5±1kg
Gross Weight	17+1kg
Product Dimension	328x248x199±5mm
Package Dimension	391x310x257+5mm

[1] Max. continuous charge/discharge current is affected by temperature and Soc
[2] Test conditions: 0.2C Charging/Discharging @25°C, 80% DOD.

Setting	FLA12171PG2
Max. Charging Voltage	14.4V
Floating Charging Voltage	14.4V
Max. Charging Current	120A*N
Cut-off Voltage	11.2V

Notes: "N" means the number of battery packs connected in parallel.
Charge at constant current 50Auntil the voltage reaches 14.4, then charge at 14.4V til charge current is 9A.

LiFePO4 Battery

FLA Series | FLA12280PG2

Low-voltage



Features

- 3.58 kWh capacity and up to 1.92 kW output
- >6,000 cycles ensure reliable long-term performance
- Supports up to 16 units in parallel for 57.28 kWh
- Up to 4 units in series
- Built-in smart BMS, fuse and Wi-Fi monitoring
- 12.8 V Nominal Voltage
- 1.92 kW Max. Power
- RS485/ CAN Communication
- 5-Year Warranty

Scenarios


RV


Small Boat


Small Stores


Small Offices


Small Farms

Specifications

Model	FLA12280PG2
Energy	3.58kWh
Battery Type	LiFePO4
Nominal Voltage	12.8V
Operating Voltage	11.2-14.4V
Recommended Charge/Discharge Current	100A
Recommended Charge/Discharge Power	1250W
Max.Continuous Charge/Discharge Current[1]	150A
Max.Charge/Discharge Power	1920W
Depth of Discharge(DOD)	295%
Scalability	Up to 16 units in parallel(57.28kWh)
Max. Series Connections	4 Units
Communication	RS485/CAN
Protection Level	IP21
Cycle Life[2]	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	26kg±3%
Gross Weight	29kg±3%
Product Dimension	379x241x286±5mm
Package Dimension	438x300x344±5mm

[1] Max. continuous charge/discharge current is affected by temperature and soc

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

Setting	FLA12280PG2
Max. Charging Voltage	14.4V
Floating Charging Voltage	14.4V
Max. Charging Current	150A*N
Cut-off Voltage	12V

Notes: "N" means the number of battery packs connected in parallel.

LiFePO4 Battery

FLA Series | FLA24100~24460-EU



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

Specifications

Model	FLA24100-EU	FLA24171-EU	FLA24230-EU	FLA24280-EU	FLA24460-EU
Battery Type	LiFePO4				
Nominal Energy	2.56kWh	4.4kWh	5.85kWh	7.15kWh	11.7kWh
Nominal Voltage	25.6V	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	22.4-28.8V
Max. Continuous Charge/ Discharge Current [1]	100A	120A	150A	150A	200A
Peak Charge/Discharge Current (15s)	150A	150A	200A	200A	300A
Max. Charge/Discharge Power (15s)	2,500W	3,000W	3,840W	3,840W	5,000W
Scalability	Max. 15 pcs in Parallel(38.4kWh)	Max. 15 pcs in Parallel(66kWh)	Max. 15 pcs in Parallel(88.5kWh)	Max. 15 pcs in Parallel(107.25kWh)	Max. 15 pcs in Parallel(177kWh)
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, Breaker, Fuse				
Warranty Period	10 Years				
Certification	UN38.3				
Product Weight	27KG	39KG	52.5KG	71KG	93KG
Package Weight	30KG	44KG	57KG	90KG	113KG
Product Dimension	454X380X154MM	482X433X194MM	527X400X280MM	700X430X253MM	783X405X274MM
Package Dimension	543X472X232MM	600X555X282MM	646X522X358MM	780X550X427MM	900X525X450MM

[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.

Features

- Scalable expansion up to 15 pcs in parallel.
- Built-in WiFi for remote monitor the battery pack data.
- Flexible Installation: wall-mounted or floor-mounted.
- 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

Product Display


Real-time status via LCD Display


Built-in WiFi/Bluetooth for Remote Monitoring


Support Wall Mounted Installation



Wide Inverter Compatibility

High-Capacity

FLA Series | FLA24400WG2

Low-voltage



Features

- 10.24kWh High Capacity
- Up to 200A charging and 250A discharging provide strong power support for demanding loads
- Multi-layer electrical and fire protection for enhanced safety
- Scalable up to 153.6kWh
- Smart BMS
- Fire Protection
- 8000 Life Cycles
- 7 Years Warranty

Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

10kWh LiFePO4 BatteryFLA24400WG2

Model	FLA24400WG2
Nominal Energy	10kWh
Battery Type	LiFePO4
Nominal Voltage	25.6V
Operating Voltage	22.4-28.8V
Recommend Charge/Discharge Current	Charge 100A/Discharge 125A
Max. Charge/Discharge Current [1]	Charge 200A/Discharge 250A
Peak Charge/Discharge Current	300A@2mins
Max. Charge/Discharge Power	Charge 5100w / Discharge 6400w
Depth of Discharge (DOD)	95%
Scalability	Up to 15 units in parallel
Communication	CAN2.0, RS485, WIFI, Bluetooth
Protection Level	IP21
Cycle Life	⩾8000@25°C
Operating Temperature	Charge 0-55°C/Discharge-20-55°C
Storage Temperature	0-35°C
Display	LCD+LED
Installation	Wall-Mounted, Floor-Mounted
Protection	BMS, Fuse, Breaker, MX+OF
Warranty [2]	7 Years
Energy Throughput [2]	22 MWh
Net Weight	83.5kg ±3%
Gross Weight	101kg±3%
Product Dimension	589x450x289mm
Package Dimension	705x570x464mm

[1] The current is affected by temperature and SOC.
[2] Condition apply, refer to Felicitysolar Warranty Letter.
[3]25°C ±2°C/77°F ±3.6°F, 70% EOL.

10kWh LiFePO4 BatteryFLA24400WG2

Recommended Settings (Without Communication)	
Setting	FLA24400WG2
Max. Charging Voltage	28.8V
Floating Charging Voltage	28.8V
Max. Charging Current	200A*N
Cut-off Voltage	22.4V

Notes: 'N' means the number of battery packs connected in parallel.

High-Capacity

FLA Series | FLA24500WG2

Low-voltage



Features

- 12.5 kWh High-Capacity LiFePO4 Battery
- Supports up to 15 units in parallel
- 187.5 kWh storage capacity
- 95% DOD and over 6,000 cycles life
- Smart BMS, built-in fuse and wireless monitoring ensure safer and smarter operation
- 25.6V Nominal Voltage
- 300 A Peak Current
- 20°C to 55°C Discharge
- Over 6,000 cycles
- 7-Year Warranty

Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

Appendix I

Model	FLA24500WG2
Nominal Energy	12.5kWh
Battery Type	LIFePO4
Nominal Voltage	25.6V
Operating Voltage	22.4-28.8V
Recommend Charge/Discharge Current	Charge 100A Discharge 125A
Max. Charge/Discharge Current[1]	Charge 200A Discharge 250A
Peak Charge/Discharge Current	300A @ 2mins
Max. Charge/Discharge Power	Charge 5100W Discharge 6400W
Depth of Discharge(DOD)	95%
Scalability	Up to 15 units in parallel
Communication	CAN2.0, RS485,WIFI,Bluetooth
Protection Level	IP21
Cycle Life	26000@25°C
Operating Temperature	Charge 0~55°C Discharge-20~55 °C
Storage Temperature	0~35°C
Display	LCD+LED
Installation	Wall-Mounted, Floor-Mounted
Protection	BMS, Fuse
Warranty[2]	7 Years
Energy Throughput[2]	27 MWh[3]
Net Weight	91.5kg±3%
Gross Weight	114kg+3%
Product Dimension	787x450x254mm
Package Dimension	904x572x431mm

[1] The current is affected by temperature and SOC.
[2] Condition apply,refer to Felicitysolar Warranty Letter
[3]25°C±2°C/77°F ±35.6°F,70%EOL

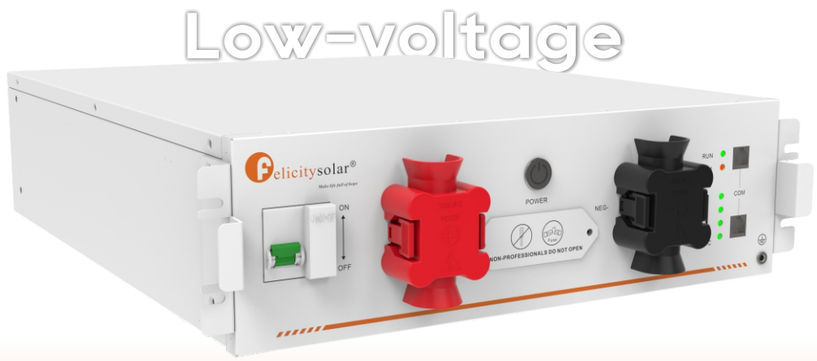
*In the absence of communication, please follow the recommended settings in the table below.

Setting	FLA24500WG2
Max. Charging Voltage	28.8V
Floating Charging Voltage	28.8V
Max. Charging Current	200A*N
Cut-off Voltage	22.4V

Notes: "N" means the number of battery packs connected in parallel.

LiFePO4 Battery

FLA Series | FLA48100UG1



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	CAN2.0/RS485
Protection Level	IP21
Cycle Life	⩾ 6,000 Cycles (25℃±2℃,0.5C/0.5C,90%DOD,70%EOL)
Charging Temperature Range	0℃~+55 ℃
Discharging Temperature Range	-20℃~+55 ℃
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.

Features

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

Scenarios


Houses


Off-grid Cabins


Small Stores


Small Offices


Small Farms

Product Display


Max. 32 units in parallel



Guaranteed safety, peace of mind

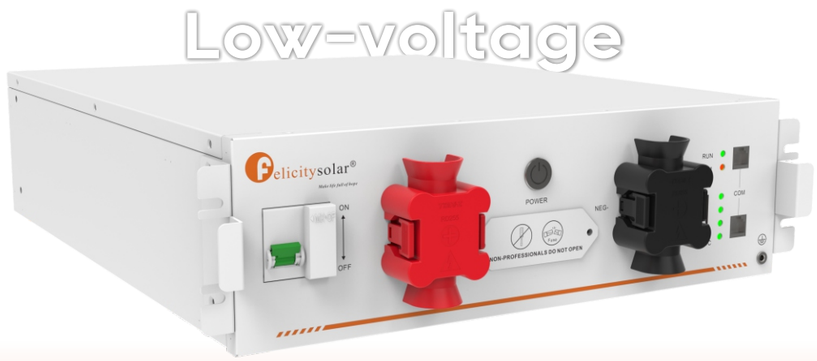


Max. 1C charge and discharge rate


Multiple installation choices, easy and convenient

LiFePO4 Battery

FLA Series | FLA48100UG2



Features

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

Scenarios


Houses


Off-grid Cabins


Small Stores


Small Offices


Small Farms

Specifications

Model	FLA48100UG2
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)	150A, 2min, 25°C
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	CAN2.0/RS485/WIFI/Bluetooth
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
Certification	IEC 62619, EN IEC 61000-6-1/2/3/4
Net Weight	43.3KG±3%
Gross Weight	49.2KG±3%
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-SA

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.
- Flexible Installation: wall-mounted / floor-mounted.

Specifications

Model	FLA48100-SA
Battery Type	LiFePO4
Energy	5.12kWh
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
Scalability	Max. 15 pcs in Parallel(76.8kWh)
Depth of Discharge(DOD)	⩾95%
Communication	CAN2.0/RS485/WIFI/Bluetooth
Protection Degree	IP21
Cycle Life[2]	⩾ 6000 Cycles
Charging Temperature Range	0°C~+55 °C
Discharging Temperature Range	-20°C~+55 °C
Display	LCD+LED
Installation	Wall-Mounted / Floor-Mounted
Protection	Built-in smart BMS, Breaker, Fuse
Warranty[3]	10 Years
Product Weight	48KG
Package Weight	55KG
Product Dimension	663X400X178MM
Package Dimension	757X497X252MM

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

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

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

Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

Product Display



Built-in WiFi/Bluetooth for Remote Monitoring



Aerosol Fire Extinguishing System



Support Wall Mounted Installation



Wide Inverter Compatibility

LiFePO4 Battery

FLA Series | FLA48100~48230-EU



(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 / Bluetooth 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.

Specifications

Model	FLA48100-EU	FLA48171-EU	FLA48206WG1-EU	FLA48230-EU
Battery Type	LiFePO4			
Nominal Energy	5.12kWh	8.75kWh	10.5kWh	11.7kWh
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
Max. Continuous Charge/Discharge Current [1]	100A	120A	160A	150A
Peak Charge/Discharge Current (15s)	150A	150A	300A	200A
Max. Charge/Discharge Power (15s)	7,500W	6,000W	8,200W	7,500W
Scalability	Max. 15 pcs in Parallel(76.8kWh)	Max. 15 pcs in Parallel(131.5kWh)	Max. 15 pcs in Parallel(157.5kWh)	Max. 15 pcs in Parallel(177kWh)
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		-20~55°C	0°C~+55 °C
Discharging Temperature Range	-20°C~+55 °C		-20~55°C	-20°C~+55 °C
Display Type	LCD+LED			
Installation	Wall-Mounted / Floor-Mounted			
Warranty Period	10 Years			
Protection	Built-in smart BMS, Breaker, Fuse		BMS, Fuse, Breaker, MX+OF	Built-in smart BMS, Breaker, Fuse,
Certification	IEC 62619, UN38.3, IEC/EN 61000-6-1/2/3/4		/	IEC 62619, UN38.3, IEC/EN 61000-6-1/2/3/4
Product Weight	55KG	68KG	90KG	97KG
Package Weight	77KG	88KG	101KG	115KG
Product Dimension	775X425X209MM	735X433X188MM	787×450×249MM	783X450X274MM
Package Dimension	892X545X385MM	849X550X362MM	900×568×344MM	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.

Scenarios


Houses


Off-grid Cabins


Small Stores


Small Offices


Small Farms

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.

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
Storge 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.

Scenarios


Houses


Off-grid Cabins


Small Stores


Small Offices


Small Farms

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.
- 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.

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.

Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

Product Display



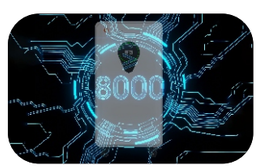
Built-in WiFi / Bluetooth for Remote Monitoring



Aerosol Fire Extinguishing System



External Battery Fuse Design



⩾8000 High Cycle Life

Low-Voltage Battery

FLA Series | FLA48400TG2

High-Capacity



Features

- 13 kW Maximum output power
- 20.48kWh Capacity
- 250A Max. Discharging Current
- Multi-Layer Protection
- Up to 15 Units in Parallel
- Wi-Fi & Bluetooth Monitoring
- 8000 Life Cycles
- 7-Year Warranty

Specifications

Model	FLA48400TG2
Nominal Energy	20kWh
Battery Type	LiFePO4
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommend Charge/Discharge Current	Charge 100A Discharge 125A
Max. Charge/Discharge Current[1]	Charge 200A Discharge 250A
Peak Charge/Discharge Current	300A @ 2mins
Max. Charge/Discharge Power	Charge 10.2kW Discharge 12.8kW
Depth of Discharge(DOD)	95%
Scalability	Up to 15 units in parallel
Communication	CAN2.0, RS485,WIFI,Bluetooth
Protection Level	IP21
Cycle Life	⩾8000@ 25°C
Operatng Temperature	Charge 0-55°C Discharge -20-55°C
Storage Temperature	0~35°C
Display	LCD+LED
Installation	Floor-Mounted
Protection	BMS, Fuse, Breaker, MX+OF
Warranty[2]	7 Years
Energy Throughput[2]	44.5 MWh [3]
Net Weight	150.5kg±3%
Gross Weight	179kg±3%
Product Dimension	960x450x265mm
Package Dimension	1040x570x481mm

[1] The current is affected by temperature and SOC.
[2] Condition apply,refer to Felicitysolar Warranty Letter.
[3] 25°C+2°C/77°F +3.6°F, 70%EOL.
*In the absence of communication, please follow the recommended settings in the table below.

Setting	FLA48400TG2
Max. Charging Voltage	57.6V
Floating Charging Voltage	57.6V
Max. Charging Current	200A*N
Cut-off Voltage	44.8V

Notes: *N* means the number of battery packs connected in parallel.

Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

Product Display



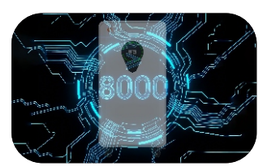
Built-in WiFi / Bluetooth for Remote Monitoring



Aerosol Fire Extinguishing System



External Battery Fuse Design



⩾8000 High Cycle Life

LiFePO4 Battery

FLA Series | FLA48460-EU

Low-voltage



Features

- Scalable expansion up to 354kWh 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 10-year long warranty.

Specifications

Model	FLA48460-EU
Battery Type	LiFePO4
Nominal Energy	23.5kWh
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Max. Continuous Charge/Discharge Current [1]	200A
Peak Charge/Discharge Current (15s)	300A
Max. Charge/Discharge Power (15s)	10,000W
Depth of Discharge (DOD)	⩾95%
Scalability	Max.15 pcs in Parallel(354kWh)
Communication	RS485/CAN
Protection Degree	IP21
Cycle Life [2]	⩾6,000 Cycles
Charging Temperature Range	0°C-55 °C
Discharging Temperature Range	-20°C-55 °C
Display	LCD+LED
Installation Style	Floor-Mounted
Protection	Built-in Smart BMS, Breaker, Fuse
Warranty	10 Years
Certification	UN38.3
Product Weight	226KG
Package Weight	256KG
Product Dimension	718X380X990MM
Package Dimension	825X498X1163MM

[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.

Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

Product Display



Longer Lasting
LiFePO4 Battery



Real-time Status
via LCD Display



Support 15 Pcs in Parallel



Wide Inverter Compatibility

LiFePO4 Battery

FLB Series | FLB24100/24230WG1



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.
- Easily replace the battery fuse when it blows.
- Equipped with an aerosol fire extinguishing system.
- 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.

Scenarios


Houses


Off-grid Cabins


Small Stores


Small Offices


Small Farms

Specifications

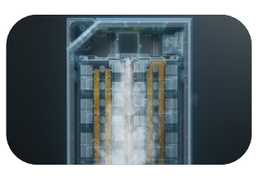
Model	FLB24100WG1	FLB24230WG1
Battery Type	LiFePO4	
Nominal Energy	2.56kWh	5.85kWh
Nominal Capacity	100Ah	230Ah
Nominal Voltage	25.6V	
Operating Voltage	22.4~28.8V	
Recommend Charge/Discharge Current	50A	100A
Max. Continuous Charge/Discharge Current[1]	100A	150A
Peak Charge/Discharge Current(15s)	150A	200A
Scalability	Max. 32 pcs in Parallel(81.92kWh)	Max. 32 pcs in Parallel(188.8kWh)
Depth of Discharge(DOD)	⩾95%	
Display Type	LED	
Protection Degree	IP65	
Working Temperature Range	Charge: 0°C~+55 °C	
	Discharge: -20°C~+55 °C	
Storge 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	10 Years	
Certification	UN38.3	
Product Weight	29.3KG	53KG
Package Weight	32.9KG	58KG
Product Dimension	540X375X150MM	540X375X261MM
Package Dimension	642X477X253MM	642X477X340MM

[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


Patented External Fuse Design


Aerosol Fire Extinguishing System


Built-in WiFi/Bluetooth for Remote Monitoring


IP65 Protection Level

LiFePO4 Battery

FLB Series | FLB48100/206/230WG1-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

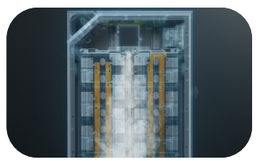
Specifications

Model	FLB48100WG1-H	FLB48206WG1-H	FLB48230WG1-H	FLB48314TG1/FLB48314TG1-H
Battery Type	LiFePO4			
Nominal Energy	5.12kWh	10.5kWh	11.7kWh	16kWh
Nominal Capacity	100Ah	206Ah	230Ah	314Ah
Nominal Voltage	51.2V			
Operating Voltage	44.8~57.6V			
Recommend Charge/Discharge Current	50A		100A	110A
Max. Continuous Charge/Discharge Current[1]	100A	160A	150A	160A
Peak Charge/Discharge Current(15s)	150A	300A	200A	300A
Scalability	Max. 32 pcs in Parallel(163.84kWh)	Max.32 pcs in Parallel(336kWh)	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-H Charge/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
Storge 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



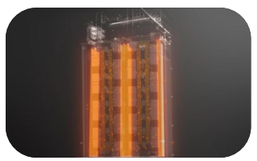
Aerosol Fire Extinguishing System



IP65 Protection Level



Scalable expansion up to 32 pcs in parallel



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

LiFePO4 Battery

FLB Series | FLB48280TG1-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

Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

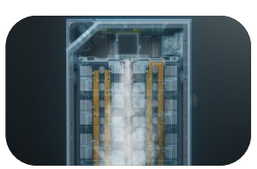
Specifications

Model	FLB48280TG1-H
Battery Type	LiFePO4
Nominal Energy	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(15s)	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	⩾8000@ 25°C
Operating Temperature	Charge: -20~55°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	140.5Kg
Product Dimension	450×895×235MM
Package Dimension	958×548×440MM

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

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

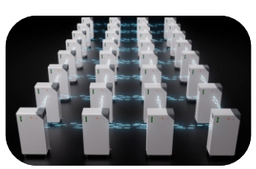
Product Display



Aerosol Fire Extinguishing System



IP65 Protection Level



Scalable expansion up to 32 pcs in parallel



Optional Thermal Module

LiFePO4 Battery

FLS Series | FLS48100SG1

Low-voltage



Features

- LiFePO4: Higher safe performance and longer cycle life.
- Flexible Installation: floor-mounted.
- Multiple Protection with built-in smart BMS, breaker and fuse.
- Compatible with leading inverter brands.
- Scalable expansion up to 8 units in parallel.
- Modular design for easy installation and increased capacity.
- Aerosol Fire Extinguishing System.

Scenarios



Houses



Off-grid Cabins



Small Stores



Small Offices



Small Farms

Specifications

Model		FLS48100SG1							
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							
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							
Storge Temperature Range		0°C~+35°C							
Humidity		5%~95%							
Altitude		⩽ 2000M							
Communication		RS485/CAN							
Cycle Life[2]		⩾ 6000 Cycles							
Installation		Floor-Mounted							
Protection		Built-in Smart BMS, Breaker, Fuse							
Warranty Period		10 Years							
Certification		UN38.3、CE-EMC、IEC 62619、CB							
Control Module FLS48100SCG1	Product Weight Approximate	46KG							
	Package Weight Approximate	60KG							
	Product Dimension	600X450X180 MM							
	Package Dimension	712X562X333 MM							
Battery Module FLS48100SMG1	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.

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

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

Product Display



Wide Inverter Compatibility



Aerosol Fire Extinguishing System



Real-time Status via LCD Display & SOC Display



Module Design for Easy Expansion

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							
Storge 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



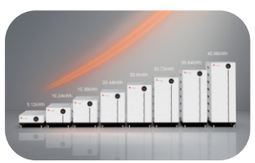
Multiple Protections



Real-time Monitoring



External Fuse Design

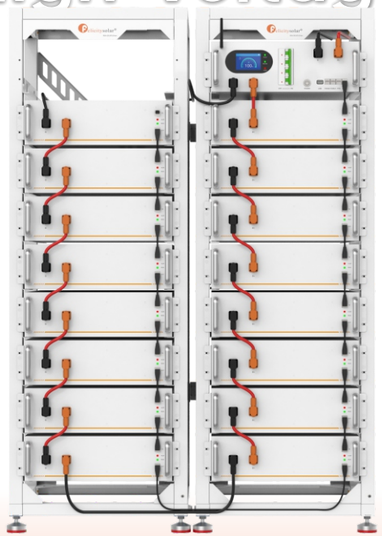


Max.8 Pcs in Parallel

LiFePO4 Battery

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 layerswith 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)[1]
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℃~+55℃			
		Discharge:-20℃~+55℃			
Storge Temperature Range		0℃~+35℃			
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 | FLH48314UG1

High-voltage



Features

- Remote monitoring via Fsolar APP.
- Peace of mind with fire protection module.
- Pack-level air cooling, high-efficiency thermal management.
- Max. 16 pcs (257kWh) in series, max. 16 clusters (4,1MWh) in parallel.
- ≥ 8000 cycles life.
- User-friendly touchscreen.

Scenarios



Small and Mid-sized Factories



Community Hospitals



Neighborhood Supermarkets



Farms



Hotels

Specifications

Model		FLH48314UG1MN[1]			
Battery Type		LiFePO4			
Nominal Energy		16.07kWh			
Nominal Voltage		51.2V			
Nominal Capacity		314Ah			
Number of Battery Modules		5(Min)	8	12	16(Max)[2]
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 Rated Energy		80.38kWh	128.61kWh	192.92kWh	257.22kWh
Rated Usabled Power		72.34kWh	115.74kWh	173.62kWh	231.49kWh
Recommend Charge/Discharge Current		157A			
Max. Continuous Charge/Discharge Current[3]		240A			
Depth of Discharge(DOD)		90%			
Display Type		LED+LCD (Touch)			
IP Rating of Enclosure		IP20			
Working Temperature Range		Charge:0℃~+55℃			
		Discharge:-20℃~+55℃			
Storge Temperature Range		0℃~+35℃			
Humidity		5%~95%			
Altitude		⩽3,000m			
Cycle Life[4]		⩾ 8,000 Cycles			
Installation		Module Stacking			
Protection		Built-in Smart BMS, MCCB with shunt trip function, Fuse			
Communication Port		RS485 / CAN / Enthernet / WiFi(2.4G)[5]			
Warranty Period[6]		10 Years			
Certification		CE/ IEC 62619/IEC62040/UN38.3			
Control Module FLH48314UCG1	Product Dimension	780x525.4x180mm			
	Package Dimension	890x602x333mm			
	Product Weight Approximate	31.5±3%kg			
	Package Weight Approximate	42.8±3%kg			
Battery Module FLH48314UMG1	Product Dimension	819.5x525.4x260mm			
	Package Dimension	925x560x405mm			
	Product Weight Approximate	123±3%kg			
	Package Weight Approximate	144.5±3%kg			
	Battery Designation	IFpP74/176/120/[1P16S]E/-20+50/90			
FLH48314UG1 Accessory Kit	Package Dimension Approximate	867x602x318mm			
	Package Weight Approximate	52±3%kg			

[1] N=5,6,7,8,9,10,11,12,13,14 or 16. N is the quantity of battery module connected series and should not exceed 16.(5⩽N⩽16)

[2] Currently, the battery supports a maximum of 16 battery modules. For the entire energy storage system, confirm the inverter's maximum supported voltage range to determine the maximum number of battery modules that can be installed.

[3] Max. continuous charge/discharge current is affected by temperature and SOC.

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

[5] A 10M/100M Ethernet port (RJ45) is provided for connecting the system to your local network via a router or switch. This connection enables core functions: software upgrades, remote monitoring & diagnostics, and cloud data synchronization. Advanced cloud-based services are in development. Availability and activation will be announced by the supplier. Contact them for future software updates to enable these features.

[6] Refer to Felicitysolar's warranty policy for applicable conditions.

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

Lead-acid Battery

G12V100AH~200AH



Features

- Lower self-discharge rate, extending battery life.
- Even electrolyte distribution, preventing stratification.
- Deeper discharge, maximizing lifespan.
- Lower charging current (1/3 of AGM), reducing energy use and heat.

Scenarios



Off-grid Cabins



Small Stores



Small Offices

Specifications

Model	G12V100AH	G12V150AH	G12V200AH
Cells Per Unit	6		
Voltage Per Unit	12		
Capacity	100Ah@10hr-rate to 1.80V per cell @25°C	150Ah@10hr-rate to 1.80V per cell @25°C	200Ah@10hr-rate to 1.80V per cell @25°C
Weight	31.5KG	42.5KG	60KG
Max. Discharge Current	1000A(5 sec)	1500A(5 sec)	2000A(5 sec)
Internal Resistance	Approx. 5.0mΩ	Approx. 4.2mΩ	Approx. 4.0mΩ
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50C Storage: -20°C~60°C		
Normal Operating Temperature Range	25°C±5°C		
Float Charging Voltage	13.6 to 13.8V DC/Unit Average at 25°C		
Recommended Maximum Charging	30A	45A	60A
Equalization and Cycle Service	14.4 to 14.6V DC/Unit Average at 25°C		
Self Discharge	GEL Batteries Can be Stored for More than 6 Months at 25°C. Self-discharge Ratio Less than 3% Per Month at 25°C. Please Charge Batteries Before Using.		
Size(MM)	330(L)x171(W)x218(H)	484(L)x241(W)x170(H)	522(L)x219(W)x240(H)
Certification	UN38.3		

*Product specifications may vary during continuous improvements. Please contact us for latest details.
*Refer to Felicitysolar's Warranty Policy for applicable conditions.

Capacity Factors With Different Temperature

Temperature	-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
Capacity Factor	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A)≤0.2C	0.2C< (A) <1.0C	(A) ≥1.0C

Charge the Batteries at Least Once Every Five Months, If They are Stored at 25°C.

Charging Method

Constant Voltage	-0.2Cx2h+14.4-14.7Vx24h,Max. Current O.3C
Constant Current	-0.2Cx2h+0.1Cx7h+0.05Cx4h
Fast	-0.2Cx2h+0.3Cx3h

Bolt	M5	M6	M8
Terminal	F3 F4 F13 F18 T25 T26	F8 F11 F12-1 F15	F5 F9 F10 F12 F14 F16
Torque	6~7N-m	8~10N-m	10~12N-m

Maintenance & Cautions

Cycle service

※ Avoid battery over discharge, especially battery sereis connection use.

※ Charged with recommend voltage, ensure battery can be full recharged. In general, recharge capacity should be 1.1-1.15 times discharge capacity.

※ Effect of temperature on cycle charge voltage: -4mV/°C/Cell.

※ There are a number of factors that will affect the length of cyclic service. The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged. Generally specking, the most important factors is depth of discharge.

C&I Energy Storage System

IVGM Series 50kW inverter & FLH Series 61 kWh 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-conditoning 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



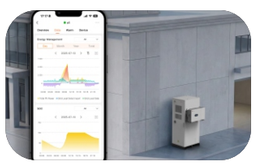
Hotels

Specifications

Model	FLH-E60
System Specification	
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
Battery Technical Specification	
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 (℃)	0~35℃
Operating Temperature Range	Charge: 0~55℃
	Discharge: -20~55℃
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

Liquid Cooling All-in-one System

FelicityMatrix 500 Series



Features

- BAT, BMS, PCS, EMS integration.
- Remote monitoring via Fsolar APP.
- Grid-to-off-grid Transfer.
- Peace of mind with fire protection module.
- C4 anti-corrosion and IP55 cabinet.
- Liquid-cooling chiller for optimal system temp.
- Reliable detection with smoke, temp, and immersion sensors.
- ≥ 8000 cycles life.

Scenarios



Small and Mid-sized Factories



Community Hospitals



Neighborhood Supermarkets



Farms



Hotels

Specifications

Model	FLM500-125/261
DC Side	
Cell type	LFP 3.2 V / 314 Ah
System battery configuration	260S1P
Nominal capacity	261.2kWh
Nominal voltage	832V
Voltage range	728~936V
Charge/discharge rate	0.5P
Depth of charge and discharge	95%
AC Side	
Nominal power	125kW
Nominal voltage	400V
Voltage range	360~440V
Access way	3P4L
Nominal frequency	50Hz/60Hz
THD	⩽3%
DC component	⩽0.5%
Power factor range	-1~1
Unbalance load capacity	100%
System Parameter	
Maximum System efficiency	⩾90%
Cycle Life[1]	⩾8000
Dimensions (W * H * D)	1050*2400*1350(mm)
Weight	2670KG
Degree of Protection	IP55
Anti-corrosion Degree	C4
Noise	⩽75db
Operation Humidity Range	0-95%
Operation Temperature Range	-25~55°C(Derating from 45°C)
Operating Altitude	2000m(Derating from 2000m)
Temperature Control Method	Liquid cooling
Fire Suppression System	Aerosol fire extinguishing equipment,Smoke detector, Heat detector, Water fire protection
Communication Interface	Ethernet /RS485
Max.Parallel Quantity	"On grid：20 pcs ; Off grid：6 pcs"
Standard	UN38.3、IEC62477、IEC61000、IEC62619、IEC63056、EN50549、IEC62109

[1]This is provided by the battery cell manufacturer. Based on cell test condition of 25±2°C, 0.5C charge and discharge rate and SOH=70%.

*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 50kW inverter & FLH 61 kWhHV LFP battery



Features

- Supports Single-phaseInput, Three-phase Output
- 150% UnbalancedThree-phase Output
- Wide Grid StandardCompatibility
- Remote Monitoringvia FSolar APP
- Max. Energy StorageCapacity Reaching 5.7MWh
- LFP Battery with FireProtection Module
- Time of Use Function,Smarter Grid Utilization
- IP65-rated Protection

Scenarios



Small and Mid-sized Factories



Community Hospitals



Neighborhood Supermarkets



Farms



Hotels

Specifications

Inverter Model		IVGM50KHP3G2			
BatteryInput Data					
Battery Type		LFP (LiFePO4)			
Battery Voltage Range		160~800vdc			
Max.Charging/Discharging Current		50+50(A)			
Number of Battery Input		2			
PV String Input Data					
Max. DCAccess Power		100kW			
Max. DC Input Power		80kW			
Max. DCInput Voltage		1000Vdc			
Start-up Voltage		180vdc			
Rated DCInput Voltage		600vdc			
MPPTRange		150-850vdc			
Full Load DCVoltage Range		550-850vdc			
PVInput Current		36+36+36+36(A)			
Max. PVIsc		55+55+55+55(A)			
No.of MPP Trackers		4			
No.of Strings Per MPP Tracker		2			
AC Output Data					
Rated AC OutputPower		50kW			
Max. AC Output Power		55kW			
AC Output Rated Current		72.5A			
Max.AC Current		79.7A			
Rated AC Voltage		110V/190V, 115V/200V, 120V/208V, 127V/220V, 133V/230V, 200V/346V, 220V/380V, 230V/400V,240V/415V, 277V/480V			
AC Wiring Mode		3L+N+PE			
Rated AC Frequency		50 /60 Hz (45~55Hz/55~65Hz)			
General Data					
Net Weight		87.1KG			
Gross Weight		107.1KG			
Product Dimension		940*582'340MM			
Package Dimension		1114*774'469MM			
Protection Degree		Ip65			
Warranty		10Years			
BatteryModel		FLH48100UG2			
Battery Type		LiFePO4			
Nominal Energy		5.12kWh			
NominalVoltage		51.2V			
Nominal Capacity		100Ah			
Number of Battery Modules		5(Min)	8	12	16(Max)^[1]
System Nominal Energy		25.6kWh	40.96kWh	61.44kWh	81.92kWh
System NominalVoltage		256V	409.6V	614.4V	819.2V
System Operating Voltage		232~288V	371.2~460.8V	556.8~691.2V	742.4~921.6V
Recommend Charge/Discharge Current		50A			
Max. Continuous Charge/Discharge Current[2]		100A			
Depth of Discharge(DOD)		90%			
Display Type		LED+LCD			
IPRatingof Enclosure		IP21			
Cycle Life[3]		> 6000 Cycles			
nstallation		Rack-Mounting			
Warranty Period[4]		10 Year			
Control Module FLH48100UCG2	Product Dimension	482.6x565x150MM			
	Package Dimension	687x562x269MM			
	Product Weight Approximate	10.3KG			
	Package Weight Approximate	16.7KG			
Battery Module FLH48100UMG2	Product Dimension	482.6x565x133MM			
	Package Dimension	687x562x250MM			
	Product Weight Approximate	41.3KG			
	Package Weight Approximate	45KG			
	Battery Designation[5]	IFpP/54/150/120/[(1P16S)NS]M/-20+50/95			

[1ICurently, The Battery Supports a Maximum of 16 BMUs. For the Entire Energy Storage System, Confirm the Inverter'sMaximum Supported Voltage RangetoDetermine 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.

Hybrid C&I ESS

IVGM50KHP3G2+ FLH48314UG1



Features

- 16.07 kWh LFP Modules
- Better Price for Larger Systems
- Supports flexible configuration of 5-16 battery modules
- 200% PV Access
- Supports up to 100KW PV access with 4 MPPTs and 8 PV strings
- 1-Phase In /3-Phase Out AC Conversion
- 1.5x Off-Grid Surge Power
- Smart TOU Energy Management
- 50 kW System Power
- 257 kWh Storage Capacity

Scenarios



Small and Mid-sized Factories



Community Hospitals



Neighborhood Supermarkets



Farms



Hotels

IVGM50KHP3G2 Hybrid Inverter

Battery Input Data	
Battery Type	LFP (LiFePO4)
Battery Voltage Range	160-800 Vdc
Max. Charging/ Discharging Current	50A+50A/50A+50A
Number of Battery Inputs	2
PV String Input Data	
Max. DC Input Power	65kW
Min. DC Input Voltage	150Vdc
Max. DC Input Voltage	1000Vdc
Start-up Voltage	250Vdc
Rated DC Input Voltage	600Vdc
MPPT Range	200-850Vdc
Full Load DC Voltage Range	450-850 Vdc
PV Input Current	36+36+36+36A
Max. PVIsc	55+55+55+55A
No. of MPP Trackers	4
Strings per MPPT Tracker	2
AC Input/Output Data	
Rated AC Output Power	50kW
Max. AC Output Power	55kW
Rated /Max. AC Current	72.5A/79.7A
Rated AC Voltage	220/380,230/400 Vac (-20%~+15%)
AC Wiring Mode	3W+N+PE
Rated AC Frequency	50/60 Hz (45-55 Hz/55-65 Hz)
THDI	<3% at rated power
Power Factor	0.8 leading to 0.8 lagging
Grid Regulation	NRS 097-2-1/VDE4105/EN50549-1
General Data	
Humidity	0-95% (No Condensation)
Protection Degree	IP65
Operating Temperature	40 to 60°C (>50°C derating)
Net/Gross Weight	87.1kg/107.1kg
Product Dimension	940x582x340 mm
Warranty	10Years

FLH48314UG1 High-Voltage Battery System

Overall System Parameters				
Model	FLH48314UG1			
Number of Battery Modules	5 (Min)	8	12	16 (Max)
System Nominal Voltage	256V	409.6V	614.4V	819.2V
System Operating Voltage	232-288V	371.2-460.8V	556.8-691.2V	742.4-921V
System Rated Energy	80.38kWh	128.61 kWh	192.92kWh	257.12 kWh
System Usable Energy	72.34 kWh	115.74 kWh	173.62 kWh	234.41 kWh
Humidity	5%-95%			
Enclosure Protection	IP20			
Installation	Module Stacking			
Display Type	LED+LCD (Touch)			
Warranty	10 Years			
Battery Technical Specifications				
Battery Chemistry/Cell Type	LiFePO4/314 Ah			
Battery Module Energy	16.07kWh			
Altitude	⩽3000m			
Module Nominal Voltage	51.2V			
Recommended Charge/ Discharge	157A			
Max. Continuous Charge/Discharge [1]	240A			
Battery Communication	RS485 /CAN /Ethernet/WiFi (2.4G)			
Storage Temperature	0-35°C			
Operating Temperature [2]	0-55°C/-20-55°C			
Depth of Discharge	90%			
Cycle Life	>8,000 @0.5C,25±2°C,EOL70%			
Certification	CE /IEC 62619 /IEC 62040/UN38.3			

[1] Current is affected by temperature and SOC.
[2] Derated operation above 45°C.

Hybrid C&I ESS

IVGM125KHP3G1 + FLH48314UG1



Features

- 0 ms Seamless Transfer
- Flexible Multi-Source Integration
- Smart Monitoring. Lower O&M
- Scalable to 1.5 MW /4.1 Mwh
- 125 kW System Power
- 257 kWh Storage Capacity
- 10 Channels PV Input
- Dual Battery Inputs
- Smart TOU Energy Management

Scenarios



Small and Mid-sized Factories



Community Hospitals



Neighborhood Supermarkets



Farms



Hotels

IVGM125KHP3G1 Hybrid Inverter

Battery Input Data	
Battery Type	LFP (LiFePO4)
Battery Voltage Range	160-950Vdc
Max. Charging/Discharging Current	120A+120A/120A+120A
Number of Battery Inputs	2
PV String Input Data	
Max. DC Input Power	250 kW
Max. DC Input Power per Tracker	25kW
Max. DC Input Voltage	1000 vdc
Start-up Voltage	180vdc
Rated DC Input Voltage	600vdc
MPPT Range	150-950vdc
Full Load DC Voltage Range	555-950vdc
PV Input Current	10x45A
Max. PV Isc	10x68A
No. of MPP Trackers	10
Strings per MPPT Tracker	1/1
AC Input/Output Data	
Rated AC Input/Output Power	125kW
Max. AC Input/Output Power	137 kVA
AC Rated /Max. Current	1812A/198.6A
Max. Output Overcurrent Protection	270A
Max. AC Bypass (gnd to load)	270A
Rated AC Voltage	220/380,230/400 Vac (-20%~+15%)
AC Wiring/Frequency	3L+N+PE/S0/60Hz
THDI	<3% (at rated power)
Power Factor	0.8 (leading) to 0.8 (lagging)
Efficiency & General Data	
Max./Euro/ MPPT Efficiency	98.8%/98.2%/99.90%
Protection Degree	IP66
Operating Temperature	40 to 60°C (>45°C derating)
Net/Gross Weight	151.6kg/208.5 kg
Product Dimension	1250x796x364mm
Warranty	10 Years

FLH48314UG1 High-Voltage Battery System

Overall System Parameters				
Model	FLH48314UG1			
Number of Battery Modules	5 (Min)	8	12	16 (Max)
System Nominal Voltage	256V	409.6 V	614.4 V	819.2V
System Operating Voltage	232-288V	371.2-460.8 V	556.8-691.2 V	742.4-921 V
System Rated Energy	80.38 kWh	128.61 kWh	192.92 kWh	257.12 kWh
System Usable Energy	72.34 kWh	115.74 kWh	173.62 kWh	234.41 kWh
Humidity	5%-95%			
Enclosure Protection	IP20			
Installation	Module Stacking			
Display Type	LED+LCD (Touch)			
Warranty	10 Years			
Battery Technical Specifications				
Battery Chemistry/ Cell Type	LiFeP04/314 Ah			
Battery Module Energy	16.07kWh			
Altitude	⩽3000m			
Module Nominal Voltage	51.2V			
Recommended Charge / Discharge	157A			
Max. Continuous Charge/Discharge [1]	240A			
Battery Communication	RS485/CAN /Ethernet/WiFi (2.4G)			
Storage Temperature	0-35°C			
Operating Temperature [2]	0-55°C/-20-55°C			
Depth of Discharge	90%			
Cycle Life	>8,000 @0.5C,25+2°C,EOL70%			
Certification	CE/IEC 62619/1EC 62040/UN38.3			

[1] Current is affected by temperature and SOC.
[2] Derated operation above 45°C.

Energy Storage System

IVGM125KHP3G1+FLH-E257



Features

- 125kW Hybrid Power Platform
- Assembled 257 kWh Cabinet
- Modular and Flexible Expansion.
  Scalable to 98.6 MWh
- Engineered for Outdoor Reliability
- IP55 Cabinet Protection
- 250kW Max. PV Input
- Intelligent Temperature Control
- 314Ah Cell Capacity
- 12 Units Max. Parallel Operation

Scenarios



Small and Mid-sized Factories



Community Hospitals



Neighborhood Supermarkets



Farms



Hotels

IVGM125KHP3G1 Hybrid Inverter

Battery Input Data	
Battery Type	LFP (LiFePO4)
Battery Voltage Range	160-950 Vdc
Max. Charging / Discharging Current	120A+120A/120 A+120A
Number of Battery Inputs	2
PV String Input Data	
Max. DC Input Power	250 kW
Max. DC Input Power per Tracker	25 kW
Max. DC Input Voltage	1000 Vdc
Start-up Voltage	180 Vdc
Rated DC Input Voltage	600 Vdc
MPPT Range	150-950 Vdc
Full Load DC Voltage Range	555-950 Vdc
PV Input Current	10x45A
Max. PV Isc	10x68A
No. of MPP Trackers	10
Strings per MPPT Tracker	2
AC Input/Output Data	
Rated AC Input / Output Power	125 kW
Max. AC Input / Output Power	137 kVA
AC Rated / Max. Current	181.2A/198.6A
Max. Output Overcurrent Protection	270A
Max. AC Bypass (grid to load)	270A
Rated AC Voltage	220/380,230/400 Vac
AC Wiring / Frequency	3L+N+PE/ 50-60 Hz
THDI	<3% at rated power
Power Factor	0.8 leading to 0.8 lagging
Efficiency & General Data	
Max. / Euro / MPPT Efficiency	98.8%/98.2%/99.90%
Protection Degree	IP66
Operating Temperature	-40 to 60°C (>45°C derating)
Net / Gross Weight	151.6 kg/208.5 kg
Product Dimension	1250 x 796 x 364 mm
Warranty	10 years

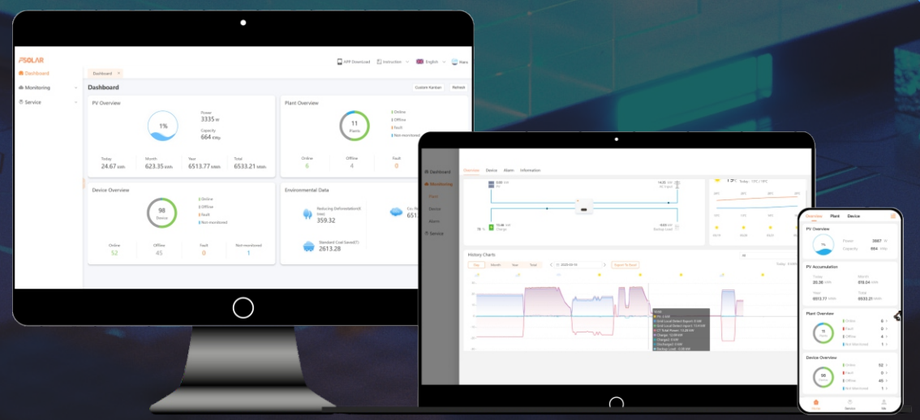
FLH-E257 EnergyStorage Cabinet

Overall System Parameters	
Model	FLH-E257
System Rated Energy	257.22 kWh
Battery Nominal Voltage	819.2V
Battery Operating Voltage	742.4-921.6 V
Humidity	5%-95% RH
Altitude	3000 m
Enclosure /Anti-corrosion	IP55 / C4 (C5 optional)
Dimension (W x D x H)	1350 x 1300 x 2400 mm (without inverter)
Approx. Weight	2780 kg (without inverter)
Heat Exchange / Installation	Smart air cooling / Floor-mounted
Warranty	10 years
Battery Technical Specifications	
Battery Chemistry / Cell Type	LiFePO4/314 Ah
Battery Module Energy	16.07 kWh
Number of Battery Modules	16
Module Nominal Voltage	51.2V
Recommended Charge / Discharge	157A
Max. Continuous Charge / Discharge [1]	240A
Battery Communication	RS485 / CAN
Storage Temperature	0-35°C
Operating Temperature [2]	-20-55°C
Depth of Discharge	90%
Cycle Life	>8,000 @25°C, 0.5P, EOL70%
Certification	UN38.3, CE, IEC62619, IEC63056, IEC62477

[1] Current is affected by temperature and SOC.
[2] Derated operation above 45°C.

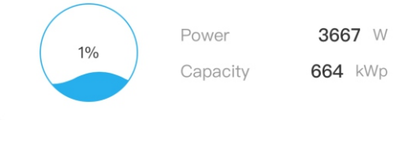
FSOLAR Smart Energy Management Platform

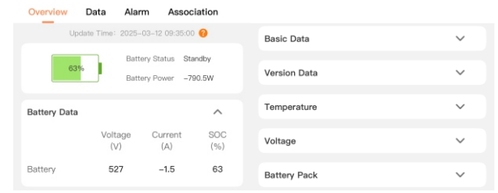
The FSOLAR smart energy management platform is designed to provide comprehensive monitoring, analysis, and management of your energy systems. It allows you to maximize energy efficiency, optimize usage, and enhance system performance.



1. Real-time Data Insight

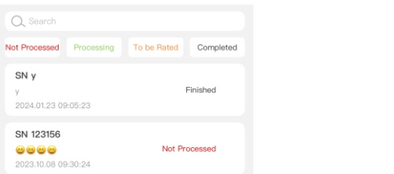
- Track daily, monthly, yearly and cumulative energy generation of all systems and individual units.
- Access battery pack details, including current, voltage, SOC, etc.





2. System and Device Status Monitoring

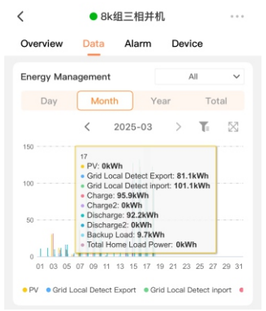
- Real-time devices status: online, offline, faulty, or unmonitored.
- Easily identify the current health and operational status of your system.





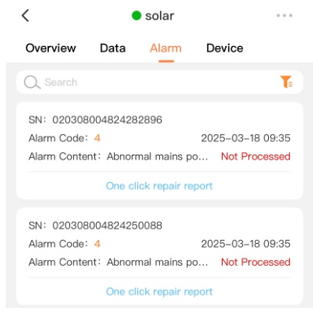
3. Historical Data Analysis

- 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 tobuild dynamic dashboards for live insights and configure automated alert.

APP Download

Download on App Store

GET IT ON Google Play

Smart WiFi Module

2.4G WiFi



Features

- Plug and Play with Easy Configuration.
- Enables Remote Inverter Monitoring.
- LED Indicator for Intuitive Working Status

Note: Sold separately; not included with inverter packages.

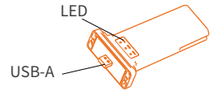
Product Introduction

Smart IOTH2403 WiFi module for solar inverter enables wireless communication between inverters and the monitoring platform. Simply connect the module to the inverter, and install the app from Google Play or the Apple Store. You can then monitor the inverter's parameters in real time through your mobile phone.

Specifications

Model	IOTH2403
General Data	
Product size (width/height/thickness) MM	122.5*68.5*27.2 mm
Packaging Size (width/height/thickness) MM	155*80*35 mm
Net Weight	74.1 g
Gross Weight	128.4 g
WiFi Performance	
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
	HT40(MCS7): -70±2dBm
Electrical Parameters	
Operating Voltage	12V
Maximum Current	500mA
Working Environment	
Protection Level	IP65
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +125°C,< 90%RH
Application Parameters	
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	IOTH2403
NAME	Smart WiFi-S
WiFi NET WORK	2.4G WiFi
PICTURE	
LED status:	802.11b/g/n
PWR	ON,Normalpower supply
COM	ON,Normalpower supply
NET	ON,Normal communication with the 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.

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	IOTH2407
General Data	
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
WiFi Performance	
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
	HT40(MCS7): -70±2dBm
Electrical Parameters	
Operating Voltage	12V
Maximum Current	500mA
Working Environment	
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
Application Parameters	
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	IOTH2407
NAME	Smart WiFi-S
WiFi NET WORK	2.4G WiFi
LED status	
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

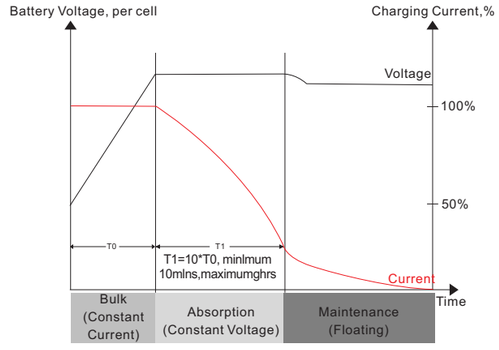
SCCM Series | SCCM15048



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
Electrical Specifications	
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
Battery Charging	
Charging Algorithm	3-Step
Charging Stages	Bulk, Absorption, Float
Charging Curve	
Mechanical and Environment	
Product Size (WxHxD, mm)	422x370x140
Product Weight (KG)	9.7 KG
Outter Carton Size (W x H x D,mm)	485x464x198
Outter 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

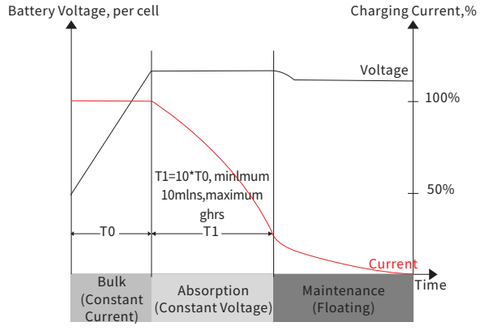
SCCM-II Series | SCCM2024-II



Features

- Maximum efficiency up to 98%.
- Enhanced Battery Performance with Three-Stage Charging.
- Multiple charging currents up to 20A.
- Efficiency increasing 25%~30% with intelligent maximum power point tracking technology.

Specifications

Model	SCCM2024-II
Electrical Specifications	
Maximum Battery Current	20Amps
Nominal System Voltage	12,24Vdc(Auto Detection)
Maximum Solar Input Voltage	95V
PV Start-up Voltage	15V
PV Array MPPT Voltage Range	12Vdc/24Vdc
	15-80Vdc/30-80Vdc
Maximum Input Power	12V - 280W
	24V - 550W
Battery Charging	
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	
Mechanical and Environment	
Product Size (WxHxD, mm)	240x170x102
Product Weight(KG)	0.9 KG
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.

MPPT Solar Charge Controller

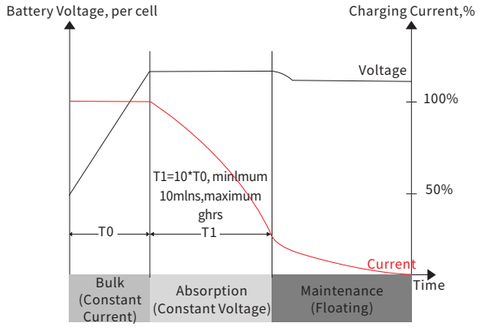
SCCM-III Series | SCCM3024~12048-III



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.

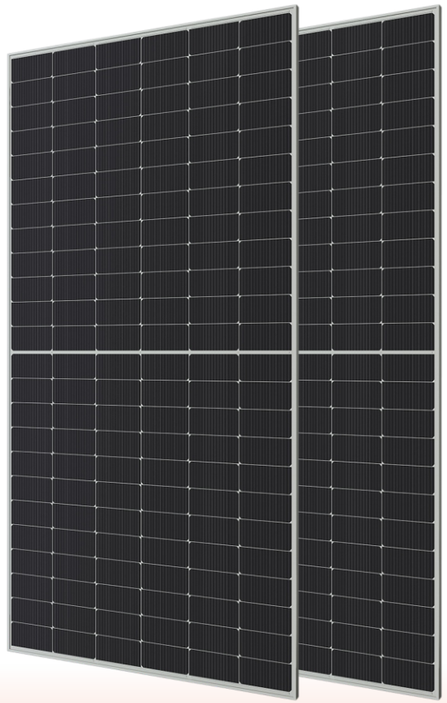
Specifications

Model	SCCM3024-III	SCCM4524-III	SCCM6048-III	SCCM8048-III	SCCM10048-III	SCCM12048-III
Electrical Specifications						
PV Start-up Voltage	20V					
Maximum Charge Curent	30Amps	45Amps	60Amps	80Amps	100Amps	120Amps
Nominal System Voltage	12,24V (Auto Detection)		12V, 24V, 48V (Auto Detection)			
Maximum Solar Input Voltage	95V		145V		165V	
MPPT Voltage Range	12VDC/24VDC		12Vdc/24Vdc/48Vdc		12Vdc/24Vdc/48Vdc	
	18-80VDC/35-80VDC		18-125Vdc/35-125Vdc 65-125Vdc		18-145Vdc/35-145Vdc 65-145Vdc	
Maximum Input Power	12V - 420W	12V - 625W	12V - 825W	12V - 1100W	12V - 1375W	12V - 1650W
	24V - 830W	24V - 1250W	24V - 1650W	24V -2200W	24V - 2750W	24V - 3300W
	/	/	48V - 3300W	48V - 4400W	48V - 5500W	48V - 6600W
Battery Charging						
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						
Mechanical and Environment						
Product Size (WxHxD, mm)	200.2x137.2x65	221x151.4x80.5	276.4x184.4x100	289.4x198.4x103.6	329x219x118.5	329x219x118.5
Product Weight(KG)	1 KG	1.5 KG	3.3 KG	3.5 KG	5.2 KG	5.2 KG
Inner Box Size (W x H x D, mm)	240x170x102	265x188x116	308x212x125	322x238x140	370x250x156	370x250x156
Inner Box Weight (KG)	1.3 KG	1.9 KG	3.7 KG	4 KG	5.9 KG	5.9 KG
Outer Carton Size (W x H x D, mm)	495x355x222	546x392x250	635x440x268	663x492x298	758x518x172	758x518x172
Outer Carton Weight (KG)	11.3(8PCS)	16.4(8PCS)	31(8PCS)	33.3(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.

Monocrystalline Solar Panels

1-72HTBD-580M



Features

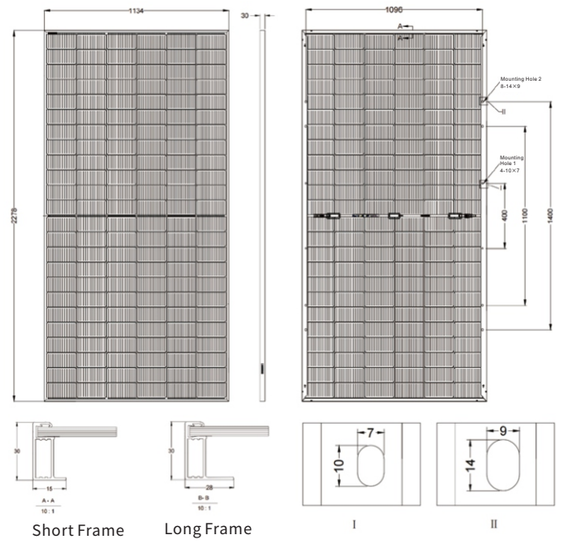
- Conversion efficiency up to 23.2%.
- Strong anti-degradation:only 1% power loss in the first year, just 0.4% per year after.
- High energy output in real conditions:better temp coefficient, low-light performance, and bifacial efficiency.

Specifications

Model	1-72HTBD-580M
Rated Maximum Power (Pmax)	580W
Open Circuit Voltage (Voc)	51.47V
Maximum Power Voltage (Vmp)	42.59V
Short Circuit Current (Isc)	14.37A
Maximum Power Current (Imp)	13.62A
Frame	anodized aluminium alloy
Front Glass	heat strengthened coated glass (0.08in / 2.0mm)
Back Glass	heat strengthened glass (0.08in / 2.0mm)
Output Cables	TüV 1×4mm², (+)300mm, (-)200mm (support customization)
Temperature Coefficent of Isc (a_Isc)	+0.045% / ℃
Temperature Coefficent of Voc (β_Voc)	-0.25% / ℃
Temperature Coefficent of Pmax (y_Pmp)	-0.29% / ℃
Protection Level	Class II
Weight	68.34 lbs / 31.0 kg
Dimensions	89.68× 44.65× 1.18in / 2278×1134×30mm
Operating Conditions	
Maximum System Voltage	DC1500V (IEC)
Operating Temperature	113 ± 3.6°F / 45±2℃
Maximum Series Fuse	30A
Maximum Static Load,Front	5400Pa
Maximum Static Load,Back	2400Pa
Certifications	CE,IEC 61215(2021)/IEC 61730(2023),PID
STC	Irradiance 1000W/m², cell temperature 77°F / 25°C, spectrum AM1.5

*Standard Test Conditions: irradiance of 1000W/m², cell temperature at 77°F / 25°C, and AM1.5 solar spectrum
*Refer to Felicitysolar's Warranty Policy for applicable conditions.

Solar Panel Dimensions



PV Combiner Box

PVCB0601/0801



Features

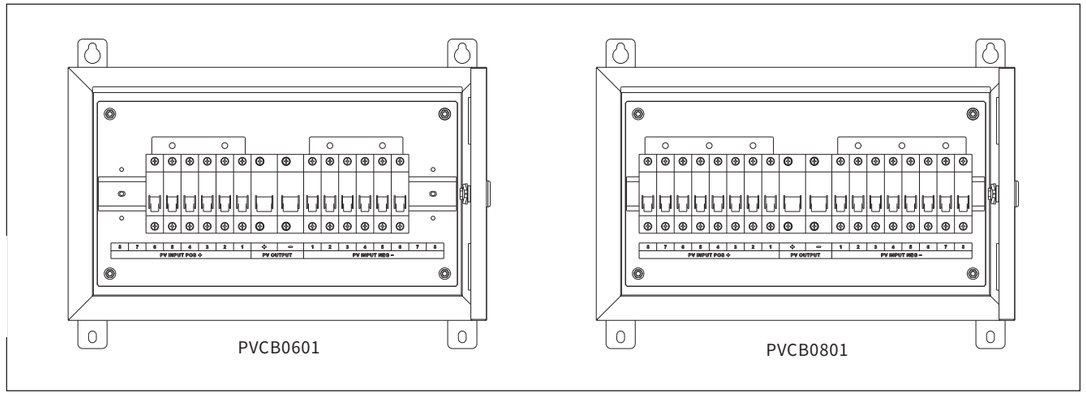
- Electric energy gathering.
- Group string protection.
- Detection and protection.
- Electricity transmission.

Specifications

Model	PVCB0601	PVCB0801
Max. Imum Input Voltage	500V	500V
Max. Imum Number of Input Paths	6	8
Max. Imum Allowable Input Current of Branch	15A	15A
Max. Imum Output Current	100A	100A
Lightning Protection Device	Surge Switch	
Shell Material	Metal Chassis	
Input Cable Diameter	4~8mm²	
Output Cable Diameter	5~10mm²	
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

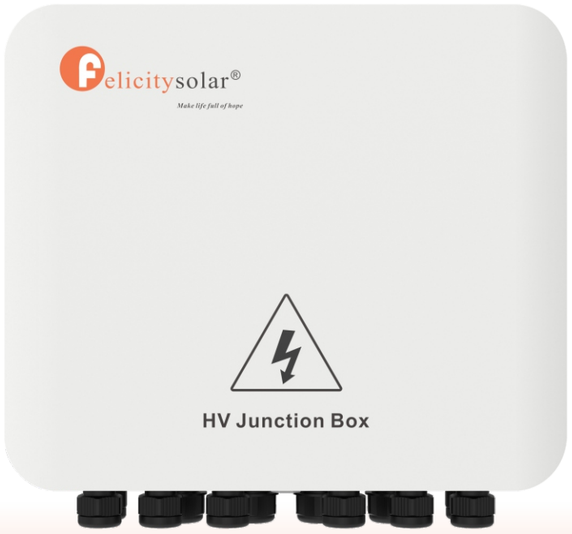
*Refer to Felicitysolar's Warranty Policy for applicable conditions.

Internal Schematic Diagram of the Product



Battery Combiner Box

BTCB0402-300-HB



Features

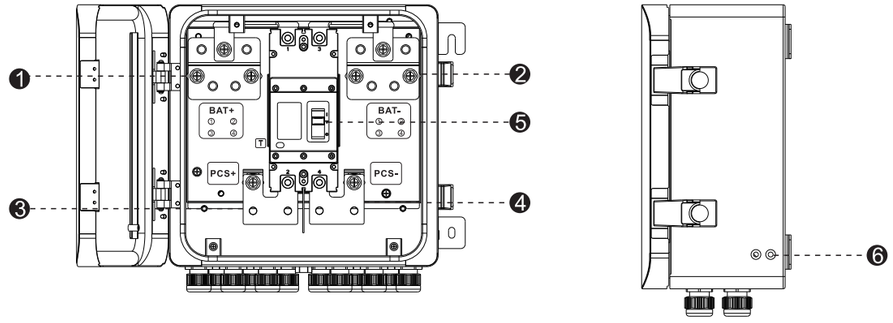
- Fit for FLH series HV battery parallel connection
- 4-input 2-output, IP65-rated protection
- Max. continuous rated current up to 240A
- 300A peak current (≤30min)
- Enhanced safety with built-in DC circuit breaker (1000V 320A)

Specifications

Model	BTCB0402-300-HB
Max. Imum Number of Input Paths	4-Input 2-0utput
Rated Voltage of Branch[V]	1000
Maximum Continuous Rated Current (A)	240
Maximum Peak Current (A)	300(⩽30 min)
Battery Switch	PEMC-H
Shell Material	Metal chassis
Protection Level	IP65
Operating Temperature Range	-20°C~60°C
Net Weight(KG)	7.4
Gross Weight(KG)	11.5
Product Dimension(MM)	366x290x152.5
Package Dimension(MM)	410x382x230
Altitude (m)	⩽3000
Cooling Method	Natural cooling
Installation Location	Indoor/Outdoor
Installation Method	Wall-mounted

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

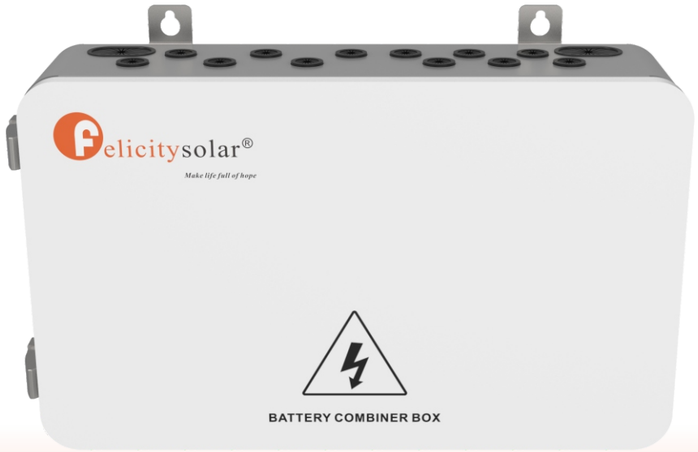
Overview



1.BAT+ input busbar
2.BAT- input busbar
3.PCS+ output busbar
4.PCS- output busbar
5.Circuit breaker (1000V 320A)
6.Ground Terminal

Battery Combiner Box

BTCB0606-120/200 & BTCB0303-120/200



Features

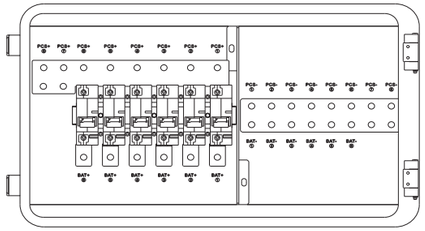
- Convenient circuit wiring.
- Superior flow expansion for higher efficiency.
- Robust high-current handling for reliable performance.

Specifications

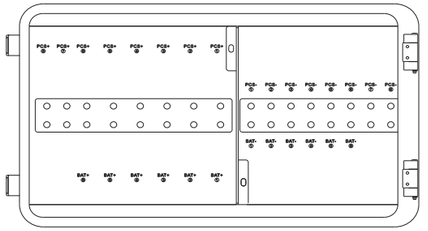
Model	BTCB0606-120	BTCB0606-200	BTCB0303-120	BTCB0303-200
Max. Imum Number of Input Paths	6	6	3	3
Rated Voltage of Branch[V]	80	/	80	/
Branch Rated Current[A]	125	200	125	200
Battery Switch	PEBS-L	/	PEBS-L	/
Shell Material	Metal Chassis			
Protection Level	IP21			
Operating Temperature Range	-10°C~50°C			
Net Weight(KG)	8.1KG	7.1KG	7.4KG	6.8KG
Gross Weight(KG)	9.7KG	8.7KG	9.0KG	8.4KG
Product Dimension(MM)	516×300×136MM			
Package Dimension(MM)	592×392×218MM			

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

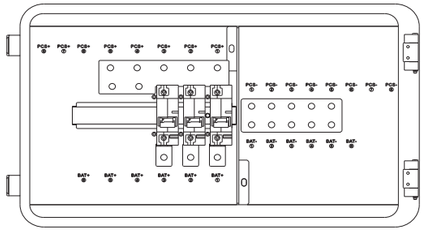
Internal schematic diagram of the product



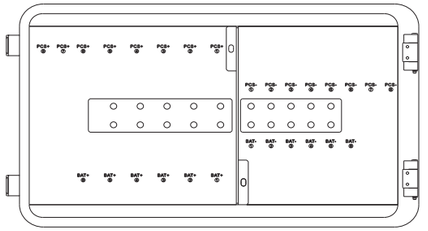
BTCB0606-120 with breaker 125A*6PCS



BTCB0606-200 without breaker



BTCB0303-120 with breaker 125A*3PCS



BTCB0303-200 without breaker

Battery Combiner Box

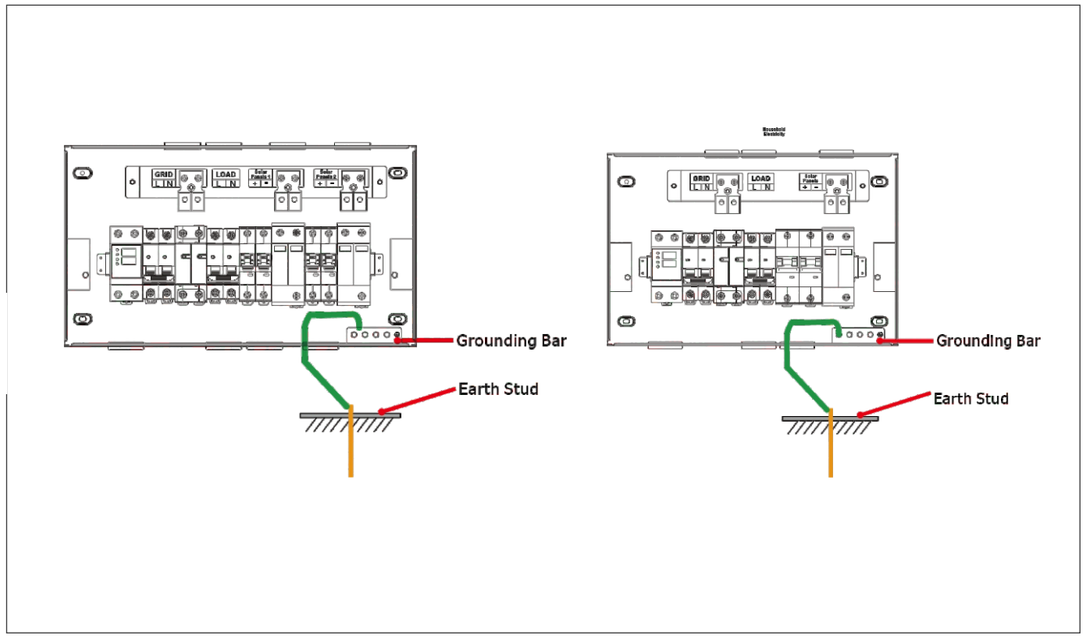
E-box63A &100A



Specifications

Model	Ebox-63A		Ebox-100A	
Rated Voltage	230 VAC			
Rated Current	63A/ 100A (depending on model)			
Frequency	50Hz			
SPD Type	Type II			
Protection Level	IP20			
Operating Temperature	-25°C~+60°C			
Net Weight(kg)	4kg		3.4kg	
Gross Weight	4.8kg		4.2kg	
Product Dimension(mm)	385x220x94		332x220x94	
Package Dimension(mm)	447x282x158		395x282x158	
Circuit	Ebox-63A	EBoX-63A	Ebox-100A	Ebox-100A
Breaker Rating	AC	DC	AC	DC
Recommended Cable Size	16 mm^2Cu	10 mm^2Cu	25 mm^2Cu	25mm^2Cu

Internal schematic diagram of the product



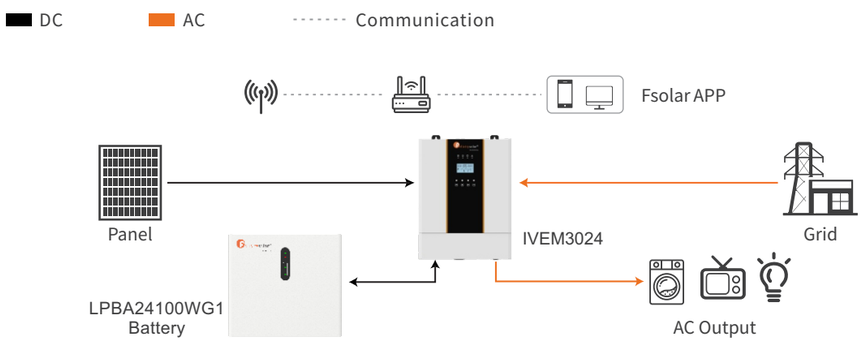
Features

- Integrated AC/DC Protection
- Faster, Simpler Installation
- Designed for Felicity Inverters
- Two Models. One Standardized Protection Solution
- 1-16 kW System Range
- 63A / 80A AC Breakers
- 40A/100A PV Breakers
- 1000V DC Surge Protection
- 440V AC Surge Protection

Solar Energy Storage Solutions

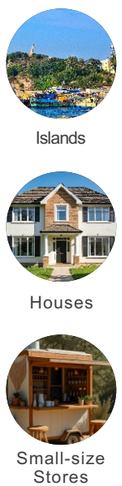
Off-grid Residential Energy Storage System

System Configuration: **3kW**



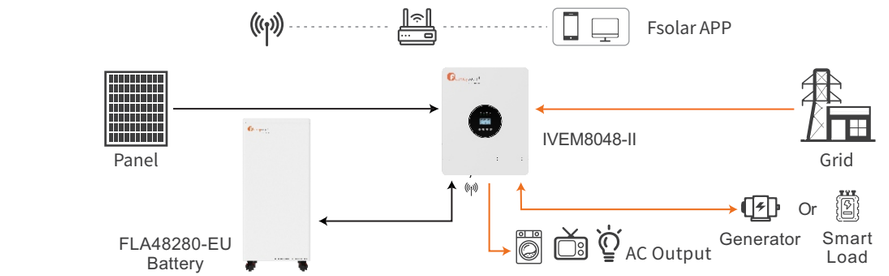
Benefits:

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



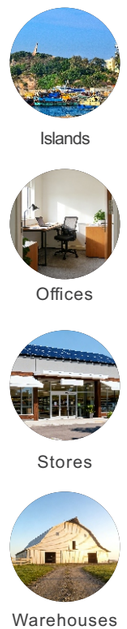
Off-grid Residential Energy Storage System

System Configuration: **8kW**



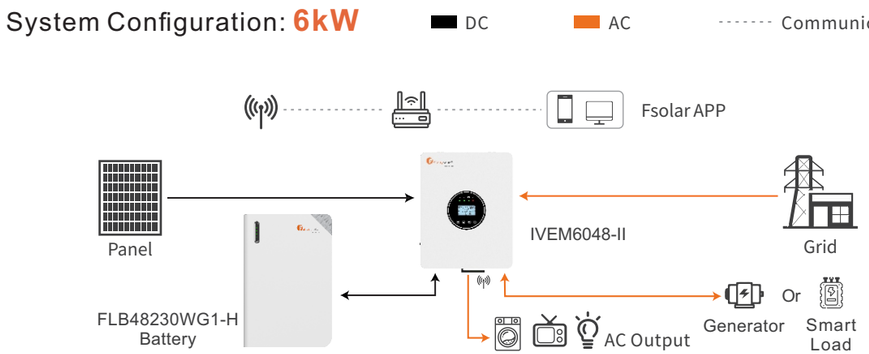
Benefits:

- 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.
- Supports Smart Load Connection with Programmable GEN Port.
- Customizable Smart Load's Output Duration Time .



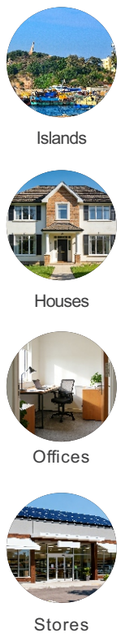
Off-grid Residential Energy Storage System

System Configuration: **6kW**



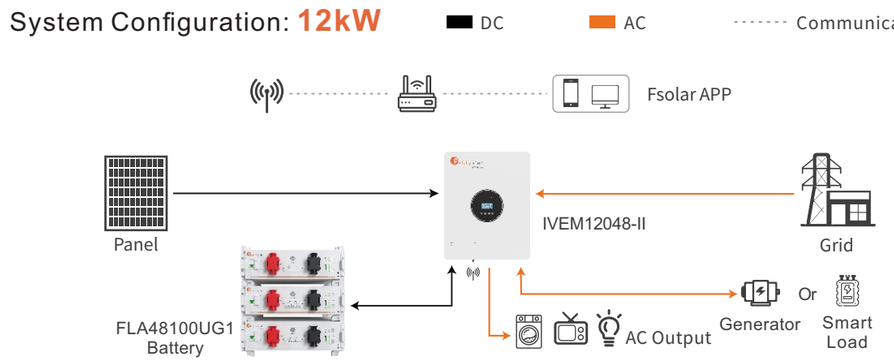
Benefits:

- 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.
- Supports Smart Load Connection with Programmable GEN Port.
- Customizable Smart Load's Output Duration Time .



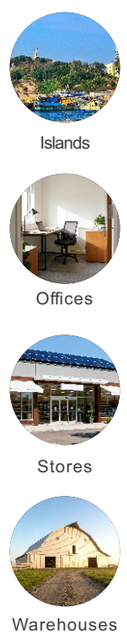
Off-grid Residential Energy Storage System

System Configuration: **12kW**



Benefits:

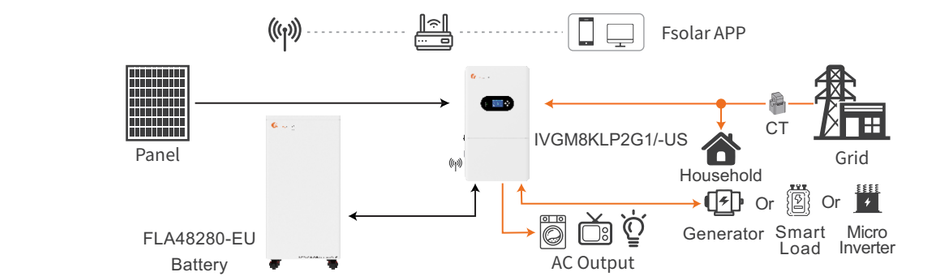
- Easy Maintenance & Reduced Operational Costs.
- Reliable Power Supply with Emergency Backup.
- Flexible Configuration Based on Power Demands and Site Conditions.
- Remotely Monitor and Control the System via Fsolar App.
- Supports Smart Load Connection with Programmable GEN Port.
- Customizable Smart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



Solar Energy Storage Solutions

Hybrid Residential Energy Storage System

System Configuration: **8kW**




Islands


Communication Base Stations

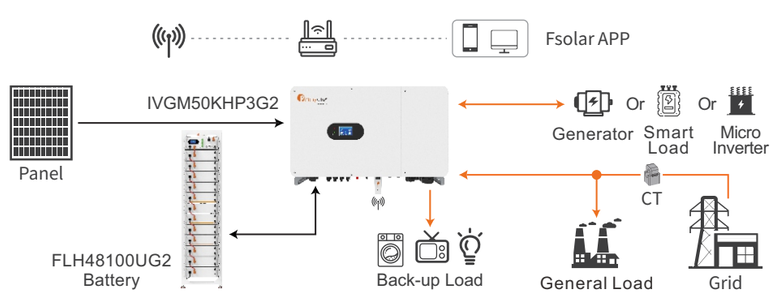

Farms

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**




Factory


Office building


Hospital

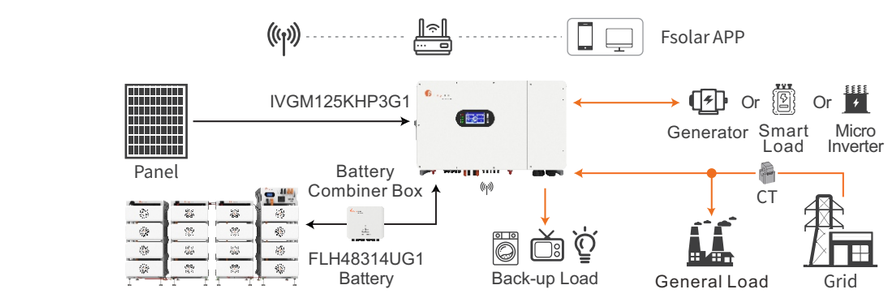

School

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: **125kW**




Office building


Industrial Park


Hospital

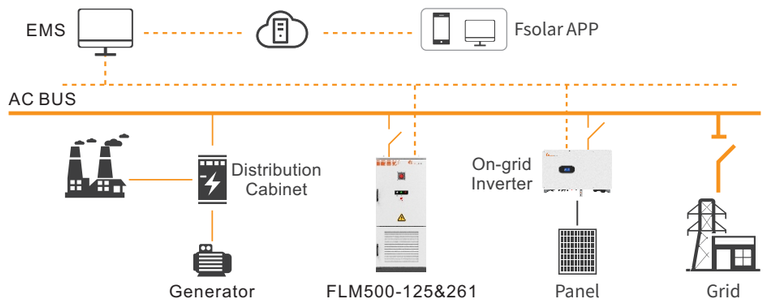

School

Benefits:

- 0ms grid-to-off-grid transfer.
- Easy Maintenance & Reduced Operational Costs.
- Flexible Configuration Based on Power Demands and Site Conditions.
- Remotely Monitor and Control the System via FSOLAR App.
- Supports single-phase input, three-phase output.
- Active PID recovery function for long-term energy yield.

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

System Configuration: **125kW Liquid Cooling System**




Office building


Industrial Park


Hospital


School

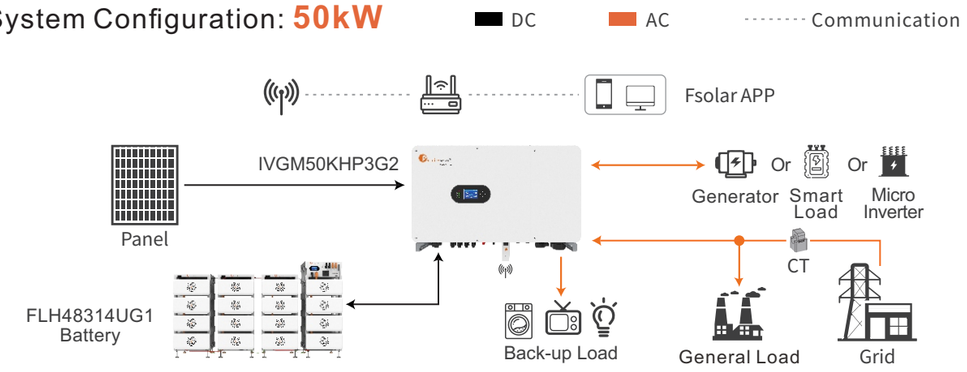
Benefits:

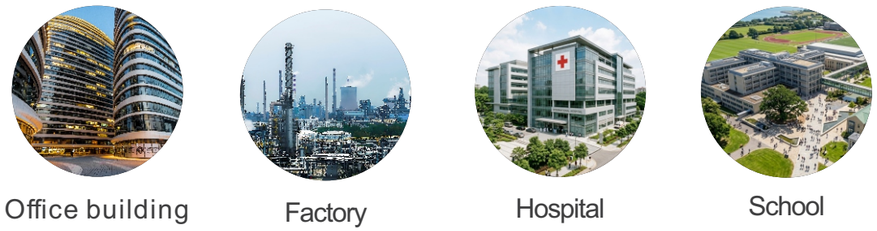
- **Peak Shaving & Valley Filling:** store energy during low-price periods and release it during high-price periods to lower electricity costs.
- **Emergency Backup:** provides temporary power during grid failures or outages, ensuring continuous supply for critical equipment.
- **Demand Capacity Expansion:**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

Solar Energy Storage Solutions

Hybrid C&I Energy Storage System

System Configuration: **50kW**



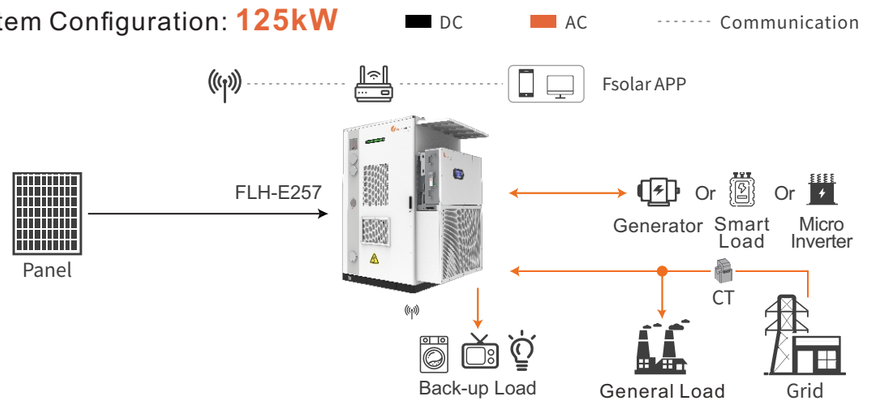


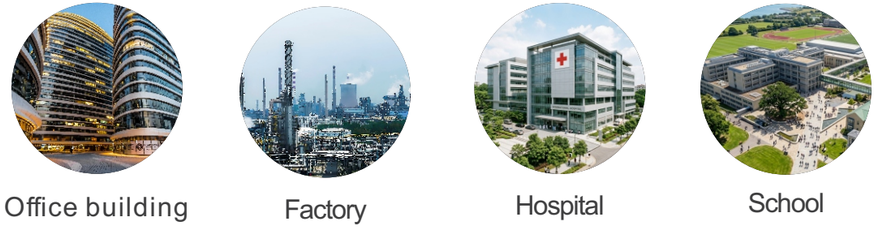
Benefits:

- **16.07 kWh LFP Modules:**16.07 kWh LFP battery modules with ⩾8,000 cycles deliver long-term reliability and flexible capacity configuration
- **Better Value for Larger Systems:**A cost-effective battery configuration for larger-capacity energy storage needs
- **Flexible Capacity Expansion:**Supports up to 16 parallel battery clusters for flexible expansion
- **Flexible Support for Unbalanced Loads:**Supports uneven load distribution across three phases to accommodate varying load demands.

Hybrid C&I Energy Storage System

System Configuration: **125kW**





Benefits:

- **0 ms Seamless Transfer:** 0 ms grid-to-off-grid transfer helps keep critical loads running during grid outages
- **Flexible Multi-Source Integration:** Integrates solar, battery and grid power, with an optional port configurable for generator, Smart Load or micro-inverter connection
- **Smart Monitoring. Lower O&M:**Remote monitoring and system control via the FSOLAR App simplify maintenance and help reduce operating costs
- **Scalable to 1.5 MW / 4.1 Mwh:**Scale system power up to 1.5 MW and storage capacity up to 4.1 Mwh as project energy demand grows

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

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