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Make life full of hope

SOLAR ENERGY STORAGE SOLUTIONS

Make life full of hope, make the world a better place

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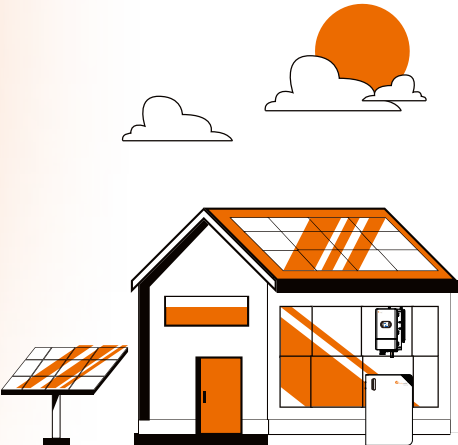


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Battery Pack Series

All-in-one System

FSOLAR Smart Energy Management Platform

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Solar Energy Storage Solutions

User Case: Asia, Africa, and Latin America

User Case: Europe, Americas & Australia

User Case: C & I Energy Storage

LEARN ABOUT US

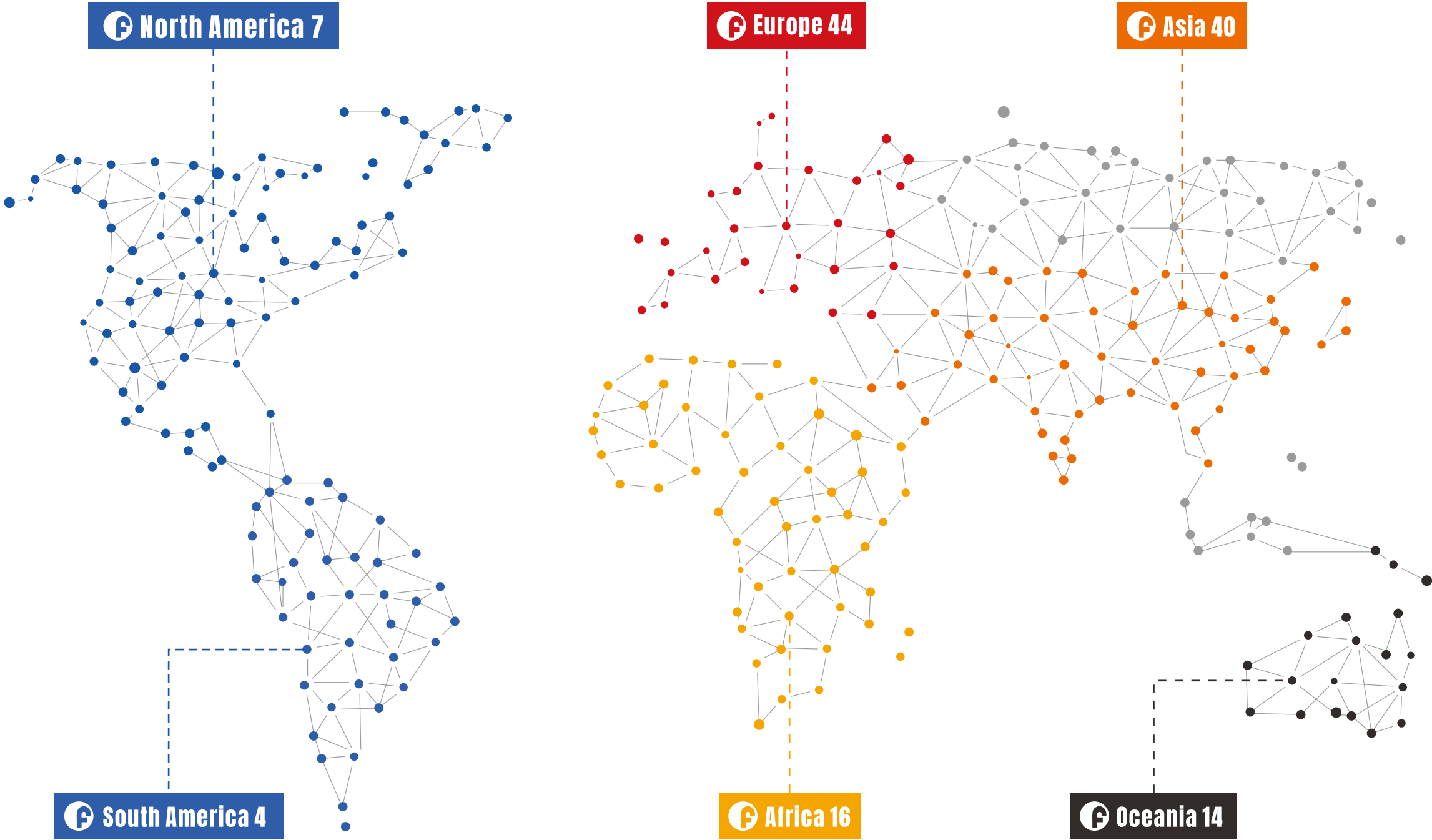


About Us

Headquartered in Guangzhou, China, Felicitysolar's 85,000+ sqm campus integrates R&D, manufacturing, sale, marketing and logistics operations. We are a trusted provider with 18 years of industry expertise, offering off-grid and hybrid solar energy storage solutions for residential, commercial, and industrial needs. With a R&D team of over 200 professionals, a 3,000 sqm R&D center, and more than 10% of annual investment dedicated to technology development, we had secured over 100 patents in core technologies. Through our 40+ global branches, we connect with users across 150+ countries and areas, delivering a comprehensive product line that includes inverters, battery packs, 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.



Broad Business Scope



18 years
Industry
Expertise

100+
Patented
Technologies

10%+
Technical
Investment

40+
Overseas
Branches

150+
Countries &
Regions Market

200+
R&D
Teammates

Company History

2007

Company establishment.

2008-2010

Team formation and development of the photovoltaic product line.

2011

First solar panel produced.

2012-2014

Opened offline shops in Guangzhou, China, with steady growth.

2016-2017

Established first overseas branch in Nigeria.

2018-2020

Rapidly expanded African market while promoted self-developed lithium battery packs.

2021-2022

Entered Central Asia, the US and Europe market, elevating brand awareness constantly.

2023

Developed Photovoltaic Energy Storage Intelligent Cloud Control Engineering Research Center.

2024

Increased R&D investment over 10% of annual spending while expanded overseas after-sales service networks.

2025

Continually launch innovative products and plan to attend 40+ trade shows worldwide.

SOLAR INVERTER

Series

Off-grid High-frequency

AC 220V

AC 120V

Off-grid Low-frequency

AC 220V

AC 120V

Hybrid Solar Inverter

Low-voltage

High-voltage

Micro Inverter

Grid-tied | Single Phase | Low Voltage

Off-grid High-frequency Solar Inverter

IVEM Series **AC-220V**

Features

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

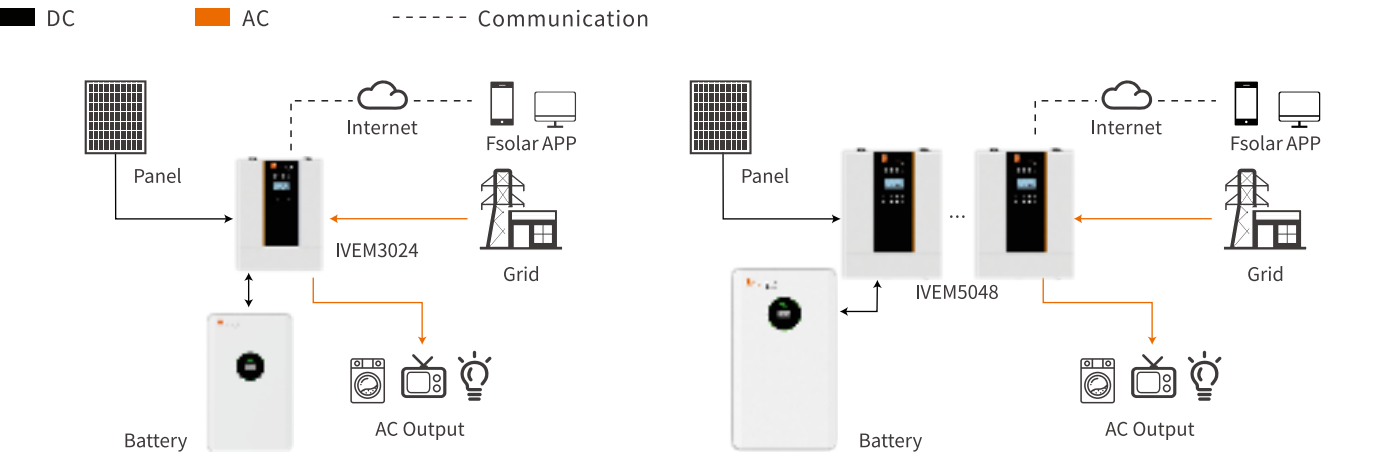


IVEM3024

IVEM5048

Model	IVEM3024	IVEM5048
Line Mode Specifications		
Rated Output Power(VA)	3000VA	5000VA
Rated Output Power(W)	3000W	5000W
Nominal DC Input Voltage	24V	48V
Nominal Input Voltage	230Vac	
Max. AC Input Voltage	280Vac	
Nominal Input Frequency	50Hz / 60Hz (Auto Detection)	
Efficiency(Line Mode)	>95% (Rated R Load, Battery Full Charged)	
Pass Through Without Battery	Yes	
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	6000W
Max. Solar Charging Current	100A	100A
Max. Charging Current(PV+Grid)	100A	100A
Max. Input Current	15A	20A
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	Yes, Up to 12 Units
Peak Efficiency	93%	
Over-Load Protection(SMPS load)	5.5s@≥150% Load; 10.5s @105% ~150%Load	
Surge Rating	2 * Rated Power for 5s	
Capable of Starting Electric	Yes	
Output Short Circuit Protection	Yes	
General Specifications		
Operating Temperature	0°C~55°C	
Range Storage Temperature	-15°C~60°C	
Net Weight(KG)	10.8KG	13.2KG
Product Dimension(MM)	395*295*129MM	415*320*129MM
Package Dimension(MM)	472*372*202MM	494*399*202MM
Certification	CE-EMC、IEC 62109-1/2、IEC 63027	CE-EMC、IEC 62109-1/2

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



Off-grid High-frequency Solar Inverter

IVEM Series **AC-220V**

Features

- Supports up to 12 units in parallel (6KVA model) (Battery must be connected).
- 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.
- Inverter running without battery.
- Cold start function.
- Built-in WiFi for mobile monitoring (IVEM6048-II; APP is required).

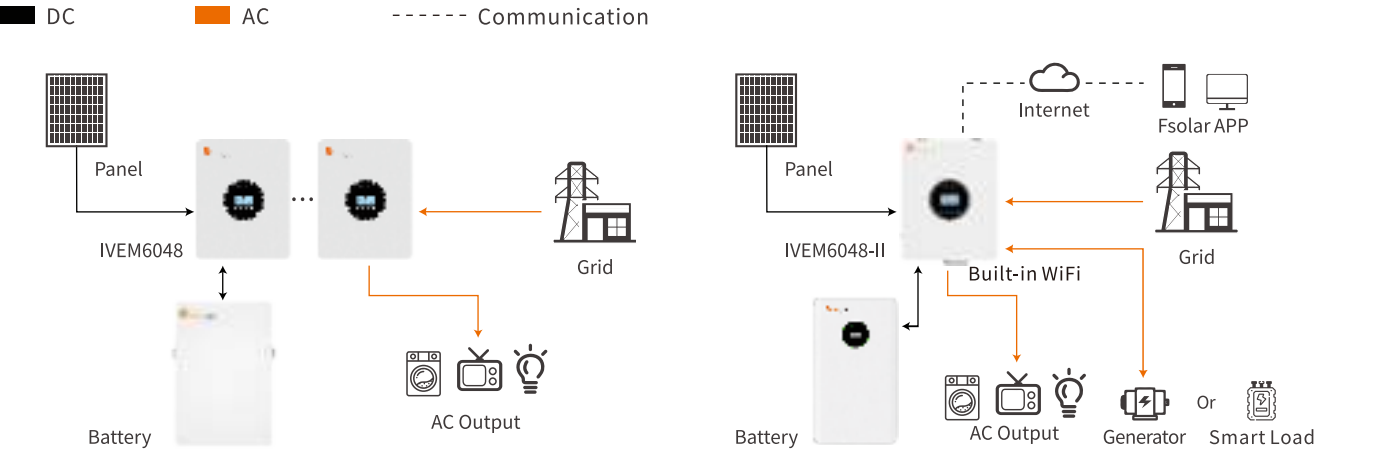
The generator input port of IVEM6048-II that can be converted into a smart output port, allowing users to customize the output duration. (under stand-alone mode)



IVEM6048 IVEM6048-II

Model	IVEM6048		IVEM6048-II
Line Mode Specifications			
Rated Output Power(VA)	6000VA		
Rated Output Power(W)	6000W		
Nominal DC Input Voltage	48V		
Nominal Input Voltage	230Vac		
Max. AC Input Voltage	280Vac		
Nominal Input Frequency	50Hz / 60Hz (Auto detection)		
Efficiency(Line Mode)	>95% (Rated R Load, Battery Full Charged)		
Pass Through Without Battery	Yes		
Utility Charge Mode Specifications			
Input Voltage Range	90~280Vac		
Max. Charge Current	100A	120A	
Over Charge Protection	Yes		
Solar Charging & Grid Charging			
Max.PV Open Circuit Voltage	500V		
PV Voltage Working Range	90V-450V		
Max. Input Power	7000W	7500W	
Max. Solar Charging Current	120A		
Max. Charging Current(PV+Grid)	120A		
Max. Input Current	27A		
Min. Startup Voltage	95V		
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	Yes, Up to 12 Units		
Peak Efficiency	93%		
Over-Load Protection(SMPS load)	5s@≥150% load; 10s @105%~150% load	Load>200%,200ms / Load >150%,5.5s Load >120%,7.5s / Load >105% 10.5s	
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)	11.5KG	12.5KG	
Product Dimension(MM)	420*335*142MM		
Package Dimension(MM)	512*417*216MM		
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 Series **AC-220V**

Features

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

The generator input port of IVEM8048-II can be converted into a smart output port, allowing users to customize the output duration (under stand-alone mode).

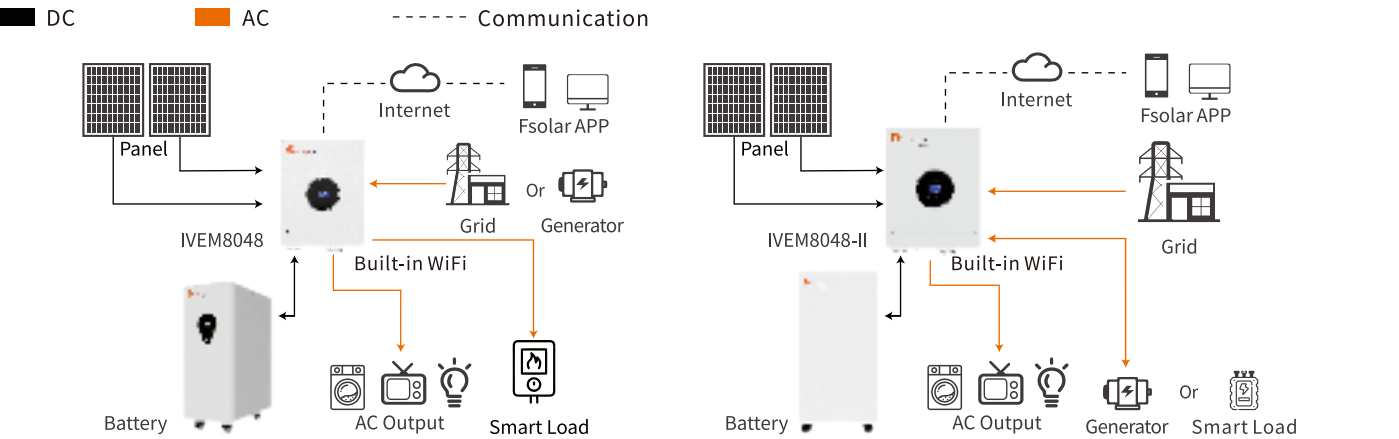


IVEM8048

IVEM8048-II

Model	IVEM8048	IVEM8048-II
Line Mode Specifications		
Rated Output Power(VA)	8000VA	
Rated Output Power(W)	8000W	
Nominal DC Input Voltage	48V	
Nominal Input Voltage	230Vac	
Max. AC Input Voltage	280Vac	
Nominal Input Frequency	50Hz / 60Hz (Auto Detection)	
Efficiency(Line Mode)	>95% (Rated R Load, Battery Full Charged)	
Pass Through Without Battery	Yes	
Utility Charge Mode Specifications		
Input Voltage Range	230Vac	
Over Charge Protection	90-280Vac	
Max. Charge Current	150A	
Over Charge Protection	Yes	
Solar Charging & Grid Charging		
Max.PV Open Circuit Voltage	500V	
PV Voltage Working Range	90V-450V	
Max. Input Power	10000W(5000W for single PV)	
Max. Solar Charging Current	150A	
Max. Charging Current(PV+Grid)	150A	
Max. Input Current	20A X 2(MAX 40A)	
Min. Startup Voltage	100V	
Number of MPP Trackers / Strings Per MPP Tracker	2/1	
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	Yes,up to 6 units	
Peak Efficiency	94.5%	
Over-Load Protection(SMPS load)	5s@≥150% load; 10s @105% ~150% load	
Surge Rating	2* rated power for 5s	
Capable of Starting Electric	Yes	
Output Short Circuit Protection	Yes	
General Specifications		
Operating Temperature	-10°C~50°C	
Range Storage Temperature	-15°C~60°C	
Net Weight(KG)	23.7KG	
Gross Weight(KG)	27.4KG	
Product Dimension(MM)	607*464*141MM	
Package Dimension(MM)	712*582*259MM	
Certification	CE-EMC、IEC 62109-1/2、IEC 63027	

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Off-grid High-frequency Solar Inverter

IVEM Series AC-220V



Features

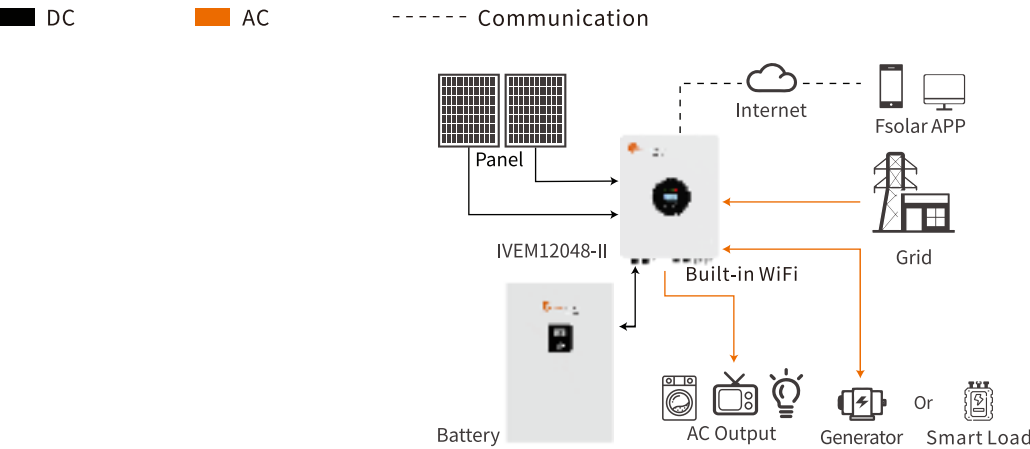
- Supports up to 6 units in parallel (Battery must be connected).
- Built-in MPPT solar charge controller with 2 strings of solar input.
- Built-in Wi-Fi for mobile monitoring (APP is required).
- Overload/ over temperature/ short circuit protection.
- Lithium battery activation function.
- Configurable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



IVEM12048-II

Model	IVEM12048-II
Line Mode Specifications	
Rated Output Power(VA)	12000VA
Rated Output Power(W)	12000W
Nominal DC Input Voltage	48V
Nominal Input Voltage	230Vac
Max. AC Input Voltage	280Vac
Nominal Input Frequency	50Hz / 60Hz (Auto Detection)
Efficiency(Line Mode)	>95% (Rated R Load, Battery Full Charged)
Pass Through Without Battery	Yes
Utility Charge Mode Specifications	
Input Voltage Range	230Vac
Over Charge Protection	90-280Vac
Max. Charge Current	240A
Charge Current Regulation	10-240A (Adjustable Unit is 1A)
Over Charge Protection	Yes
Solar Charging & Grid Charging	
Max.PV Open Circuit Voltage	500V
PV Voltage Working Range	90V-450V
Max. Input Power	15000W(7500W for Single PV)
Max. Solar Charging Current	240A
Max. Charging Current(PV+Grid)	240A
Max. Input Current	27A X 2(MAX 54A)
Min. Startup Voltage	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	Yes,up to 6 units
Peak Efficiency	94.5%
Over-Load Protection(SMPS load)	5s@≥150% load; 10s @105% ~150% load
Surge Rating	2* rated power for 5s
Capable of Starting Electric	Yes
Output Short Circuit Protection	Yes
General Specifications	
Operating Temperature	-10°C~50°C
Range Storage Temperature	-15°C~60°C
Net Weight(KG)	26.8KG
Product Dimension(MM)	634*476*141MM
Package Dimension(MM)	726*594*258MM

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Off-grid High-frequency Solar Inverter

IVCM Series **AC-220V**

Features

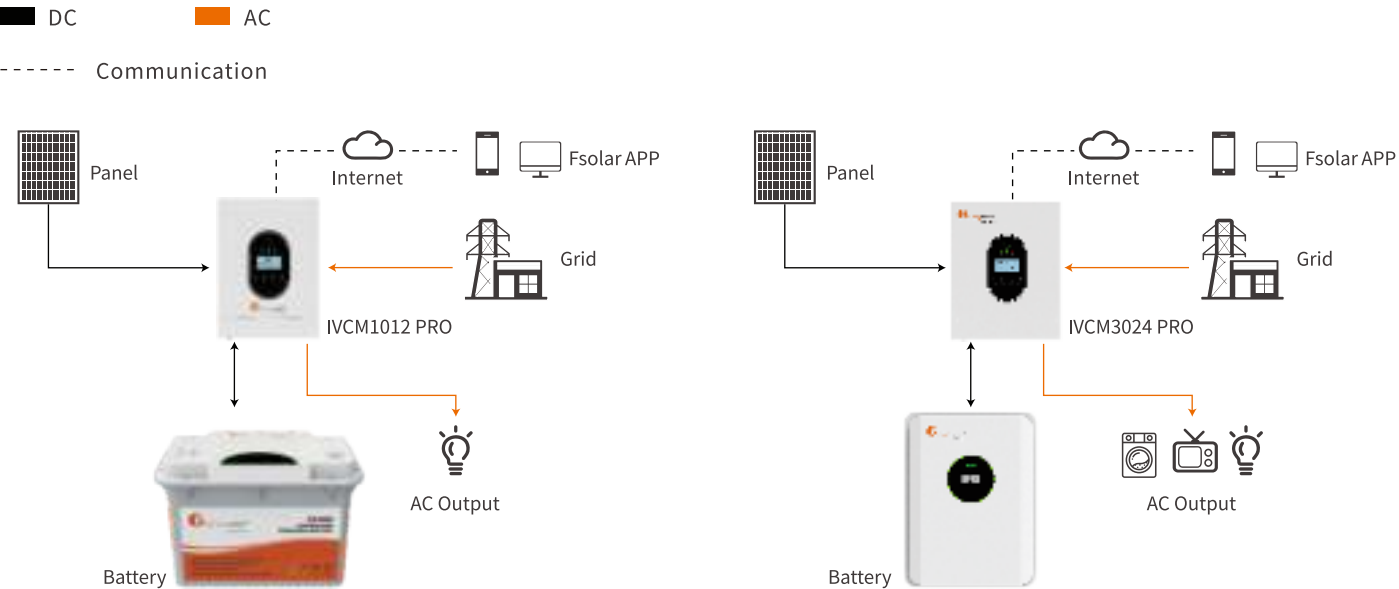
- Depending on the model, Turbo mode can be enabled in APL mode to use up to three times the maximum rated load.
- Support parameters setting via LCD screen (input voltage/charging current/charge mode).
- Overload/ over temperature/ short circuit protection.
- Compatible with mains voltage or generator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



IVCM1012/2024 PRO IVCM3024 PRO

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 Regulation	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

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Hybrid Solar Inverter

IVGM Series Low-voltage | Single Phase

Features

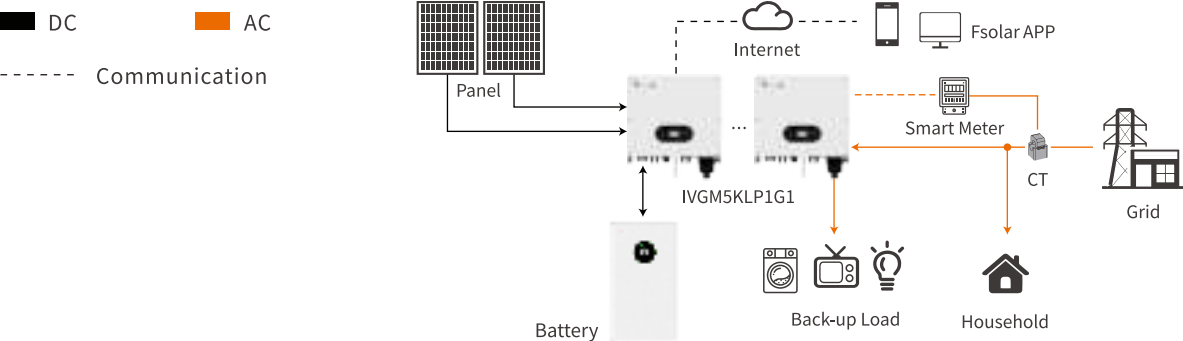
- Enables real-time monitoring via WiFi.
- 48V low voltage battery, transformer isolation topology.
- Max. charging/discharging current of 100A.
- AC couple to retrofit existing solar system.
- Support storing energy from diesel generator.
- Seamless power supply switching within 20ms.
- Scalable expansion up to 6pcs in parallel.



IVGM5KLP1G1

Model	IVGM5KLP1G1
Battery Input Data	
Battery Voltage Range	40V~60V
Max. charging and discharging current	100A/100A
Max. charging and discharging power	5000W
Battery type	Li-Ion / Lead-acid
DC Input Data(PV side)	
Max. Recommended PV Power	6500W (3500W for Single PV)
Max. PV Voltage	550V
Start Oltag	130V
PV Voltage Range	90V-550V
MPPT Voltage Range	100V-500V
MPPT Voltage Range for Full Load	220V-500V
Nominal Voltage	360V
Max. Input Current	15A/15A
Max. Shorted Current	18A/18A
Number of MPP Trackers / Strings Per MPP Tracker	2/1
Grid Data	
Nominal Input Voltage	230Vac
Nominal Grid Frequency	50/60Hz
Max. Input Current	40A
Max. Charge Current	100A
Max. AC Output Power	5000W
AC Output Rated Current	21.7A
Max. Output Current	25A
Max. Continuous AC Passthrough	30A
Power Factor	>0.99
Displacement Power Factor	0.8(Leading) to 0.8(Lagging)
THDI	<3%
AC Output Data(Back Up)	
Rated Output Power	5000VA/5000W
Max. Output Current	30A
Rated AC Output Voltage	230Vac
Rated AC Output Frequency	50/60Hz
General Data	
Operating Temperature Range	-25°C~60°C,>45°C Derating
Protection Degree	IP65
Cooling Concept	Nature
Communication	RS232/RS485
BMS Communication	CAN/RS485
Monitor Module	WiFi/GPRS
Display	LCD+LED
Installation Style	Wall-mounted
Warranty	10 Years
Grid Regulation	CEI 0-21、G99、VDE 4105、EN 50549-1、NRS 097-2-1、C10/11、NTS & UNE217001 & UNE217002、PORTARIA N° 140 & 515
Safety Regulation	IEC 62109-1/-2
EMC	IEC/EN 61000-6-1/2/3/4、EN/IEC 61000-3-11/12
Net Weight(KG)	32.4KG
Gross Weight(KG)	39.1KG
Product Dimension(MM)	530*493*228MM
Package Dimension(MM)	632*570*315MM

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



Hybrid Solar Inverter

IVGM Series Low-voltage | Split Phase

Features

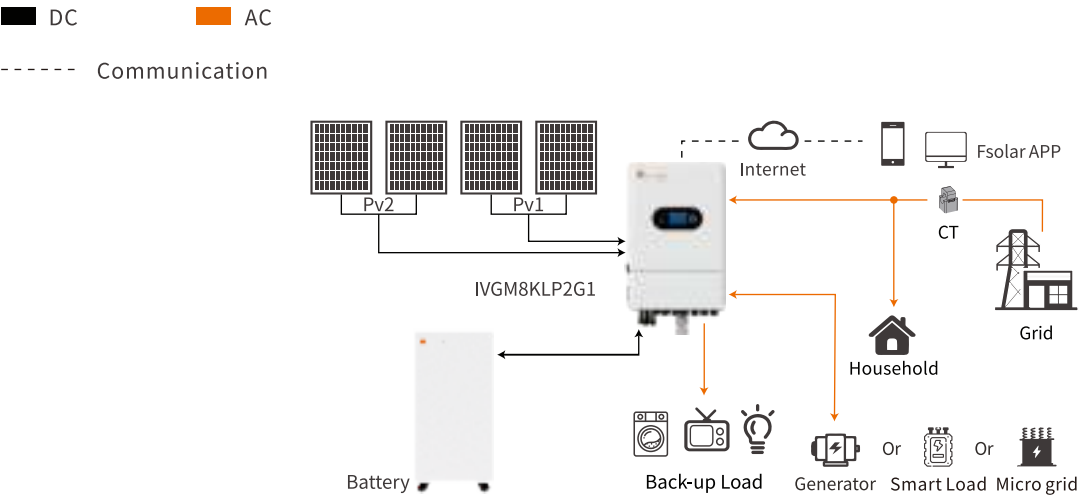
- Configurable parameters and working mode by LCD touch screen.
- Supporting WiFi monitoring and Fsolar smart cloud monitoring system.
- Battery charge and discharge current up to 190A.
- Optimize energy use with Time-of-Use, Sell-First, and Zero Export options to maximize savings and efficiency.
- Prevent grid overload with built-in limit function while seamlessly switching between battery and grid supply within 10ms for uninterrupted power.
- 4-channel PV, 2-channel MPPT, 1.5 times over configuration capacity.
- Programmable generator port, support smart load and micro inverter access.
- Support parallel operation with single-phase, split phase and three-phase.
- IP65 protection level.



IVGM8KLP2G1

Model	IVGM8KLP2G1
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-550V
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	120/240Vac (Split Phase), 208Vac (2/3 Phase)
Nominal Grid Frequency	50/60Hz
Max. AC Output Power	8800W
AC Output Rated Current	33.3A
Max. Output Current	36.7A
Max. Continuous AC Passthrough	50A
AC Output Data(Back Up)	
Rated Output Power	8000W
Max. Output Current	40A
Rated AC Output Voltage	120/240Vac (Split Phase), 208Vac (2/3 Phase)
Rated AC Output Frequency	50/60Hz
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.



Hybrid Solar Inverter

IVGM Series Low-voltage | Three Phase

Features

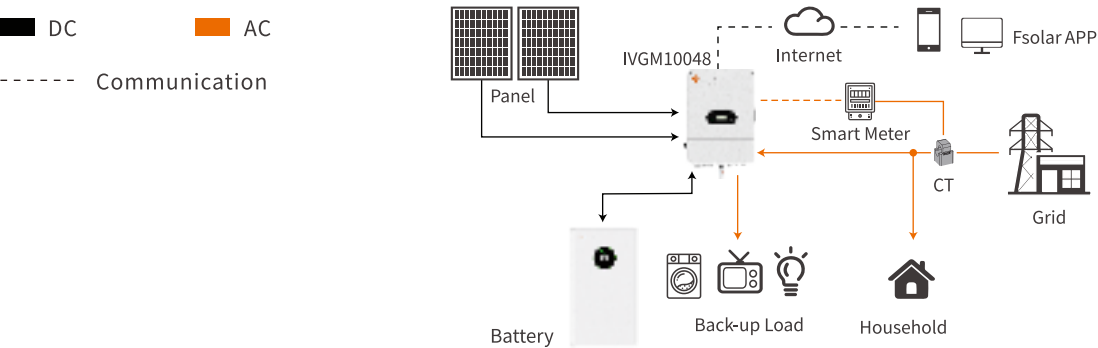
-  Support WiFi for mobile monitoring.
-  Max. charging / discharging current of 200A.
-  AC couple to retrofit existing solar system.
-  Support storing energy from diesel generator.
-  Switch power supply within 20ms.
-  IP65 protection level.



IVGM10048

Model	IVGM10048
Battery Input Data	
Battery Voltage Range	40V~60V
Max. charging and discharging current	200A/200A
Max. charging and discharging power	10000W
Battery type	Li-Ion / Lead-acid
DC Input Data(PV side)	
Max. Recommended PV Power	13000W (6500W for Single PV)
Max. PV Voltage	900V
Start Oltage	180V
PV Voltage Range	160V-900V
MPPT Voltage Range	200V-850V
MPPT Voltage Range for Full Load	450V-850V
Nominal Voltage	720V
Max. Input Current	15A/15A
Max. Shorted Current	18A/18A
Number of MPP Trackers / Strings Per MPP Tracker	2/1
Grid Data	
Nominal Input Voltage	L1/L2/L3/N/PE, 230/400Vac
Nominal Grid Frequency	50/60Hz
Max. Input Current	30A
Max. Charge Current	200A
Max. AC Output Power	10000W
AC Output Rated Current	14.5A
Max. Output Current	18A
Max. Continuous AC Passthrough	30A
Power Factor	>0.99
Displacement Power Factor	0.8(Leading) to 0.8(Lagging)
THDI	<3%
AC Output Data(Back Up)	
Rated Output Power	10000VA/10000W
Max. Output Current	30A
Rated AC Output Voltage	L1/L2/L3/N/PE, 230/400Vac
Rated AC Output Frequency	50/60Hz
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	VDE-AR-N 4105
Safety Regulation	IEC 62109-1/-2
Net Weight(KG)	38.9KG
Gross Weight(KG)	47.1KG
Product Dimension(MM)	655*475*266MM
Package Dimension(MM)	792*597*351MM

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



Hybrid Solar Inverter

IVGM Series High-voltage | Three Phase

Features

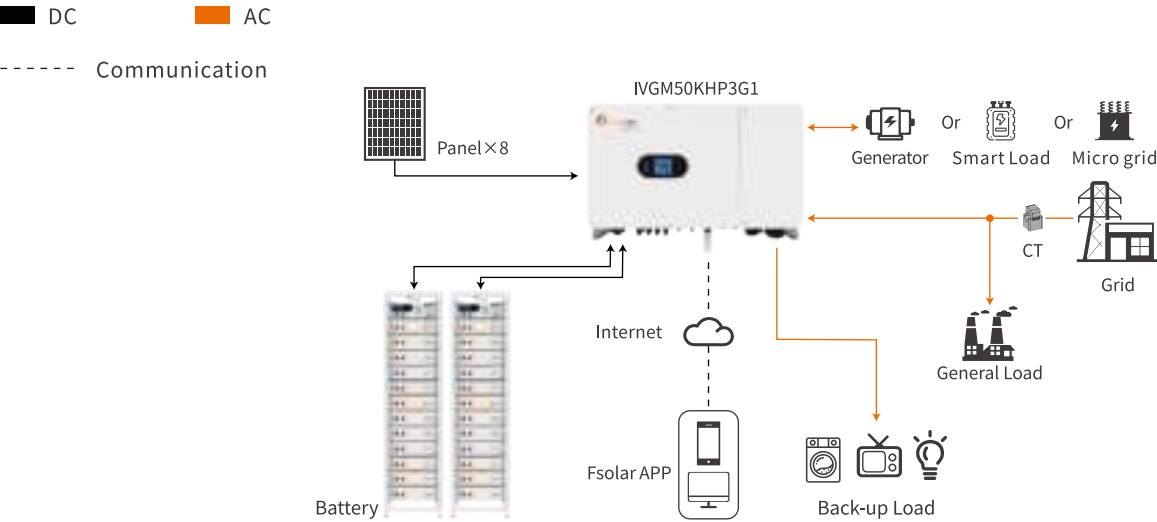
- Supports WiFi monitoring and Fsolar smart cloud monitoring system.
- Seamless power supply switching within 10ms.
- Configurable parameters and working mode via LCD touch screen.
- Programmable supply priority for battery or grid.
- Programmable multiple operation modes: On grid, off grid and UPS.
- 8-channel PV,4-channel MPPT, 1.3 times over configuration capacity.
- 2 independent battery inputs, effectively reducing inter-cluster circulation.
- Wide battery voltage input and high battery charge and discharge current up to 50A.
- Programmable generator port, support smart load and micro inverter access.
- IP65 protection level.
- 12pcs in parallel maximum.
- Auto restart while AC is recovering.



IVGM50KHP3G1

Model	IVGM50KHP3G1
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 Input Power	65KW(16KW for Single PV)
Max. DC Input Voltage	1000Vdc
Min. DC Input Voltage	150Vdc
Start-up Voltage	250Vdc
Rated DC Input Voltage	600Vdc
MPPT Range	200~850Vdc
Full Load DC Voltage Range	450~850Vdc
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 Output Data	
Rated AC Output Power	50 KW
Max. AC Output Power	55 KW
AC Output Rated Current	72.5 A
Max. AC Current	79.7 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)
Certification and Standards	
Grid Regulation	NTS & UNE217001 & UNE217002、CEI 0-21、NRS 097-2-1、NC RFG(Poland)、VDE 4105、G99、EN 50549-1、EN 50549-1+Netherlands
Safety Regulation	EN 62477-1、IEC 62109-1/-2
EMC	IEC/EN 61000-6-2/4、EN/IEC 61000-3-11/12
General Data	
Net Weight	85.6KG
Gross Weight	98.4KG
Product Dimension	940*582*340MM
Package Dimension	1110*770*463MM
Protection Degree	IP65
Operating Temperature Range	-25 to 60°C(> 50°C Derating)
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.



SOLAR BATTERY

Series

LiFePO4 Battery Pack

Low-voltage

High-voltage

Lead-acid Battery

GEL Battery

OPzV Battery

LiFePO4 Battery Pack

Low-voltage FLA Series

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.



FLA12100



FLA12200



FLA12300

Model	FLA12100	FLA12200	FLA12300
Battery Type	LiFePO4		
Nominal Energy	1.28kWh	2.56kWh	3.75kWh
Nominal Voltage	12.8V	12.8V	12.8V
Operating Voltage	11.2V-14.4V	11.2V-14.4V	11.2V-14.4V
Recommend Charge/Discharge Current[1]	≤100A	≤100A	≤100A
Recommend Charge/Discharge Power[1]	≤1,250W	≤1,500W	≤1,875W
Maximum Charge/Discharge Current(15s)	150A	200A	200A
Maximum Charge/Discharge Power(15s)	1,875W	2,500W	2,500W
Scalability	Max. 16 pcs in Parallel(20.48kWh)	Max. 16 pcs in Parallel(40.96kWh)	Max. 16 pcs in Parallel(60kWh)
Depth of Discharge(DOD)	≥95%		
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 Type	LED		
Installation	Floor-Mounted		
Protection	Built-in smart BMS, Fuse		
Warranty Period	5 Years		
Certification	UN38.3		
Product Weight	10KG	15KG	26KG
Package Weight	12KG	18KG	29KG
Product Dimension	295X201X199MM	328X248X199MM	379X241X286MM
Package Dimension	357X263X261MM	391X310X257MM	443X305X344MM
[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



Longer Lasting LiFePO4 Battery



Support 16 Pcs in Parallel



Real-time Status via LCD Screen & LED



Wide Inverter Compatibility



LiFePO4 Battery Pack

Low-voltage FLA Series

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 7-year long warranty.



FLA 24V Series
(The battery's size varies according to its capacity.)

Model	FLA24100	FLA24200	FLA24250	FLA24300	FLA24500
Battery Type	LiFePO4				
Nominal Energy	2.56kWh	5kWh	6.4kWh	7.5kWh	12.5kWh
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
Recommend Charge/Discharge Current[1]	≤100A	≤120A	≤150A	≤150A	≤200A
Recommend Charge/Discharge Power[1]	≤2,500W	≤3,000W	≤3,750W	≤3,750W	≤5,000W
Maximum Charge/Discharge Current(15s)	150A	150A	200A	200A	300A
Maximum Charge/Discharge Power(15s)	3,750W	3,750W	5,000W	5,000W	7,500W
Scalability	Max. 15 pcs in Parallel(38.4kWh)	Max. 15 pcs in Parallel(75kWh)	Max. 15 pcs in Parallel(96kWh)	Max. 15 pcs in Parallel(112.5kWh)	Max. 15 pcs in Parallel(187.5kWh)
Depth of Discharge(DOD)	≥95%				
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 type	LCD+LED				
Installation	Wall-Mounted / Floor-Mounted				
Protection	Built-in Smart BMS, Breaker, Fuse				
Warranty Period	7 Years				
Certification	UN38.3	UN38.3	UN38.3	UN38.3、CE-EMC、IEC 62619	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.					
[2] Test conditions: 0.2C Charging/Discharging @25°C,80% DOD					

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

Product Display



Real-time status via LCD Display



Built-in WiFi/Bluetooth for Remote Monitoring



Support Wall Mounted Installation



Wide Inverter Compatibility



LiFePO4 Battery Pack

Low-voltage FLA Series

Features

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



FLA 48V Series
The battery's size varies according to its capacity.

Model	FLA48100	FLA48200	FLA48200-P	FLA48230	FLA48250
Battery Type	LiFePO4				
Nominal Energy	5.12kWh	10kWh	10.5kWh	11.8kWh	12.5kWh
Nominal Voltage	51.2V	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	44.8-57.6V
Recommend Charge/Discharge Current[1]	≤100A	≤120A	≤150A	≤150A	≤150A
Recommend Charge/Discharge Power[1]	≤5,000W	≤6,000W	≤7,500W	≤7,500W	≤7,500W
Maximum Charge/Discharge Current(15s)	150A	150A	200A	200A	200A
Maximum Charge/Discharge Power(15s)	7,500W	7,500W	10,000W	10,000W	10,000W
Scalability	Max. 15 pcs in Parallel(76.8kWh)	Max. 15 pcs in Parallel(150kWh)	Max. 15 pcs in Parallel(157.4kWh)	Max. 15 pcs in Parallel(176.6kWh)	Max. 15 pcs in Parallel(187kWh)
Depth of Discharge(DOD)	≥95%				
Communication	RS485/CAN				
Protection Degree	IP21				
Cycle Life	≥ 6000 Cycles (25℃±2℃,0.5C/0.5C,90%DOD,70%EOL)				
Charging Temperature Range	0℃~+55℃				
Discharging Temperature Range	-20℃~+55℃				
Display Type	LCD+LED				
Installation	Wall-Mounted / Floor-Mounted				
Protection	Built-in smart BMS, Breaker, Fuse				
Warranty Period	7 Years				
Certification	UN38.3、CE-EMC、IEC 62619	UN38.3、CE-EMC、IEC 62619、CB	UN38.3、CE-EMC、IEC 62619	UN38.3、CB	UN38.3、CE-EMC、IEC 62619
Product Weight	48KG	68KG	92KG	92KG	97KG
Package Weight	55KG	88KG	115.6KG	115.6KG	115KG
Product Dimension	663X400X178MM	735X433X188MM	783X450X274MM	783X450X274MM	783X450X274MM
Package Dimension	782X522X262MM	849X550X362MM	900X570X450MM	900X570X450MM	900X570X450MM

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

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

Product Display



Built-in WiFi/Bluetooth for Remote Monitoring



Aerosol Fire Extinguishing System



Support Wall Mounted Installation



Wide Inverter Compatibility



LiFePO4 Battery Pack

Low-voltage FLA Series

Features

-  LiFePO4: higher safe performance and longer cycle life.
-  Multiple protection with built-in smart BMS, breaker and fuse.
-  Flexible Installation: wall-mounted or 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.

FLA48280/48300

Model	FLA48280	FLA48300
Battery Type	LiFePO4	
Nominal Energy	14.3kWh	15kWh
Nominal Capacity	280Ah	300Ah
Nominal Voltage	51.2V	
Operating Voltage	44.8-57.6V	
Recommend Charge/Discharge Current	120A	
Max. Continuous Charge/Discharge Current[1]	150A	
Peak Charge/Discharge Current(15s)	200A	
Scalability	Max. 15 pcs in Parallel(215kWh)	Max. 15 pcs in Parallel(225kWh)
Depth of Discharge(DOD)	≥95%	
Display Type	LCD	
Protection Degree	IP21	
Working Temperature Range	Charge: 0°C~55 °C	
	Discharge: -20°C~55 °C	
Storge Temperature Range	0°C~+35°C	
Humidity	5%~95%	
Altitude	≤ 2000m	
Communication	RS485/CAN	
Cycle Life	≥ 6000 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	7 Years	
Certification	UN38.3	UN38.3、CE-EMC、IEC 62619
Product Weight	135KG	
Package Weight	160KG	
Product Dimension	480X1100X300MM	
Package Dimension	1150X635X498MM	

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

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

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

Product Display



Real-time status via LCD Display



Aerosol Fire Extinguishing System



Support 15 Pcs in Parallel



Built-in WiFi/Bluetooth for Remote Monitoring



LiFePO4 Battery Pack

Low-voltage FLA Series

Features

-  Scalable expansion up to 375kWh in parallel.
-  Flexible Installation: 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 7-year long warranty.



FLA48500

Model	FLA48500
Battery Type	LiFePO4
Nominal Energy	25kWh
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommend Charge/Discharge Current[1]	≤200A
Recommend Charge/Discharge Power[1]	≤10000W
Maximum Charge/Discharge Current(15s)	300A
Maximum Charge/Discharge Power(15s)	15000W
Depth of Discharge(DOD)	≥95%
Scalability	Max.15 pcs in Parallel(375kWh)
Communication	RS485/CAN
Protection Degree	IP21
Cycle Life[2]	≥6,000 Cycles
Charging Temperature Range	0°C-55 °C
Discharging Temperature Range	-20°C-60 °C
Display	LCD+LED
Installation Style	Floor-Mounted
Protection	Built-in Smart BMS, Breaker, Fuse
Warranty	7 Years
Certification	UN38.3、CE-EMC、IEC 62619
Product Weight	218KG
Package Weight	248KG
Product Dimension	718X380X990MM
Package Dimension	825X498X1162MM
[1] Recommend Charge/Discharge Current/Power is Affected by Temperature and SOC.	
[2] Test Conditions: 0.2C Charging/Discharging @25°C, 80% DOD.	
*Product specifications may vary during continuous improvements. Please contact us for latest details.	
*Refer to Felicitysolar's Warranty Policy for applicable conditions.	

Product Display



Longer Lasting LiFePO4 Battery



Real-time Status via LCD Display



Support 15 Pcs in Parallel



Wide Inverter Compatibility



LiFePO4 Battery Pack

Low-voltage FLS Series

Features

-  LiFePO4: Higher safe performance and longer cycle life.
-  Flexible Installation: wall-mounted or 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.



FLS48100SG1

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		Wall-Mounted/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 Display



Wide Inverter Compatibility



Aerosol Fire Extinguishing System



Real-time Status via
LCD Display & SOC Display



Module Design for
Easy Expansion

LiFePO4 Battery Pack

Low-voltage LPBF Series

Features

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



LPBF24100-M



LPBF24200-M



LPBF24300

Model	LPBF24100-M	LPBF24200-M	LPBF24300
Battery Type	LiFePO4	LiFePO4	LiFePO4
Nominal Energy	2.5kWh	5kWh	7.5kWh
Nominal Voltage	25.6V	25.6V	25.6V
Operating Voltage	24-28.8V	24-28.8V	24-28.8V
Recommend Charge/Discharge Current[1]	≤60A	≤80A	≤120A
Recommend Charge/Discharge Power[1]	≤1,500W	≤2,000W	≤3,000W
Maximum Charge/Discharge Current(15s)	100A	120A	200A
Maximum Charge/Discharge Power(15s)	2,500W	3,000W	5,000W
Depth of Discharge(DOD)	≥95%	≥95%	≥95%
Scalability	Max. 6 pcs in Parallel(15kWh)	Max. 6 pcs in Parallel(30kWh)	Max. 6 pcs in Parallel(45kWh)
Communication	RS485/CAN	RS485/CAN	RS485/CAN
Protection Degree	IP21	IP21	IP21
Cycle Life[2]	≥6,000 Cycles	≥6,000 Cycles	≥6,000 Cycles
Charging Temperature Range	0°C-55 °C	0°C-55 °C	0°C-55 °C
Discharging Temperature Range	-20°C-60 °C	-20°C-60 °C	-20°C-60 °C
Display	LCD+LED	LED	LCD+LED
Installation Style	Wall-Mounted / Floor-Mounted	Wall-Mounted / Floor-Mounted	Wall-Mounted / Floor-Mounted
Protection	Built-in Smart BMS, Fuse	Built-in Smart BMS, Fuse	Built-in Smart BMS, Fuse
Warranty	5 Years	5 Years	5 Years
Certification	UN38.3、CE-EMC、IEC 62619	UN38.3、CE-EMC、IEC 62619	UN38.3
Product Weight	22KG	36.5KG	76KG
Package Weight	26KG	41.5KG	93KG
Product Dimension	420x341x195MM	415x400x213MM	670x540x231MM
Package Dimension	517x433x243MM	537x522x298MM	765x635x400MM

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

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

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

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

Product Display



Longer Lasting LiFePO4 Battery



Support 6 Pcs in Parallel



Wide Inverter Compatibility



Real-time Status via LCD Screen



Support Wall Mounted Installation

LiFePO4 Battery Pack

Low-voltage LPBF Series

Features

- Scalable expansion up to 6 pcs in parallel.
- LiFePO4: higher safe performance and longer cycle life.
- Multiple Protection with built-in smart BMS, breaker and fuse.
- Flexible Installation: Wall-Mounted or Floor-Mounted.
- Compatible with leading inverter brands.
- Up to 5-year long warranty.



LPBF48100-M



LPBF48150-P



LPBF48200-H

Model	LPBF48100-M	LPBF48150-P	LPBF48200-H
Battery Type	LiFePO4	LiFePO4	LiFePO4
Nominal Energy	5kWh	7.2kWh	10kWh
Nominal Voltage	51.2V	51.2V	51.2V
Operating Voltage	48-57.6V	48-57.6V	48-57.6V
Recommend Charge/Discharge Current[1]	≤50A	≤60A	≤80A
Recommend Charge/Discharge Power[1]	≤2,500W	≤3,000W	≤4,000W
Maximum Charge/Discharge Current(15s)	100A	120A	120A
Maximum Charge/Discharge Power(15s)	5,000W	6,000W	6,000W
Depth of Discharge(DOD)	≥95%	≥95%	≥95%
Scalability	Max. 6 pcs in Parallel(30kWh)	Max. 6 pcs in Parallel(43.2kWh)	Max. 6 pcs in Parallel(60kWh)
Communication	RS485/CAN	RS485/CAN	RS485/CAN
Protection Degree	IP21	IP21	IP21
Cycle Life[2]	≥6,000 Cycles	≥6,000 Cycles	≥6,000 Cycles
Charging Temperature Range	0°C-55 °C	0°C-55 °C	0°C-55 °C
Discharging Temperature Range	-20°C-60 °C	-20°C-60 °C	-20°C-60 °C
Display	LCD+LED	LED	LCD+LED
Installation Style	Wall-Mounted / Floor-Mounted	Wall-Mounted / Floor-Mounted	Wall-Mounted / Floor-Mounted
Protection	Built-in Smart BMS, Fuse	Built-in Smart BMS, Fuse	Built-in Smart BMS, Fuse
Warranty	5 Years	5 Years	5 Years
Certification	UN38.3	UN38.3、CE-EMC、IEC 62619	UN38.3、CE-EMC、IEC 62619
Product Weight	40KG	54.5KG	72KG
Package Weight	44kKG	59.5KG	86KG
Product Dimension	507x455x184MM	654x425x203MM	664x468x213MM
Package Dimension	585x537x258MM	752x527x268MM	748x556x358MM
[1] Recommend charge/discharge current/power is affected by temperature and SOC.			
[2] Test conditions: 0.2C Charging/Discharging @25°C, 80% DOD.			

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

Product Display



Longer Lasting LiFePO4 Battery



Support 6 Pcs in Parallel



Wide Inverter Compatibility



Real-time Status via LCD Screen
LPBF48100-M & LPBF48200-H



Support Wall Mounted Installation

LiFePO4 Battery Pack

Low-voltage LPBF Series

Features

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

(LPBF48300-II optimizes wiring ports)



LPBF48250~48300-II LPBF48350

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

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

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

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

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

Product Display



Real-time status via LCD Display



Support 6 Pcs in Parallel



Longer Lasting LiFePO4 Battery



LPBF48250/48300/48350 Wire Ports
(LPBF48300-II optimizes port placement compared to the LPBF48300 model.)



LPBF48300-II Wire Ports

LiFePO4 Battery Pack

Low-voltage LPBA Series

Features

- LiFePO4: Higher safe performance and longer cycle life
- Multiple Protection with built-in smart BMS,breaker and fuse.
- Compatible with leading inverter brands
- Flexible Installation: Wall- Mounted or Floor-Mounted
- Scalable expansion up to 12 pcs in parallel.
- Resist harsh environment with IP65-rate protection
- Aerosol Fire Extinguishing System
- Up to 10-year long warranty.



LPBA48100-OL

Model	LPBA48100-OL
Battery Type	LiFePO4
Nominal Energy	5.12kWh
Nominal Capacity	100Ah
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommended Charge/Discharge Current	50A
Max.continuous charge/Discharge current[1]	60A
Peak Charge/Discharge Current(15s)	100A
Scalability	Max. 12 pcs in Parallel(61.44kWh)
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	RS485/CAN
Cycle Life[2]	≥6,000 Cycles
Installation	Wall-Mounted / Floor-Mounted
Protection	Built-in smart BMS, Breaker, Fuse
Warranty Period	10 Years
Certification	UN38.3、CE-EMC、IEC 62619、CB
Product Weight	48.5KG
Package Weight	64.5KG
Product Dimension	665X440X175 MM
Package Dimension	760X540X345 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



IP65 Protection Level



> 6000 High Cycle Life



Aerosol Fire Extinguishing System



Support 12 Pcs in Parallel



LiFePO4 Battery Pack

High-voltage FLH Series

Features

- Multiple protections: over voltage, over current, external short circuit, reverse polarity/ground. fault, over temp.
- Battery Protection: internal short circuit, over voltage, over current, over temp, under voltage.
- Higher safe performance and longer cycle life with LFP battery.
- Flexible Installation: rack-Mounting.
- Compatible with leading inverter brands.
- Up to 10-year long warranty.
- Configurable parameters and working mode via LCD touch screen.



FLH48100UG1

Model		FLH48100UG1		
Battery Type		LiFePO4		
Nominal Energy		5.12KWh		
Nominal Voltage		51.2V		
Nominal Capacity		100Ah		
Number of Battery Modules		4(Min)	8	12
System Nominal Energy		20.48kWh	40.96kWh	61.44kWh
System Nominal Voltage		204.8V	409.6V	614.4V
System Operating Voltage		192-230.4V	384-460.8V	576-691.2V
Recommend Charge/Discharge Current		50A		
Max. Continuous Charge/Discharge Current[1]		100A		
Peak Charge/Discharge current(15S)		120A		
Depth of Discharge(DOD)		≥ 95%		
Display Type		LED+LCD(Touch)		
IP Rating of Enclosure		IP21		
Operating Temperature Range		Charge:0~+55°C		
		Discharge:-20°C~+55°C		
Storge Temperature Range		0°C~+35°C		
Humidity		5%~95%		
Altitude		≤2000M		
Cycle Life[2]		≥ 6000		
Installation		Rack-Mounting		
Protection		Built-in smart BMS, Breaker		
Communication Port		RS485 / CAN		
Warranty Period		10 Year		
Certification		UN38.3、CB、CE-EMC、IEC 62619、EN IEC 62040-1		
Control Module FLH48100UCG1	Product Dimension	482.6x565x150MM		
	Package Dimension	687x562x269MM		
	Product Weight Approximate	10.3KG		
	Package Weight Approximate	16.7KG		
Battery Module FLH48100UMG1	Product Dimension	482.6x565x131MM		
	Package Dimension	687x562x250MM		
	Product Weight Approximate	41.3KG		
	Package Weight Approximate	45KG		
	Battery Designation[3]	IFpP/54/150/120/[(1P16S)NS]M/-20+50/95		
Rack FLH48100R13G1	Product Dimension	560×590×2137.5MM (13th Floor)		
	Package Dimension	165×640×2142MM		
	Product Weight Approximate	62KG		
	Package Weight Approximate	69.5KG		
Rack FLH48100R9G1	Product Dimension	560×590×1565.5MM (9th Floor)		
	Package Dimension	168×642×1570MM		
	Product Weight Approximate	46KG		
	Package Weight Approximate	52KG(Approx)		

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

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

[3] "N" Means the Number of Battery Packs Connected Series and Should not Exceed 12. (N≤12)

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

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

ALL-IN-ONE

System

Household Energy Storage System

LFP Battery-Inverter Integrated System

Commercial & Industrial Energy Storage System

Liquid Cooling System

Air Cooling System

Household Energy Storage System

LFP Battery-Inverter Integrated System AI Series

Features

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

AI100-5048 ESS

Model	AI100-5048 ESS
Inverter Parameters	AI100-5048
Rated Output Power	5000VA
	5000W
Nominal DC Input Voltage	48V
Nominal Input Voltage	230Vac
Nominal Input Frequency	50Hz/60Hz(Auto detection)
Parallel Capability	Yes, up to 12 units
PCS (In Progress)	CE-EMC、CE-LVD
Utility Charge Mode Specifications	
Nominal Input Voltage	230Vac
Nominal Output Voltage	230Vac
Input Voltage Range	90~280Vac
Max. Charge Current	100A
Solar Charging &Grid Charging	
Max. PV Open Circuit Voltage	500V
Max. Input Power	6000W
Max. Solar Charging Current	100A
Max. Charging Current(PV+Grid)	100A
Max. Input Current	25A
General Specifications	
Protection Level	IP20
Net Weight (KG)	17.8KG
Product Size(D*W*H)	710x350x180MM
Package Dimension(D*W*H)	792x507x278MM
battery Parameters	AI100-B5
Capacity	5.12kWh
Battery Type	LiFePO4
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommend Charge/Discharge Current [1]	≤100A
Recommend Charge/Discharge Power [1]	≤5,000W
Maximum Charge/Discharge Current (15s)	150A
Maximum Charge/Discharge Power (15s)	7,500W
Depth of Discharge (DOD)	≥95%
Scalability	Max. 15 pcs in Parallel(76.8kWh)
Communication	RS485/CAN
Protection Level	IP21
Cycle Life [2]	≥6,000 Cycles
Display	LED
Installation	Wall-Mounted/Floor-Mounted
Protection	Built-in smart BMS, Breaker, Fuse
Warranty	5 Years
Certification	UN38.3
Net Weight	45KG
Gross Weight	49.5KG
Product Dimension	660X420X180MM
Package Dimension	822X522X278MM
[1] Recommend Charge/Discharge Current/Power is Affected by Temperature and soc.	
[2] Test Conditions: 0.2C Charging/Discharging @25°C, 80% DOD.	

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

Household Energy Storage System

LFP Battery-Inverter Integrated System AI Series

Features

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

AI100-8048 ESS

Model	AI100-8048 ESS
Inverter Parameters	AI100-8048
Rated Output Power	8000VA
	8000W
Nominal DC Input Voltage	48V
Nominal Input Voltage	230Vac
Nominal Input Frequency	50Hz/60Hz(Auto detection)
Parallel Capability	Yes, up to 6units
PCS (In Progress)	CE-EMC、CE-LVD
Utility Charge Mode Specifications	
Nominal Input Voltage	230Vac
Nominal Output Voltage	230Vac
Input Voltage Range	90~280Vac
Max. Charge Current	150A
Solar Charging &Grid Charging	
Max. PV Open Circuit Voltage	500V
Max. Input Power	10000W (5000W for Single PV)
Max. Solar Charging Current	150A
Max. Charging Current(PV+Grid)	150A
Max. Input Current	20A×2(MAX40A)
General Specifications	
Protection Level	IP20
Net Weight (KG)	26.8KG
Product Size(D*W*H)	660x500x180MM
Package Dimension(D*W*H)	792x657x278MM
battery Parameters	AI100-B5
Capacity	5.12kWh
Battery Type	LiFePO4
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommend Charge/Discharge Current [1]	≤100A
Recommend Charge/Discharge Power [1]	≤5,000W
Maximum Charge/Discharge Current (15s)	150A
Maximum Charge/Discharge Power (15s)	7,500W
Depth of Discharge (DOD)	≥95%
Scalability	Max. 15 pcs in Parallel(76.8kWh)
Communication	RS485/CAN
Protection Level	IP21
Cycle Life [2]	≥6,000 Cycles
Display	LED
Installation	Wall-Mounted/Floor-Mounted
Protection	Built-in smart BMS, Breaker, Fuse
Warranty	5 Years
Certification	UN38.3
Net Weight	45KG
Gross Weight	49.5KG
Product Dimension	660X420X180MM
Package Dimension	822X522X278MM
[1] Recommend Charge/Discharge Current/Power is Affected by Temperature and soc.	
[2] Test Conditions: 0.2C Charging/Discharging @25°C, 80% DOD.	
*Product specifications may vary during continuous improvements. Please contact us for latest details.	
*Refer to Felicitysolar's Warranty Policy for applicable conditions.	

Commercial & Industrial Energy Storage System

Air Cooling System

Features

- ☀️ ≥ 6000 long cycle life.
- 🏗️ Easy expansion with module design.
- 🏠 High Efficiency: battery 94%, system 87%.
- 🔌 Multi Branches: Support load, battery and PV.
- 🛡️ High Safety: no parallel/circulating currents/ three fire prevention.
- 🔧 Easy maintenance with self diagnosis and fault location.
- 🔄 User-friendly experience with ready to work, auto switch on grid / off grid mode.



FLS-MES215AF-S

Model	FLS-MES215AF-S
DC	
Cell	LFP 280Ah
Number of MPPT	2
MPPT Operating Voltage/Full Load Voltage	250~ 850/450 ~850
Protection	Circuit Braker and Fuse
Pack Capacity /Arrangement	14.336kWh / 1P16S
Maximum PV Input Voltage/Power	1000V / 120kW
System Capacity /Arrangement	215kWh/1P240S
Nominal Current	140A
Charge/Discharge Rate	≤0.5Cp
DC Efficiency	94%
AC (On Grid)	
Nominal Output Power	100KW
Nominal Input Voltage	AC340V~460V
Power Factor	-1~1
Nominal Output Current	144A
Nominal Grid Frequency	50Hz/60Hz
Wiring	3P+N+PE
AC (Off Grid)	
Nominal Output Power	100KW
Nominal Input Voltage	AC400V
THD	Linear ≤1%/Nonlinear ≤5%
Nominal Output Current	144A
Nominal Grid Frequency	50Hz/60Hz
Output Wiring	3P+N+PE (Isolated Transformer, STS Inside)
System	
Overall System Efficiency	87%&0.5P (STD)
Communication	RS485, CAN, TCP/IP
Fire Prevention	Fk5112
DOD	5~95%
Charging/Discharging Rate	≤0.5Cp
Cooling Power	1.1 kW/ 3.0 kW
Cooling	Forced air Cooling
Operation Temperature	-20°C~50°C(>45°C Derating)
Cabinet Enclosure Protection for Cabinet	IP54
Warranty Period	5 Years
Relative Humidity Range	5~95%RH (no Condensing)
Noise	<75dB
Weight	3900KG
Max. Operation Altitude	≤3000M
Size (MM)	2450(L)×1550(D)×2400(H)
Certification	Battery: UN38.3 PCS: EN 50549-1、EN 50549-10、CE-EMC、CE-LVD

*Conditions Apply, Refer to Felicitysolar Warranty Letter.

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

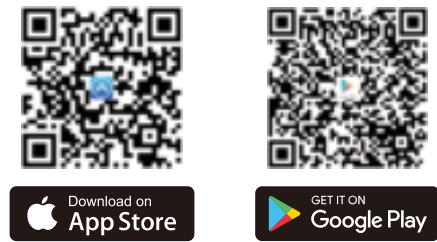
- Submit a request, and our support team will reply within 12 hours, offer solution within 24 hours.
- Local service points deployment for fast on-site inspection and repair services.



6. OpenAPI

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

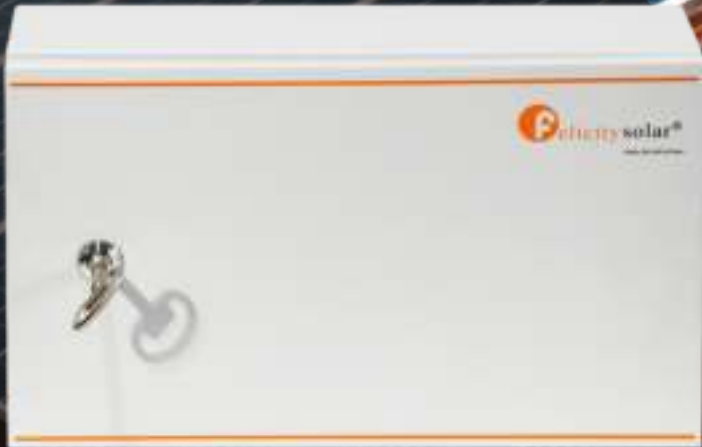
APP Download



PV Combiner Box

Features

-  Electric Energy Gathering.
-  Group String Protection.
-  Detection and Protection.
-  Electricity Transmission.

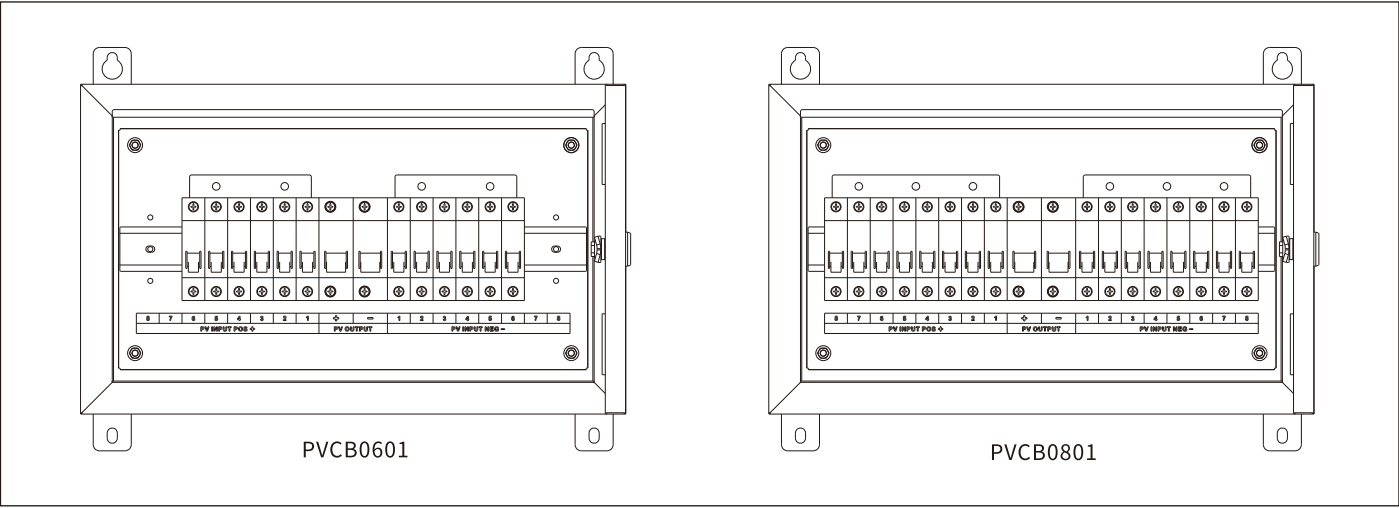


PVCB0601

PVCB0801

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	4~8mm ²	
Output Cable Diameter	5~10mm ²	
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

Internal Schematic Diagram of the Product



Battery Combiner Box

Features

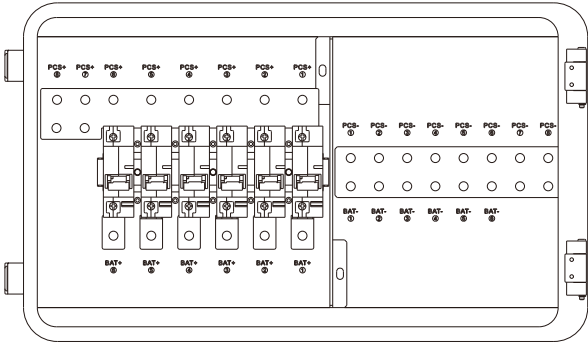
-  Convenient circuit wiring.
-  Superior flow expansion for higher efficiency.
-  Robust high-current handling for reliable performance.



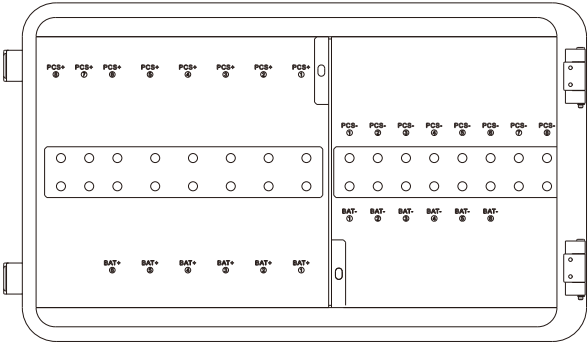
BTCB0606/0303-120/200

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			

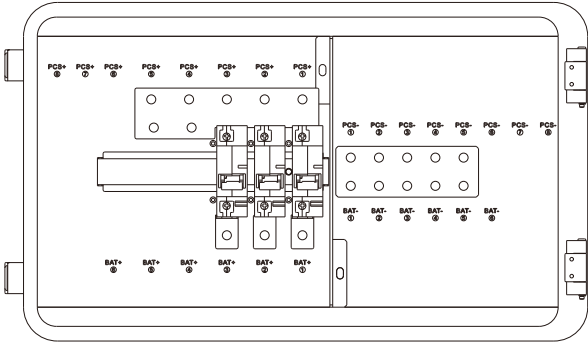
Internal schematic diagram of the product



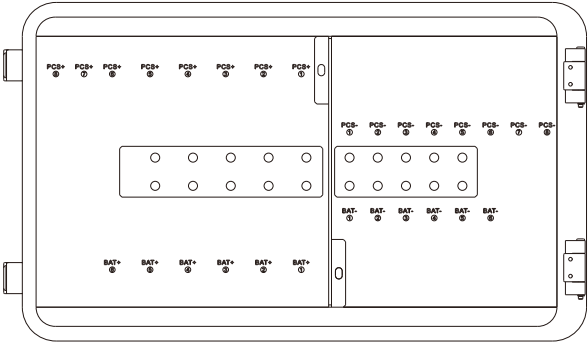
BTCB0606-120 with breaker 125A*6PCS



BTCB0606-200 with out breaker



BTCB0303-120 with breaker 125A*3PCS



BTCB0303-200 with out breaker

User Cases

Europe, Americas & Australia



User Cases

C & I Energy Storage system

