

Micro Balcony Solar Systems & Off-grid Solar Power Generation System



Micro Balcony Solar Systems

■ What is a balcony power plant?

The Balcony Solar Power Station is a miniature photovoltaic module for producing electricity for your home.

Equipped with an AC plug and an integrated inverter. Simply plug it into your outlet and it generates its own electricity and connects to your home's power grid.

■ Is it easy to install?

The system is very easy to install. No need to call a professional. Simply connect the solar panels in series and parallel to the micro-inverter. Then connect it to your home outlet and you're ready to go. Plug and Play!



MICRO GRID-CONNECTED SYSTEM

TIED BALCONY MICRO GRID-CONNECTED SYSTEM
A-GRADE MONO SILICON CELLS

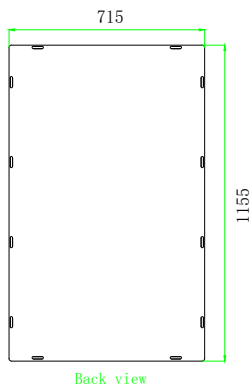
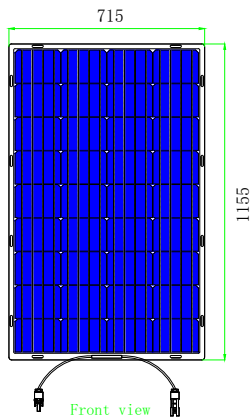


MICRO GRID-CONNECTED SYSTEM

HANGING BALCONY MICRO GRID-CONNECTED SYSTEM
MONO PCB LAMINATED SOLAR MODULE KITS



Product Drawing



*TIED BALCONY MICRO GRID-CONNECTED SYSTEM

*Standard test conditions: irradiance 1000W/m², component temperature 25°C, wind speed 0m/s, AM=1.5

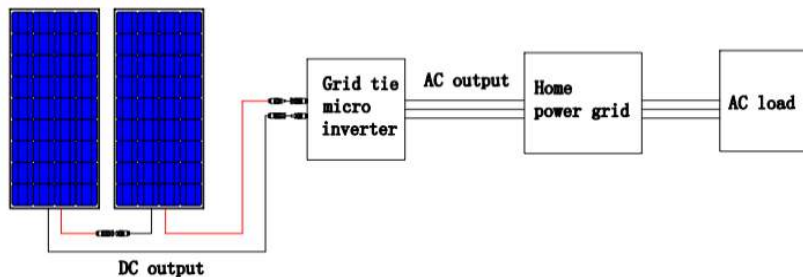
150W Solar Panel Specification

Module	Pmax(W)	Vmp(V)	Imp(A)	Voc(V)	Isc(A)	Size(mm)	Weight(kg)
PG-150W	150	19.8	7.58	23.76	8.33	1155*715*3mm	/

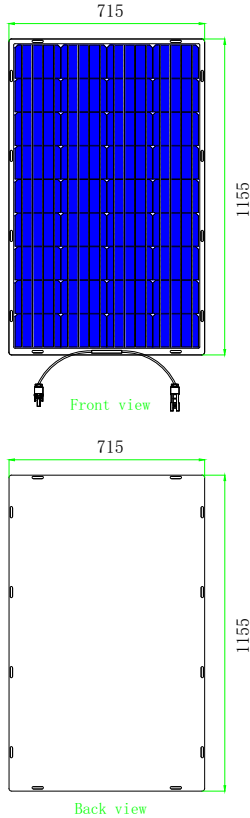
300W Micro Balcony System Configuration

Item	Model	Specification	Quantity	Weight(kg)	Packing(mm)
1	Solar panel	150W/19.8V	2 pcs	/	1175*730*45mm
2	Micro inverter	300W/230V	1 set	3.5	775*775*80
3	Cable	Customized	1 set		
4	Bind	55*500mm Black nylon	24 pcs	/	

System connection diagram



Product Drawing



***TIED BALCONY MICRO GRID-CONNECTED SYSTEM**

*Standard test conditions: irradiance 1000W/m², component temperature 25°C, wind speed 0m/s, AM=1.5

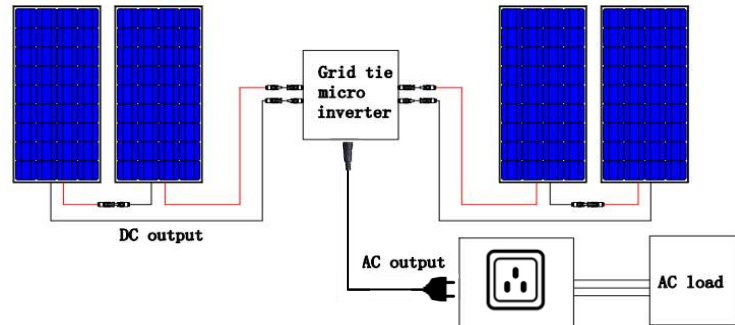
150W Solar Panel Specification

Module	Pmax(W)	Vmp(V)	Imp(A)	Voc(V)	Isc(A)	Size(mm)	Weight(kg)
PG-150W	150	19.8	7.58	23.76	8.33	1155*715*3mm	/

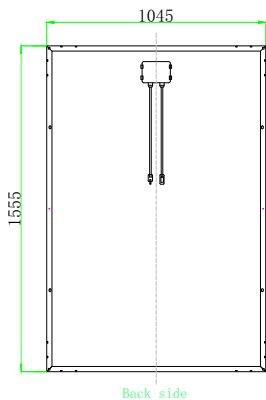
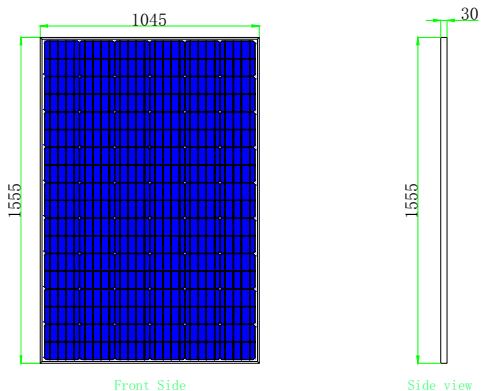
600W Micro Balcony System Configuration

Item	Model	Specification	Quantity	Weight(kg)	Packing(mm)
1	Solar panel	150W/19.8V	4 pcs	/	1175*730*45mm
2	Micro inverter	600W/230V	1 set	3.5	775*775*80
3	Cable	Customized	1 set		
4	Bind	55*500mm Black nylon	48 pcs	/	

System connection diagram



Product Drawing



*HANGING BALCONY MICRO GRID-CONNECTED SYSTEM

*Standard test conditions: irradiance 1000W/m², component temperature 25°C, wind speed 0m/s, AM=1.5

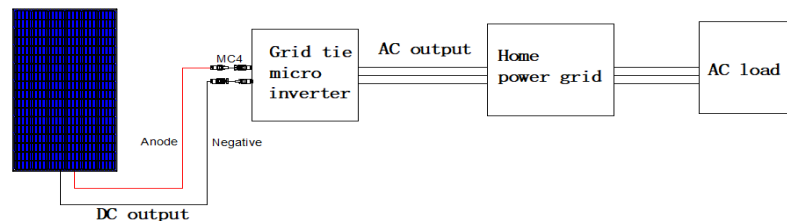
300W Solar Panel Specification

Module	Pmax(W)	Vmp(V)	Imp(A)	Voc(V)	Isc(A)	Size(mm)	Weight(kg)
PG-300W	300	29.7	10.1	35.64	11.1	1555*1045*30mm	17

300W Micro Balcony System Configuration

Item	Model	Specification	Quantity	Weight(kg)	Packing(mm)	Number of cabinets (set)
1	Solar panel	300W/29.7V	1 pcs	17	1575*1060*45	500
2	Micro inverter	300W/230V	1 set	3.5		
3	Cable	Customized	1 set			
4	Triangular Bracket	Customized	2 pcs	9		

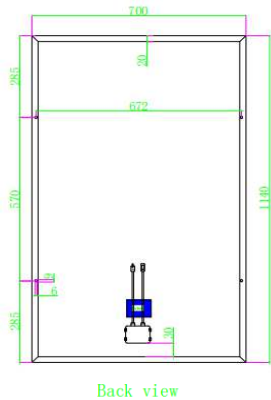
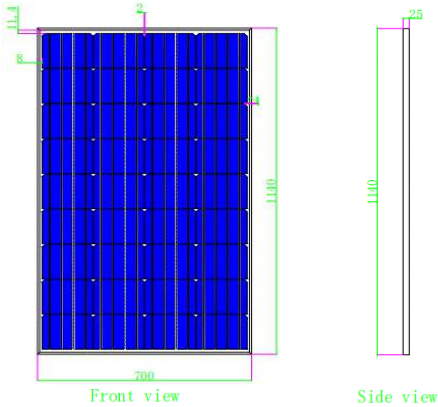
System connection diagram



***HANGING BALCONY MICRO GRID-CONNECTED SYSTEM**

*Standard test conditions: irradiance 1000W/m², component temperature 25°C, wind speed 0m/s, AM=1.5

Product Drawing



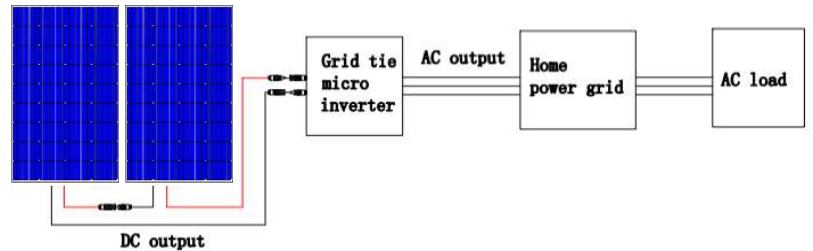
150W Solar Panel Specification

Module	Pmax(W)	Vmp(V)	Imp(A)	Voc(V)	Isc(A)	Size(mm)	Weight(kg)
PG-150W	150	19.8	7.58	23.76	8.33	1140*700*25mm	7.5

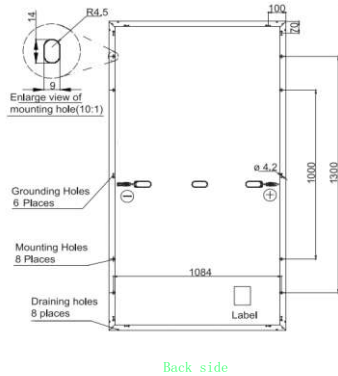
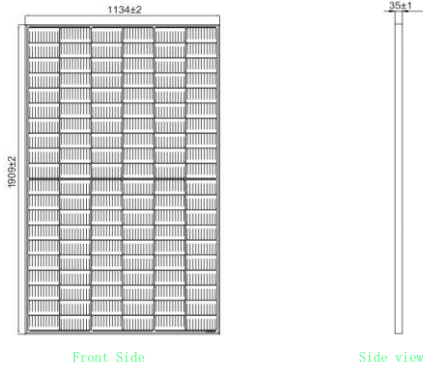
300W Micro Balcony System Configuration

Item	Model	Specification	Quantity	Weight(kg)	Packing(mm)	Number of cabinets (set)
1	Solar panel	150W/19.8V	2 pcs	15	1160*715*40	700
2	Micro inverter	300W/230V	1 set	3.5		
3	Cable	Customized	1 set			
4	Triangular Bracket	Customized	4 pcs	9	500*500*90	

System connection diagram



Product Drawing



***HANGING BALCONY MICRO GRID-CONNECTED SYSTEM**

*Standard test conditions: irradiance 1000W/m², component temperature 25°C, wind speed 0m/s, AM=1.5

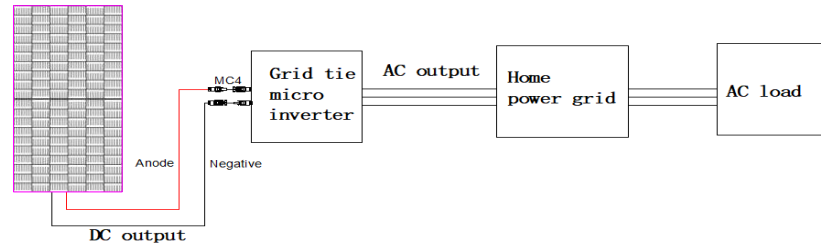
450W Solar Panel Specification

Module	Pmax(W)	Vmp(V)	Imp(A)	Voc(V)	Isc(A)	Size(mm)	Weight(kg)
PG-450W	450	34.67	12.98	41.25	13.89	1909*1134*35mm	23.9

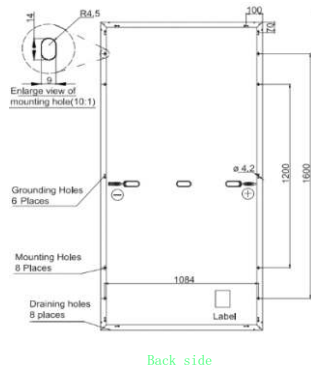
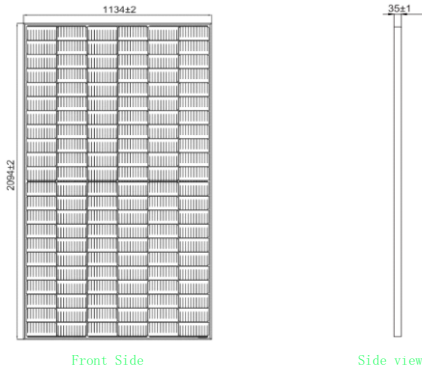
450W Micro Balcony System Configuration

Item	Model	Specification	Quantity	Weight(kg)	Packing(mm)	Number of cabinets (set)
1	Solar panel	450W/34.67V	1 pc	23.9	1930*1155*55	300
2	Micro inverter	500W/230V	1 set	3.5		
3	Cable	Customized	1 set			
4	Triangular Bracket	Customized	2 pcs	7.5	840*840*70	

System connection diagram



Product Drawing



***HANGING BALCONY MICRO GRID-CONNECTED SYSTEM**

*Standard test conditions: irradiance 1000W/m², component temperature 25°C, wind speed 0m/s, AM=1.5

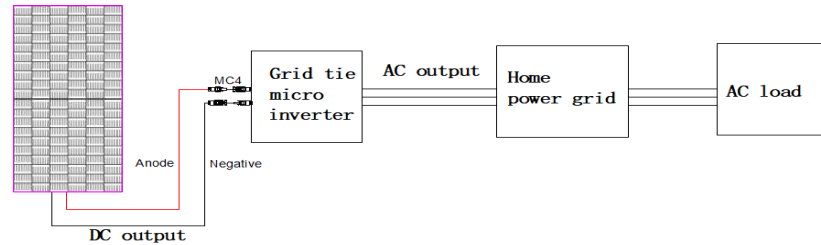
500W Solar Panel Specification

Module	Pmax(W)	Vmp(V)	Imp(A)	Voc(V)	Isc(A)	Size(mm)	Weight(kg)
PG-500W	500	38.43	13.01	46.12	14.3	2094*1134*35mm	23.5

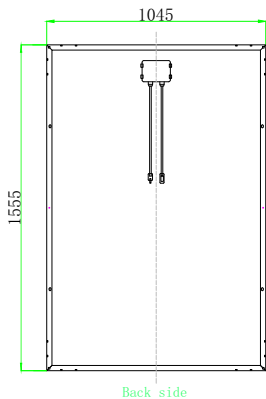
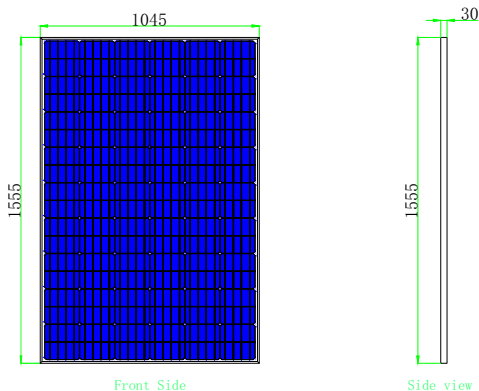
500W Micro Balcony System Configuration

Item	Model	Specification	Quantity	Weight(kg)	Packing(mm)	Number of cabinets (set)
1	Solar panel	500W/37.71V	1 pc	23.5	2094*1134*35	290
2	Micro inverter	500W/230V	1 set	3.5		
3	Cable	Customized	1 set			
4	Triangular Bracket	Customized	3 pcs	11.5		

System connection diagram



Product Drawing



***HANGING BALCONY MICRO GRID-CONNECTED SYSTEM**

*Standard test conditions: irradiance 1000W/m², component temperature 25°C, wind speed 0m/s, AM=1.5

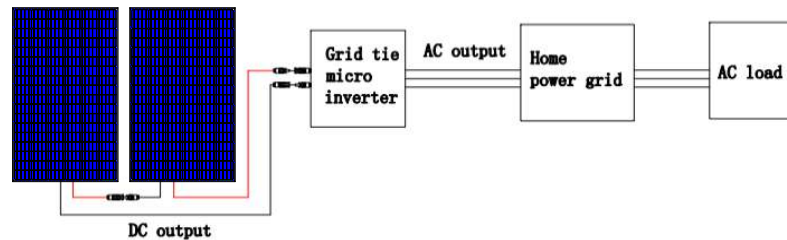
300W Solar Panel Specification

Module	Pmax(W)	Vmp(V)	Imp(A)	Voc(V)	Isc(A)	Size(mm)	Weight(kg)
PG-300W	300	29.7	10.1	35.64	11.1	1555*1045*30mm	17

600W Micro Balcony System Configuration

Item	Model	Specification	Quantity	Weight(kg)	Packing(mm)	Number of cabinets (set)
1	Solar panel	300W/29.7V	2 pcs	34	1575*1060*45	300
2	Micro inverter	600W/230V	1 set	3.5		
3	Cable	Customized	1 set			
4	Triangular Bracket	Customized	4 pcs	13.5	775*775*80	

System connection diagram



Microinverter

300G3-US-220/EU-230
500G3-US-220/EU-230



Support reactive power compensation



IP67 protection degree, 10 years warranty



1 MPP tracker, module level monitoring



PLC, Zigbee or WIFI communication



Rapid shutdown function

Technical Data

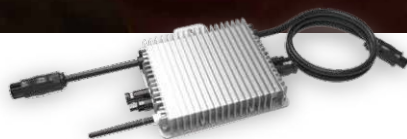
Model	300G3-US-220	300G3-EU-230	500G3-US-220	500G3-EU-230
Input Data (DC)				
Recommended input Power (STC)	210~400W (1 Piece)		210~600W (1 Piece)	
Maximum input DC Voltage	60V			
MPPT Voltage Range	25~55V			
Operating DC Voltage Range	20~60V			
Max. DC Short Circuit Current	19.5A			
Max. input Current	13A			
Number of MPPT / Strings per MPPT	1/1			
Output Data (AC)				
Rated output Power	300W		500W	
Rated output Current	1.4A	1.3A	2.3A	2.2A
Nominal Voltage / Range (this may vary with grid standards)	220V / 176-242V	230V / 184~265V	220V / 176-242V	230V / 184~265V
Nominal Frequency / Range	50 / 60Hz			
Extended Frequency / Range	45~55Hz / 55~65Hz			
Power Factor	>0.99			
Maximum units per branch	17		10	
Efficiency				
CEC Weighted Efficiency	95%			
Peak Inverter Efficiency	96.5%			
Static MPPT Efficiency	99%			
Night Time Power Consumption	50mW			
Mechanical Data				
Ambient Temperature Range	-40~65°C			
Size (mm)	189W×184H×31.5D (Without mounting bracket and cable)			
Weight (kg)	2.15			
Cooling	Natural cooling			
Enclosure Environmental Rating	IP67			
Features				
Compatibility	Compatible with 60~72 cell PV modules			
Communication	Power line / WIFI / Zigbee			
Grid Connection Standard	EN50549-1, VDE0126-1-1, VDE 4105, ABNT NBR 16149, ABNT NBR 16150, ABNT NBR 62116, RD1699, UNE 206006 IN, UNE 206007-1 IN, IEE1547			
Safety EMC / Standard	UL 1741, IEC62109-1/2, IEC61000-6-1, IEC61000-6-3, IEC61000-3-2, IEC61000-3-3			
Warranty	10 years			

Microinverter

800G3-US-220/EU-230


600G3-US-220/EU-230


1000G3-US-220/EU-230




 Support reactive power compensation

 IP67 protection degree, 10 years warranty

 2 MPP tracker, module level monitoring

 PLC, Zigbee or WIFI communication

 Rapid shutdown function

Technical Data

Model	600G3-US-220	600G3-EU-230	800G3-US-220	800G3-EU-230	1000G3-US-220	1000G3-EU-230
Input Data (DC)						
Recommended input Power (STC)	210-400W (2 Pieces)		210-500W (2 Pieces)		210-600W (2 Pieces)	
Maximum input DC Voltage	60V					
MPPT Voltage Range	25-55V					
Operating DC Voltage Range	20-60V					
Max. DC Short Circuit Current	2×19.5A					
Max. input Current	2×13A					
Number of MPPT / Strings per MPPT	2/1					
Output Data (AC)						
Rated output Power	600W		800W		1000W	
Rated output Current	2.7A	2.6A	3.6A	3.5A	4.5A	4.3A
Nominal Voltage / Range (this may vary with grid standards)	220V / 176-242V	230V / 184-265V	220V / 176-242V	230V / 184-265V	220V / 176-242V	230V / 184-265V
Nominal Frequency / Range	50 / 60Hz					
Extended Frequency / Range	45-55Hz / 55-65Hz					
Power Factor	>0.99					
Maximum units per branch	8		6		5	
Efficiency						
CEC Weighted Efficiency	95%					
Peak Inverter Efficiency	96.5%					
Static MPPT Efficiency	99%					
Night Time Power Consumption	50mW					
Mechanical Data						
Ambient Temperature Range	-40-65°C					
Size (mm)	212W×230H×40D (Without mounting bracket and cable)					
Weight (kg)	3.15					
Cooling	Natural cooling					
Enclosure Environmental Rating	IP67					
Features						
Compatibility	Compatible with 60-72 cell PV modules					
Communication	Power line / WIFI / Zigbee					
Grid Connection Standard	EN50549-1, VDE0126-1-1, VDE 4105, ABNT NBR 16149, ABNT NBR 16150, ABNT NBR 62116, RD1699, UNE 206006 IN, UNE 206007-1 IN, IEEE1547					
Safety EMC / Standard	UL 1741, IEC62109-1/2, IEC61000-6-1, IEC61000-6-3, IEC61000-3-2, IEC61000-3-3					
Warranty	10 years					

Off-grid Solar Power Generation System

■ What is off-grid solar power generation system?

The off-grid solar power generation system converts light energy into electric energy through photovoltaic panels, which is used to effectively solve the problems caused by power shortage and power failure.

The photovoltaic panel converts solar energy into electric energy, and charges the load and the battery pack at the same time through the controller.

When there is no light, the battery pack supplies power to the DC load and the inverter through the controller, and the inverter is converted into AC power to supply the AC power so as to achieve off-grid .



■ Applications

Off grid solar power generation systems are widely used in remote mountainous areas, power-free areas, islands, communication base stations and street lamps.

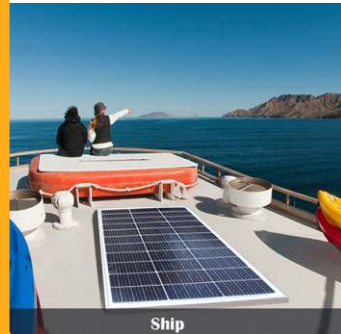
The wide application scenarios include roofs of villas, residential buildings, schools, hotels, factories, etc; RV, yacht, street lamp and monitoring power generation system, photovoltaic building integration, photovoltaic water pump irrigation system, wind solar complementary power generation, etc.



Street light



RV

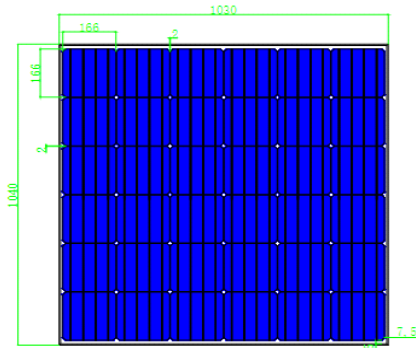


Ship

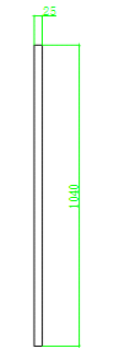


Roof

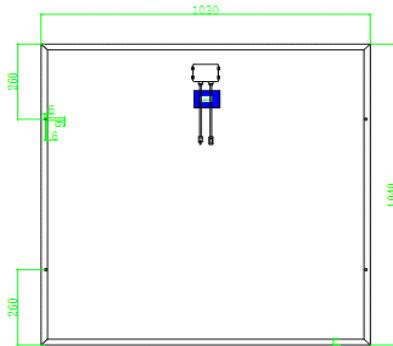
Product Drawing



Front view



Side view



Back view

*Standard test conditions: irradiance 1000W/m², component temperature 25°C, wind speed 0m/s, AM=1.5

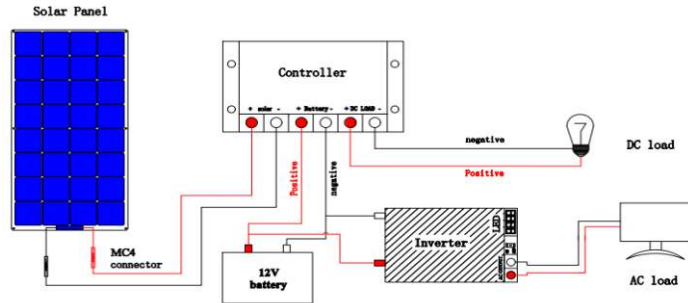
200W Solar Panel Specification

Module	Pmax(W)	Vmp(V)	Imp(A)	Voc(V)	Isc(A)	Size(mm)	Weight(kg)
PG-200W	200	19.8	10.1	23.76	11.11	1040*1030*25	10

200W-12V Off-grid Solar System Configuration

Item	Model	Specification	Quantity	Weight(kg)	Packing(mm)
1	Solar panel	200W/19.8V	1 pc	10	1055*1045*40
2	Controller	12/24V-30A	1	32	1070*245*250
	Battery	100Ah-12V	1		
	Inverter	1000W/230V	1 set		
3	Cable	Customized	1		

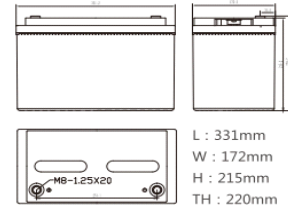
System connection diagram



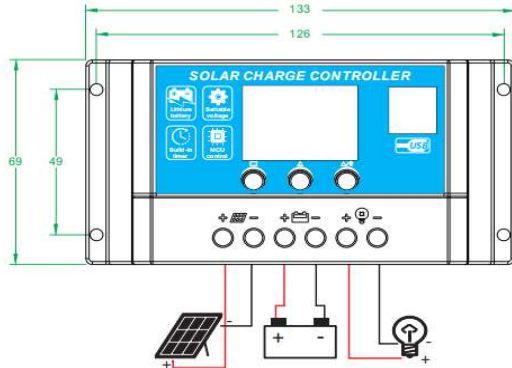
Inverter



Battery



12/24V-30A Controller



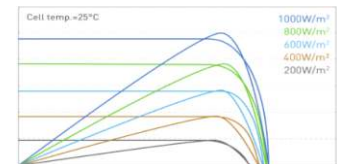
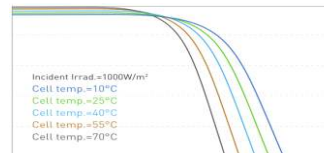
Certifications



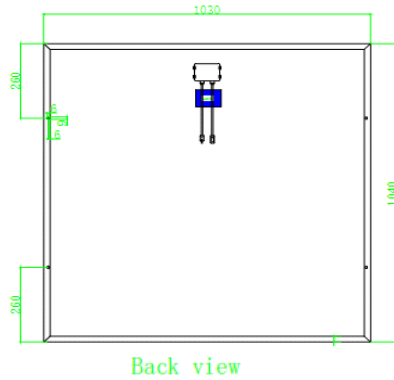
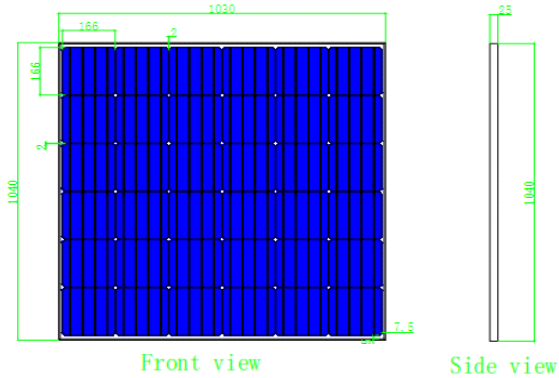
Specifications

Model	6-GFM-100	
Design Life	8 years	
Nominal Capacity	20HR(5.4A,1.80V)	108Ah
	10HR(10A,1.80V)	100Ah
	3HR(27A,1.80V)	81Ah
	1HR(55A,1.80V)	55Ah
Internal Resistance	4.8mΩ(Full Charge)	
Self Discharge	≤3% per month	
Charge Voltage	Cycle Use	Standby Use
	2.35V/Cell (-4mV/°C/Cell) Max. Charge Current:15A	2.25V/Cell (-3mV/°C/Cell)

Note: Data contained herein are measured at 25°C



Product Drawing



*Standard test conditions: irradiance 1000W/m², component temperature 25°C, wind speed 0m/s, AM=1.5

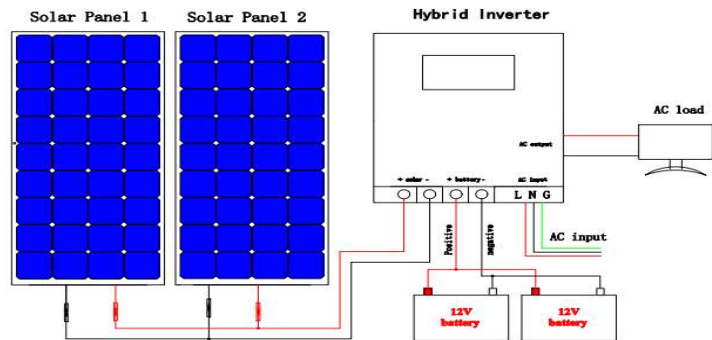
200W Solar Panel Specification

Module	Pmax(W)	Vmp(V)	Imp(A)	Voc(V)	Isc(A)	Size(mm)	Weight(kg)
PG-200W	200	19.8	10.1	23.76	11.11	1040*1030*25	10

400W-12V Off-grid Solar System Configuration

Item	Model	Specification	Quantity	Weight(kg)	Packing(mm)
1	Solar panel	200W/19.8V	2 pcs	20	1055*1045*40
2	Battery	120Ah-12V lead battery	2	76	1070*245*250
3	Hyrid Inverter	12V-1000W/230V	1		
4	Cable	Customized	1 set		

System connection diagram



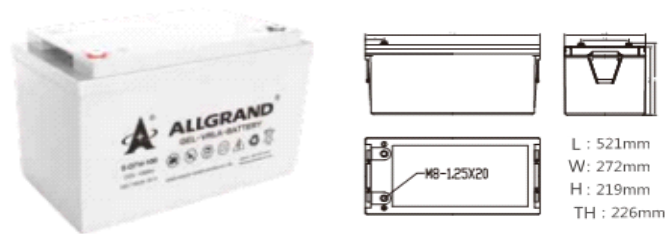
Hyrid Inverter



Cable



Battery



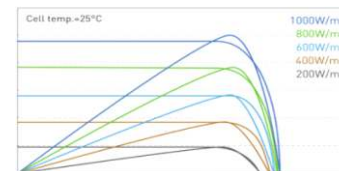
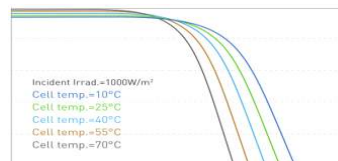
Certifications



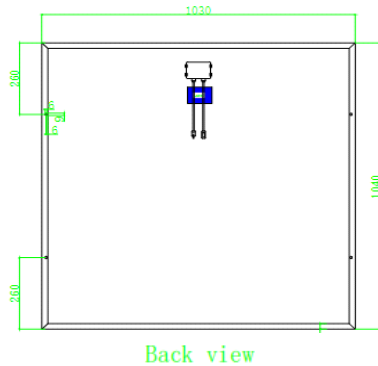
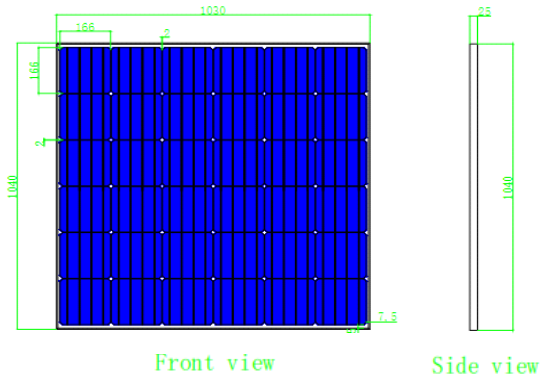
Specifications

Model	6-GFM-250	
Design Life	12 years	
Nominal Capacity	20HR(13.5A,1.80V)	270Ah
	10HR(25A,1.80V)	250Ah
	3HR(67.5A,1.80V)	202.5Ah
	1HR(137.5A,1.80V)	137.5Ah
Internal Resistance	2.5mΩ(Full Charge)	
Self Discharge	≤3% per month	
Charge Voltage	Cycle Use	
	2.35V/Cell (-4mV/°C/Cell)	Standby Use
	Max. Charge Current:37.5A	2.25V/Cell (-3mV/°C/Cell)

Note: Data contained herein are measured at 25°C



Product Drawing



*Standard test conditions: irradiance 1000W/m², component temperature 25°C, wind speed 0m/s, AM=1.5

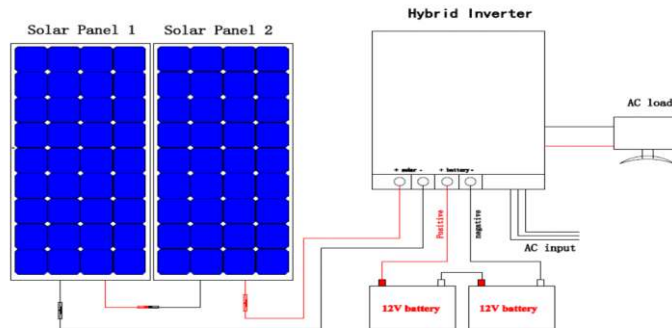
200W Solar Panel Specification

Module	Pmax(W)	Vmp(V)	Imp(A)	Voc(V)	Isc(A)	Size(mm)	Weight(kg)
PG-200W	200	19.8	10.1	23.76	11.11	1040*1030*25	10

400W-24V Off-grid Solar System Configuration

Item	Model	Specification	Quantity	Weight(kg)	Packing(mm)
1	Solar panel	200W/19.8V	2 pcs	20	1055*1045*40
2	Battery	120Ah-12V lead battery	2	76	1070*245*250
3	Hyrid Inverter	24V-2000W/230V	1		
4	Cable	Customized	1 set		

System connection diagram



Hybrid Inverter



LCD display

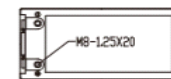
LED indicators

Function keys

Cable



Battery



L : 521mm
W : 272mm
H : 219mm
TH : 226mm

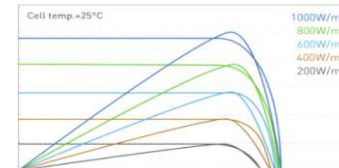
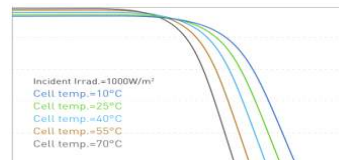
Certifications



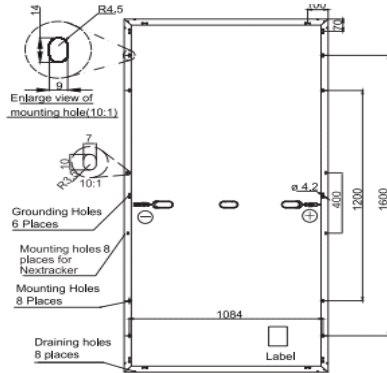
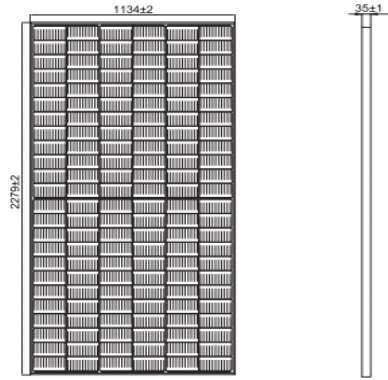
Specifications

Model	6-GFM-120	
Design Life	12 years	
Nominal Capacity	20HR(6.48A, 1.80V)	129.6Ah
	10HR(12A, 1.80V)	120Ah
	3HR(32.4A, 1.80V)	97.2Ah
	1HR(66A, 1.80V)	66Ah
Internal Resistance	4.5mΩ(Full Charge)	
Self Discharge	≤3% per month	
Charge Voltage	Cycle Use	Standby Use
	2.35V/Cell (-4mV/°C/Cell)	2.25V/Cell
	Max. Charge Current:18A	(-3mV/°C/Cell)

Note: Data contained herein are measured at 25°C



Product Drawing



*Standard test conditions: irradiance 1000W/m², component temperature 25°C, wind speed 0m/s, AM=1.5

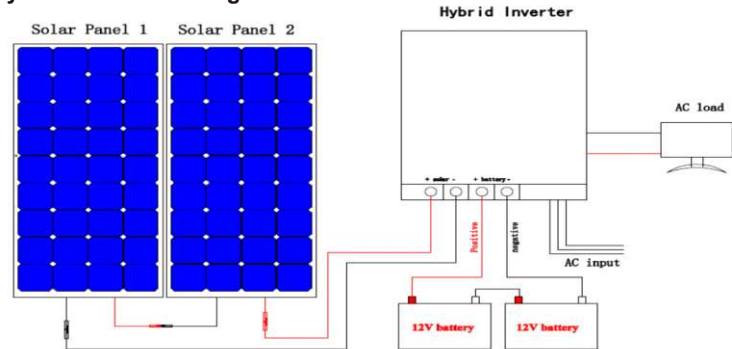
540W Solar Panel Specification

Module	Pmax(W)	Vmp(V)	Imp(A)	Voc(V)	Isc(A)	Size(mm)	Weight(kg)
PG-540W	540	41.62	12.98	49.55	13.89	2279*1134*35	28.5

1.08KW Off-grid Solar System Configuration

Item	Model	Specification	Quantity	Weight(kg)	Packing(mm)
1	Solar panel	540W/41.62V	2 pcs	57	2279*1134*35
2	Battery	12V/120AH	2	77	408*175*210
3	Hyrid Inverter	24V-3KW/230V	1		378*280*103
4	Cable	Customized	1 set		

System connection diagram



“Mission:

**Absorbing Sunshine
Focusing Energy**

Returning the earth to a clean place”

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For Consumable Energies

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