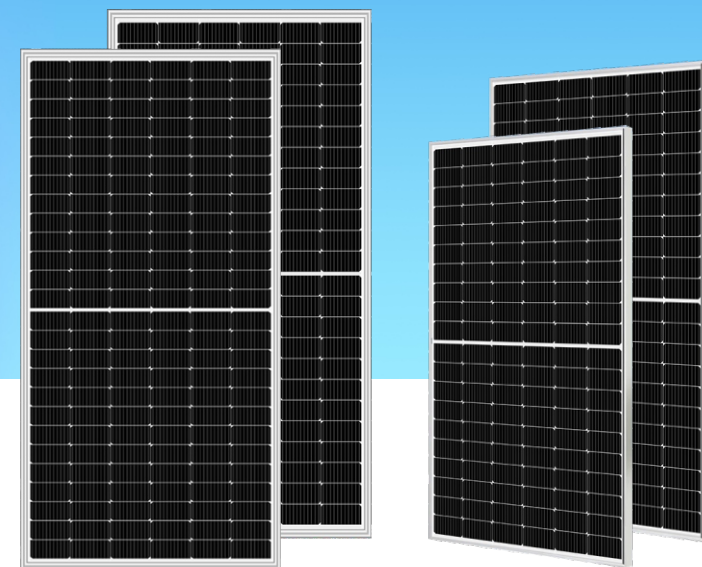




MSD450-600W

Mono Half-cut Single/Double Glass Module

450-600/MB Series



Solar module features



Multi Busbar Technology

Better light trapping and current collection to improve, Effectively improve the module's power output and reliability.



Higher output power

Module output power increased to 505W.



Low light performance

The special solar cell technology has excellent low light power generation performance.



Better resistance to hot spots

The use of half cell structure and special circuit design is less shade loss, with better temperature coefficient and thermal spot resistance ability

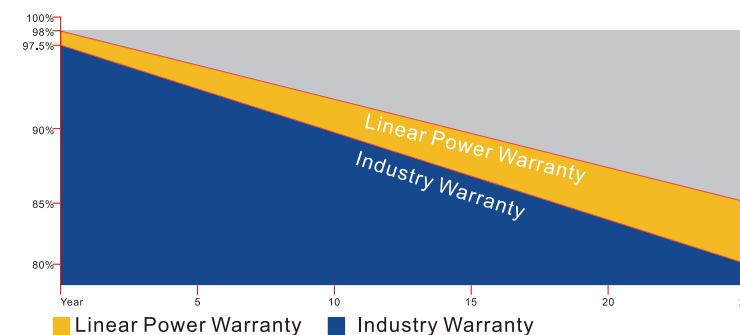


Adaptability to harsh environments

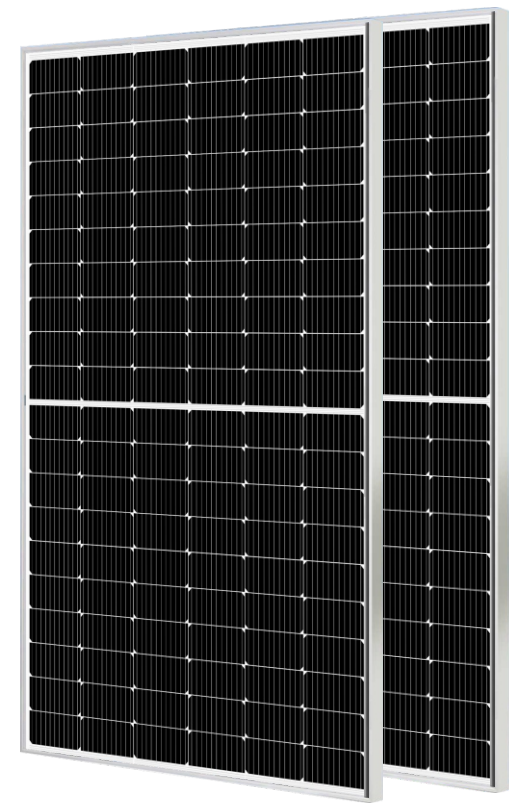
High performance materials are suitable for coastal, farm, desert and other harsh environmental conditions, glass surface is anti-reflective and easy to clean, minimizing power generation losses caused by dirt and dust.

First-class Quality Assurance

- 10-year warranty for material and technology
- 25-year linear power output warranty



Module Picture



MSD450M-120

Mono Half-cut Single/Double Glass Module

430-455/MB

Series

INTRODUCTION

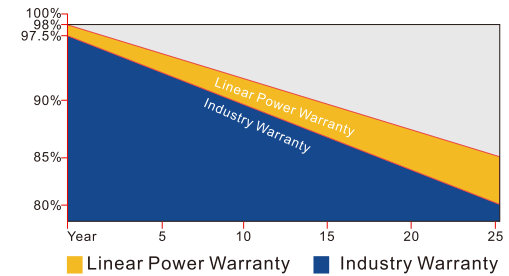
MONO half-cut single / double glass module, assembled with multi-busbar PERC technique and half-cut structure, which can not only absorb the energy from the front of the module, but also absorb the reflected light and the scattered light from the back, offer the advantages of higher power output, reduce shading effect on the energy generation, enhance the mechanical load bearing capacity as well.

LCOE save 6-8%

- ↓6% Saving logistics cost
- ↓7% Saving cable cost
- ↓8% Saving bracket cost
- ↓9% Saving labor cost

First-class Quality Assurance

- 10-year warranty for material and technology
- 25-year linear power output warranty

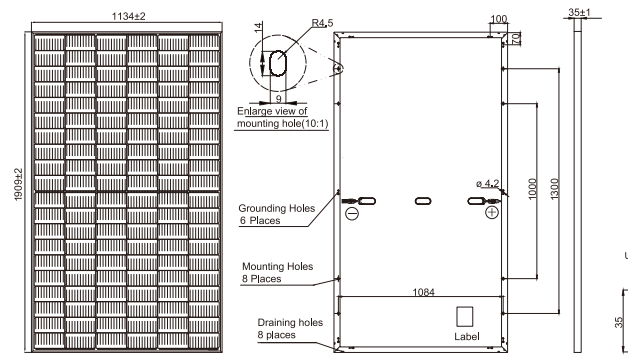


Comprehensive Certificates

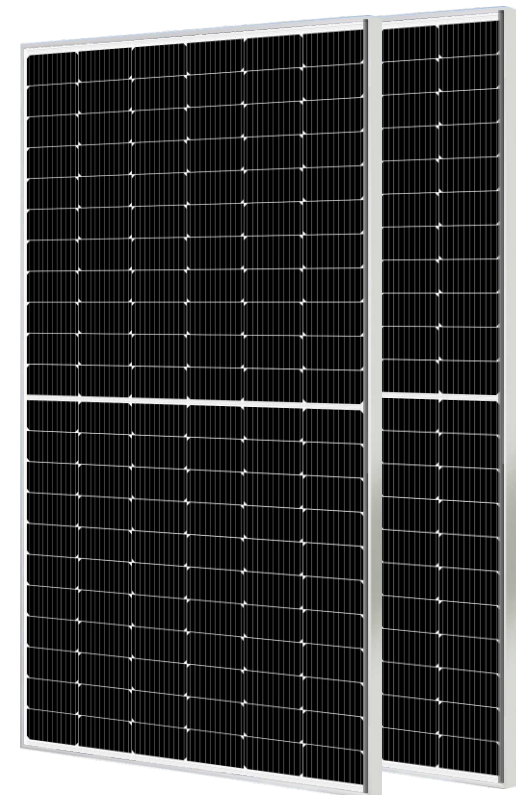
- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001: Environmental management systems
- ISO45001:2018 Occupational health and safety management systems



Mechanical Diagrams



Module Picture



MSD500M-132

Mono Half-cut Single/Double Glass Module

480-505/MB

Series

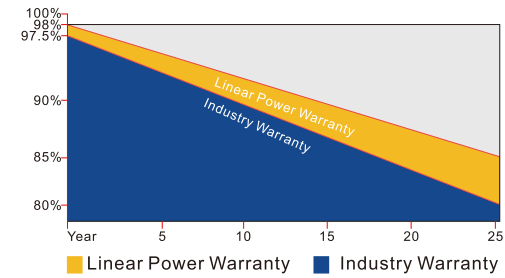
INTRODUCTION
MONO half-cut single / double glass module, assembled with multi-busbar PERC technique and half-cut structure, which can not only absorb the energy from the front of the module, but also absorb the reflected light and the scattered light from the back, offer the advantages of higher power output, reduce shading effect on the energy generation, enhance the mechanical load bearing capacity as well.

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- ↓9% Saving labor cost

First-class Quality Assurance

- 10-year warranty for material and technology
- 25-year linear power output warranty

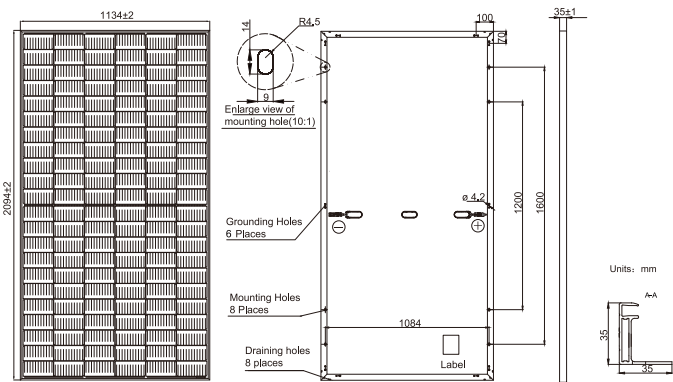


Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001: Environmental management systems
- ISO45001:2018 Occupational health and safety management systems



Mechanical Diagrams



PS: Frame color and cable length can be customized

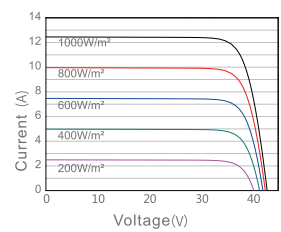
Electrical Parameters at STC						
Module Type	MSD480P	MSD485P	MSD490P	MSD495P	MSD500P	MSD505P
Rate Maximum Power(Pmax/W)	480	485	490	495	500	505
Module Efficiency(%)	20.20	20.40	20.60	20.80	21.10	21.30
Open Circuit Volatge(Voc/V)	45.02	45.18	45.33	45.49	45.65	45.79
Short Circuit Current(Isc/A)	13.66	13.73	13.79	13.86	13.92	13.99
Voltage at Pmax(Vmp/V)	37.71	37.87	38.02	38.18	38.33	38.50
Current at Pmax(Imp/A)	12.73	12.81	12.89	12.97	13.05	13.12
Power Tolerance	0~+5w					
Temperature Coefficient of Isc	+0.046%/°C					
Temperature Coefficient of Voc	-0.276%/°C					
Temperature Coefficient of Pmax	-0.350%/°C					
STC	Irradiance 1000W/m² Cell Temperature 25°C AM1.5					

Remark: Electrical data in this catalogue does not refer to a single module, and it's not part of the offer. It only serves for the comparison among different module types.

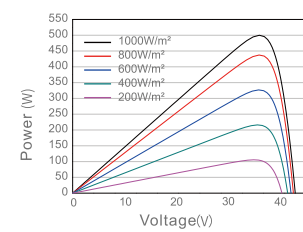
Electrical Parameters at NOCT							Operating Conditions	
Module Type	MSD480P	MSD485P	MSD490P	MSD495P	MSD500P	MSD505P	Operating Temperature	-40~+85°C
Rate Maximum Power(Pmax/W)	363	366	370	373	377	381	Maximum System Voltage	1500VDC
Open Circuit Voltage(Voc/V)	42.16	42.31	42.46	42.60	42.75	42.89	NOCT	45±2°C
Short Circuit Current(Isc/A))	10.98	11.06	11.12	11.19	11.26	11.33	Fireproof Performance	Glass C
Voltage at Pmax(Vmp/V)	35.48	35.61	35.73	35.86	35.99	36.11	Maximum Series Fuse	25A
Currrnt at Pmax(Imp/A)	10.23	10.28	10.36	10.41	10.48	10.56	Temperature Coefficient of Voc	-0.276%/K
NOCT: Irradiance 800W/m² Ambient Temperature 20°C Wind at 1m/S AM1.5							Temperature Coefficient of Isc	+0.046%/K

Characteristics

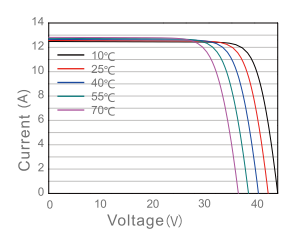
Current Voltage Curve MSD500P



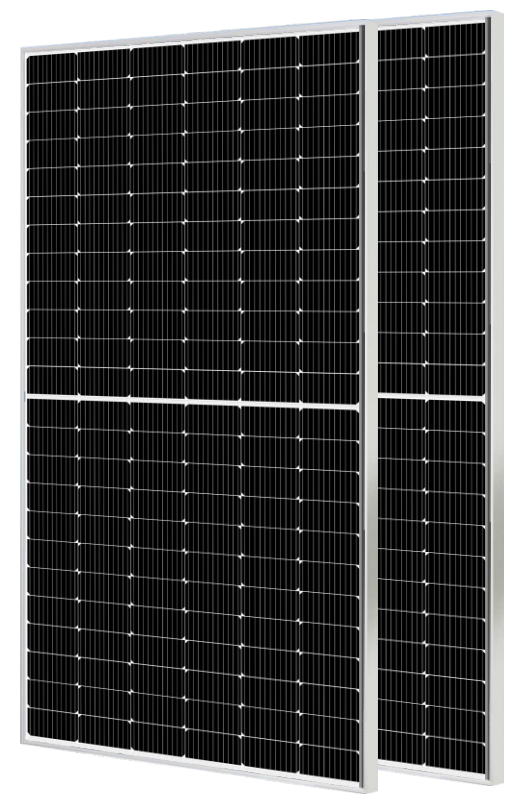
Power Voltage Curve MSD500P



Current Voltage Curve MSD500P



Module Picture



MSD540M-144

Mono Half-cut Single/Double Glass Module

525-550/MB

Series

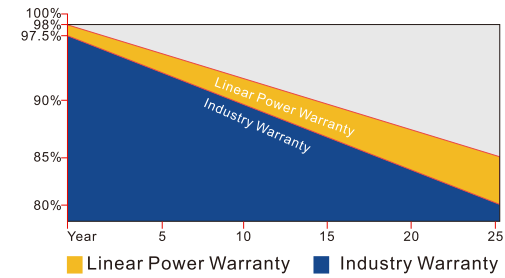
INTRODUCTION
MONO half-cut single / double glass module, assembled with multi-busbar PERC technique and half-cut structure, which can not only absorb the energy from the front of the module, but also absorb the reflected light and the scattered light from the back, offer the advantages of higher power output, reduce shading effect on the energy generation, enhance the mechanical load bearing capacity as well.

LCOE save 6-8%

- ↓6% Saving logistics cost
- ↓7% Saving cable cost
- ↓8% Saving bracket cost
- ↓9% Saving labor cost

First-class Quality Assurance

- 10-year warranty for material and technology
- 25-year linear power output warranty

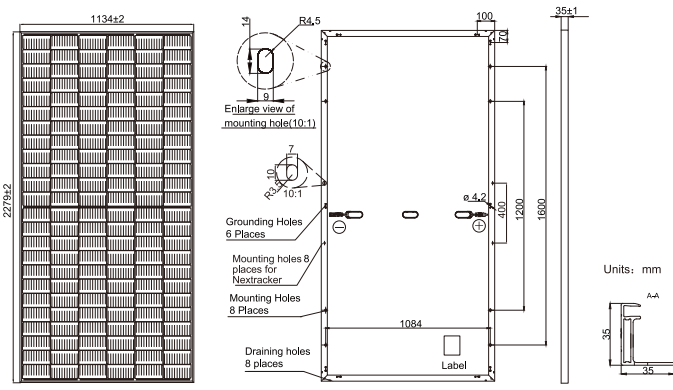


Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001: Environmental management systems
- ISO45001:2018 Occupational health and safety management systems



Mechanical Diagrams



PS: Frame color and cable length can be customized

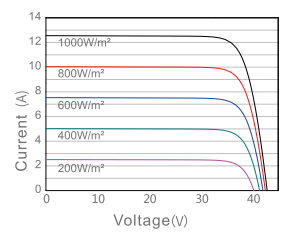
Electrical Parameters at STC						
Module Type	MSD525P	MSD530P	MSD535P	MSD540P	MSD545P	MSD550P
Rate Maximum Power(Pmax/W)	525	530	535	540	545	550
Module Efficiency(%)	20.30	20.50	20.70	20.90	21.10	21.30
Open Circuit Volatge(Voc/V)	48.95	49.15	49.35	49.55	49.75	49.95
Short Circuit Current(Isc/A)	13.67	13.74	13.82	13.89	13.97	14.05
Voltage at Pmax(Vmp/V)	41.10	41.27	41.45	41.62	41.80	41.97
Current at Pmax(Imp/A)	12.78	12.85	12.91	12.98	13.05	13.11
Power Tolerance	0~+5w					
Temperature Coefficient of Isc	+0.046%/°C					
Temperature Coefficient of Voc	-0.276%/°C					
Temperature Coefficient of Pmax	-0.350%/°C					
STC	Irradiance 1000W/m² Cell Temperature 25°C AM1.5					

Remark: Electrical data in this catalogue does not refer to a single module, and it's not part of the offer. It only serves for the comparison among different module types.

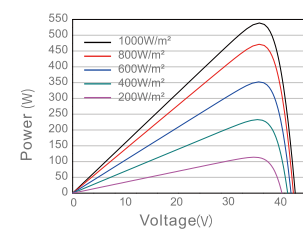
Electrical Parameters at NOCT							Operating Conditions	
Module Type	MSD525P	MSD530P	MSD535P	MSD540P	MSD545P	MSD550P	Operating Temperature	-40~+85°C
Rate Maximum Power(Pmax/W)	396	400	404	407	411	414	Maximum System Voltage	1500VDC
Open Circuit Voltage(Voc/V)	46.00	46.13	46.26	46.38	46.50	46.63	NOCT	45±2°C
Short Circuit Current(Isc/A)	10.95	10.99	11.03	11.08	11.12	11.17	Fireproof Performance	Glass C
Voltage at Pmax(Vmp/V)	38.35	38.55	38.76	38.95	39.16	39.31	Maximum Series Fuse	25A
Currrnt at Pmax(Imp/A)	10.33	10.38	10.43	10.46	10.50	10.53	Temperature Coefficient of Voc	-0.276%/K
NOCT: Irradiance 800W/m² Ambient Temperature 20°C Wind at 1m/S AM1.5							Temperature Coefficient of Isc	+0.046%/K

Characteristics

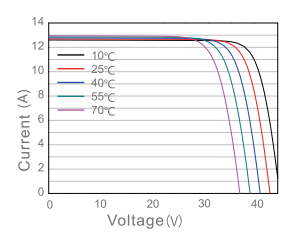
Current Voltage Curve MSD540P

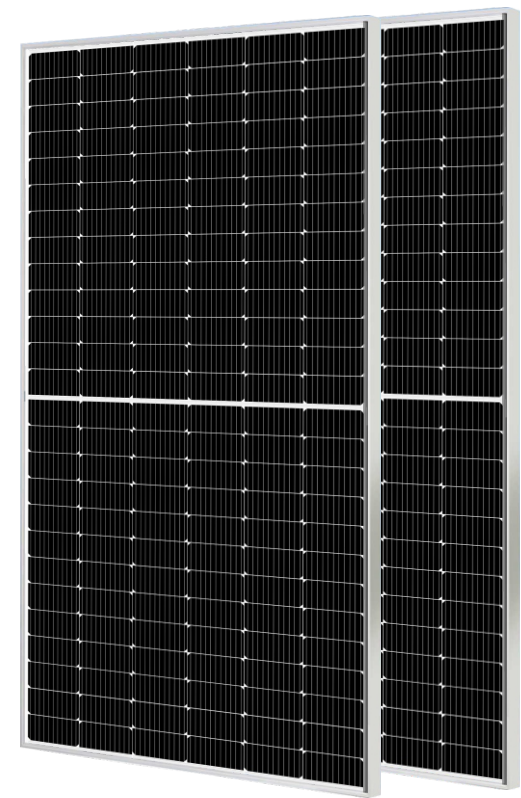


Power Voltage Curve MSD540P



Current Voltage Curve MSD540P





MSD600M-156

Mono Half-cut Single/Double Glass Module

580-600/MB Series

INTRODUCTION

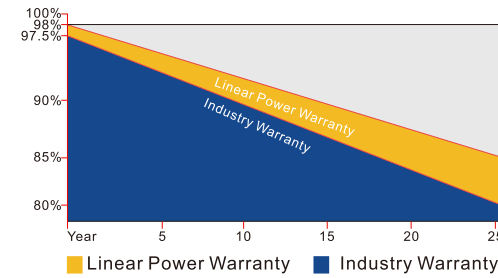
MONO half-cut single / double glass module, assembled with multi-busbar PERC technique and half-cut structure, which can not only absorb the energy from the front of the module, but also absorb the reflected light and the scattered light from the back, offer the advantages of higher power output, reduce shading effect on the energy generation, enhance the mechanical load bearing capacity as well.

LCOE save 6-8%

- ↓6% Saving logistics cost
- ↓7% Saving cable cost
- ↓8% Saving bracket cost
- ↓9% Saving labor cost

First-class Quality Assurance

- 10-year warranty for material and technology
- 25-year linear power output warranty

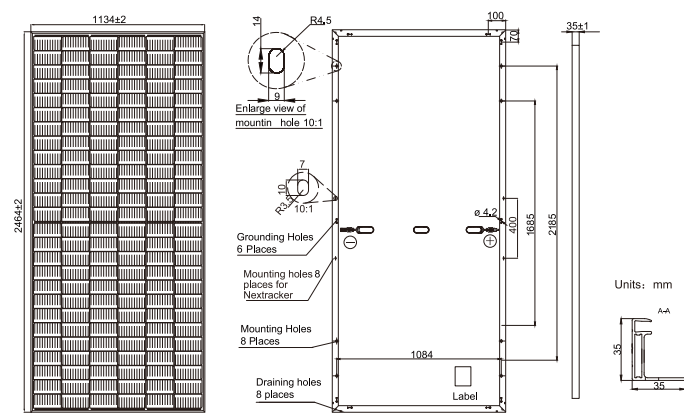


Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001: Environmental management systems
- ISO45001:2018 Occupational health and safety management systems



Mechanical Diagrams



PS: Frame color and cable length can be customized

Electrical Parameters at STC

Module Type	MSD580P	MSD585P	MSD590P	MSD595P	MSD600P
Rate Maximum Power(Pmax/W)	580	585	590	595	600
Module Efficiency(%)	20.70	20.90	20.10	21.30	21.50
Open Circuit Volatge(Voc/V)	53.50	53.65	53.80	53.95	54.10
Short Circuit Current(Isc/A)	13.82	13.89	13.96	14.03	14.10
Voltage at Pmax(Vmp/V)	44.90	45.07	45.22	45.39	45.53
Current at Pmax(Imp/A)	12.92	12.98	13.05	13.11	13.18
Power Tolerance	0~+5w				
Temperature Coefficient of Isc	+0.046%/°C				
Temperature Coefficient of Voc	-0.276%/°C				
Temperature Coefficient of Pmax	-0.350%/°C				
STC	Irradiance 1000W/m² Cell Temperature 25°C AM1.5				

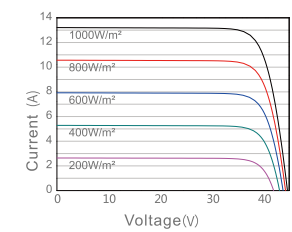
Remark: Electrical data in this catalogue does not refer to a single module, and it's not part of the offer. It only serves for the comparison among different module types.

Electrical Parameters at NOCT

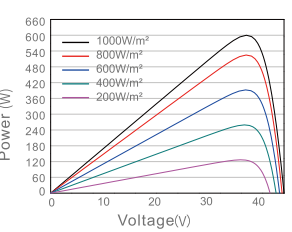
Module Type	MSD580P	MSD585P	MSD590P	MSD595P	MSD600P	Operating Temperature	-40~+85℃	
Rate Maximum Power(Pmax/W)	438	441	445	448	452	Maximum System Voltage	1500VDC	
Open Circuit Voltage(Voc.V)	50.09	50.22	50.35	50.48	50.60	NOCT	45±2℃	
Short Circuit Current{(Isc/A))	11.03	11.08	11.12	11.17	11.22	Fireproof Performance	Glass C	
Voltage at Pmax(Vmp/V)	42.03	42.17	42.39	42.51	42.73	Maximum Series Fuse	25A	
Currrnt at Pmax(Imp/A)	10.42	10.46	10.50	10.54	10.58	Temperature Coefficient of Voc	-0.276%/K	
NOCT:Irradiance 800W/㎡ Ambient Temperature 20℃ Wind at 1m/S AM1.5							Temperature Coefficient of Isc	+0.046%/K

Characteristics

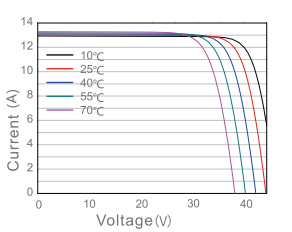
Current Voltage Curve MSD600P



Power Voltage Curve MSD600P



Current Voltage Curve MSD600P



40-450 Watt

High efficiency monocrystalline
silicon solar modules

0~+3% tolerance

ISO9001:2008, ISO14001:2004, OHSAS18001

Factory certificates

IEC61215, IEC61730, UL1703 Product certificates

PERC

182 Cell 450W

Solar module features



PERC 182 cells

Better capability of current collection, larger area of power generation, nice appearance, more suitable for installation on the roof.



High output power

Using PERC battery structure technology (Low resistance characteristics), output power of 60pcs monocrystalline cells reaches Max 450W (Highest Conversion efficiency to 20.9%)



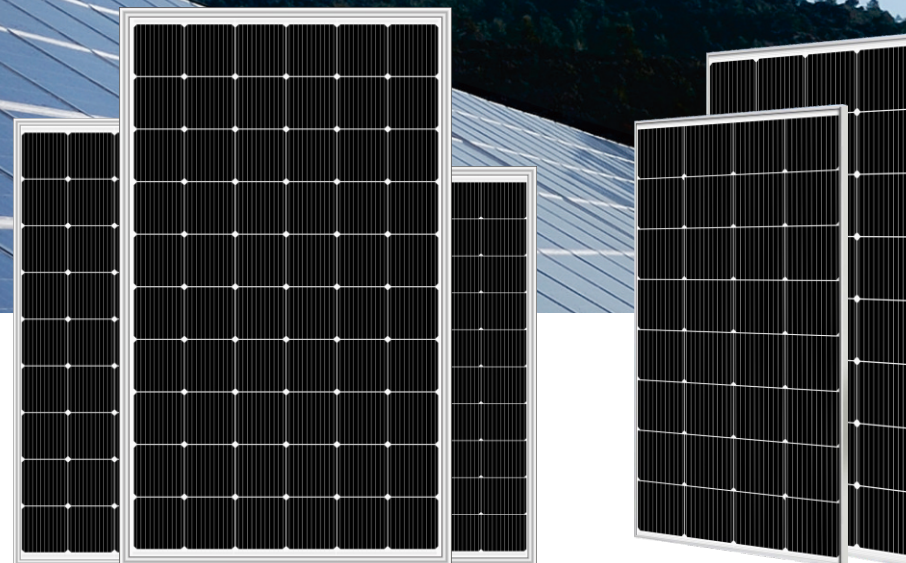
Low light performance

Using excellent glass and texture surface making of solar cell, outstanding performance can be obtained in low light condition.



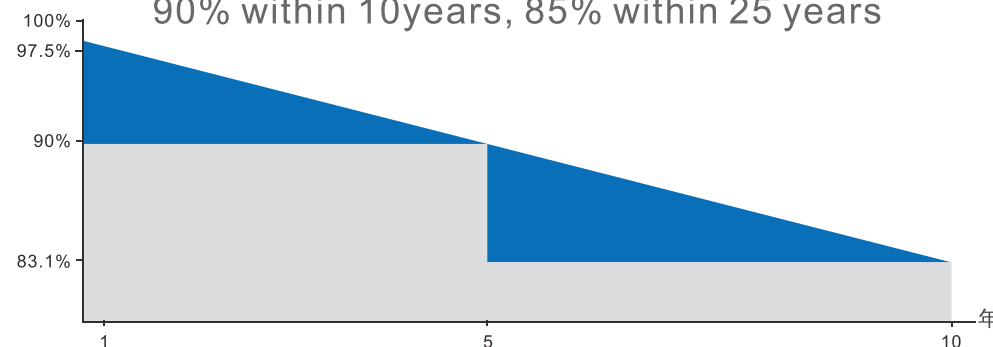
Adaptability of harsh environment

Corrosion tests have certified in high salt fog and high ammonia environment.

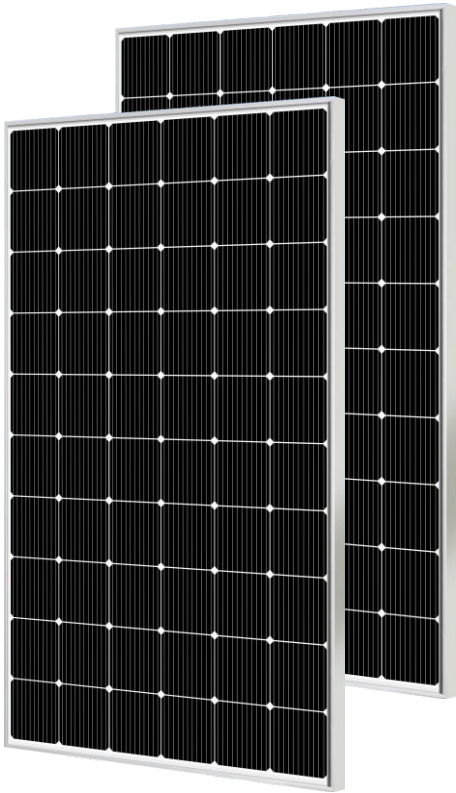


Guaranteed output power

90% within 10years, 85% within 25 years



Module Picture



SP450M-60

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

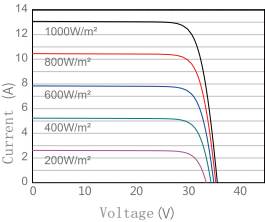


Electrical Parameters at (STC)

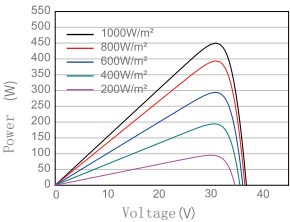
Module	Power (W)	Module Efficiency (%)	Voltage at Pmax (Vmp)	Current at Pmax (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)	Power Tolerance (w)
SP450M	450W	20.80%	34.20	13.16	41.04	13.95	±3%

Characteristics

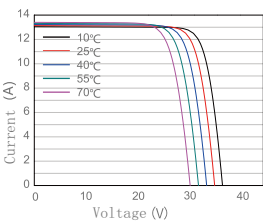
Current Voltage Curve SP450M/60



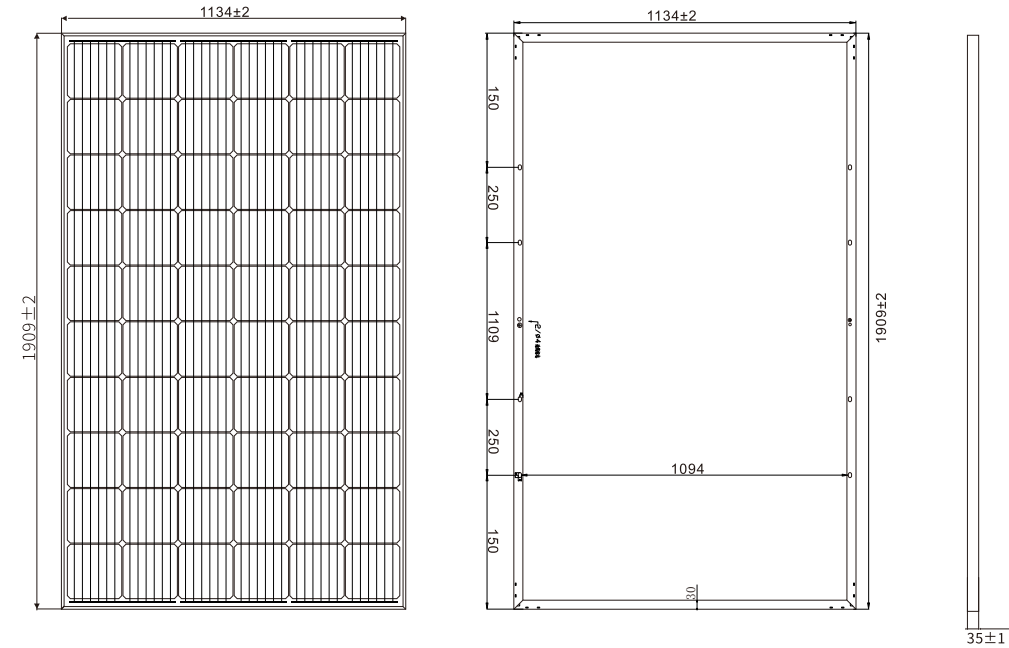
Power Voltage Curve SP450M/60



Current Voltage Curve SP450M/60



Mechanical Diagrams



PS:Frame color and cable length can be customized

Mechanical Parameters		Packing	
Solar Cell(Type/Size)	MONO(182mm)	Module Type	SP450M-60
Solar Cells Number	60Pcs(6x10)	Carton Size	1930x1160x85mm
Dimension	1909x1134x35mm	Number	2Pcs/Ctn
Weight	22.9Kg/Pcs	Weight	46Kg/Ctn
Tempered Glass	3.2 mm High Permeability Coated	Volume	0.190Cbm/Ctn
Frame	Anodized aluminum alloy	20GP Container	316Pcs
Junction Box	IP67, 3*bypass diode	40HQ Container	736Pcs
Cable	4.0mm², (+)1000mm/(-)1000mm		
Connector	Original MC4/Compatible MC4		
Mechanical Load	Front 5400PA/back 2400PA		

STC: Light intensity 1000W/m² Battery temperature:25°C atmosphere quality=15

NOCT: Light intensity 800W/m² Battery temperature:20°C atmosphere quality=15 wind velocity 1m/s

Module Picture



SP400M-54

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

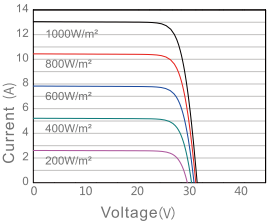


Electrical Parameters at (STC)

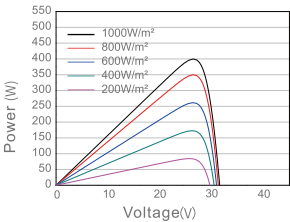
Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)
SP400M	400W	20.70%	30.78	13.00	37.02	13.78	±3%

Characteristics

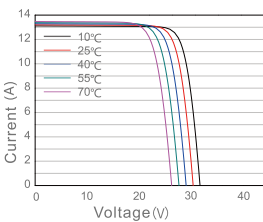
Current Voltage Curve SP400M/32



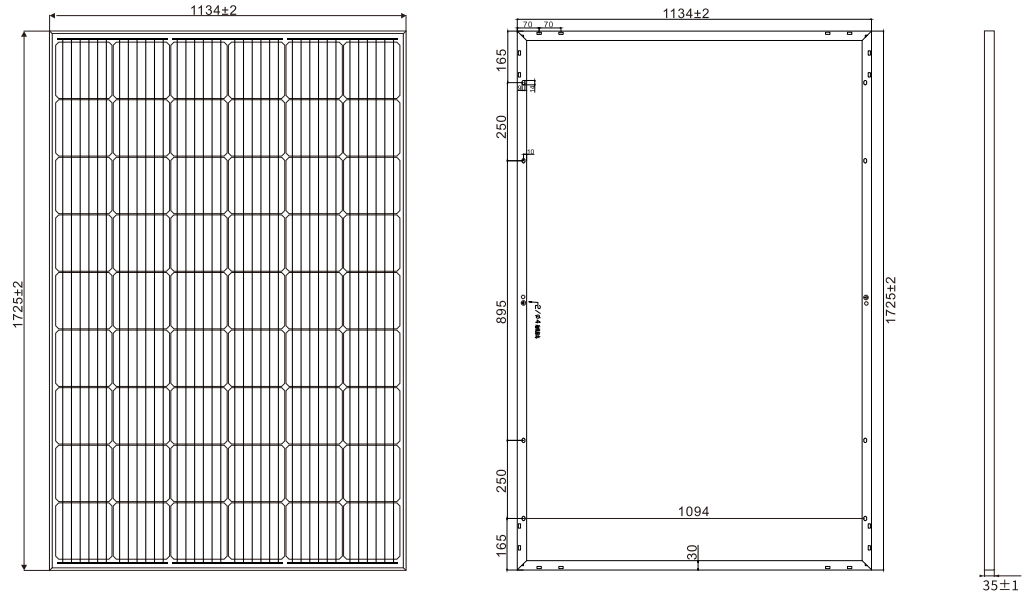
Power Voltage Curve SP400M/32



Current Voltage Curve SP400M/32



Mechanical Diagrams



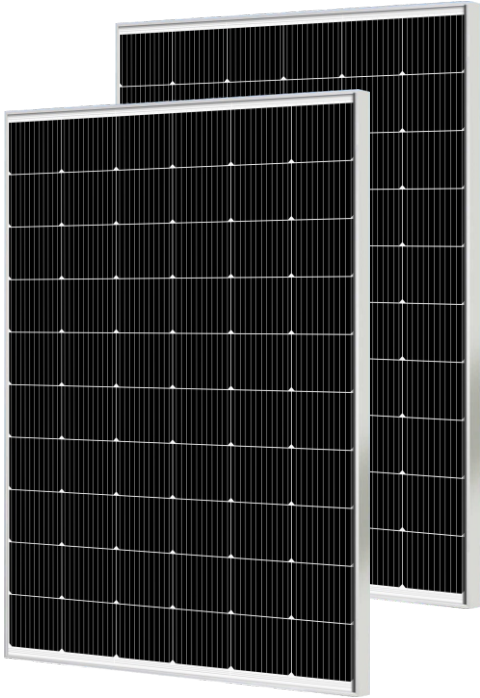
PS:Frame color and cable length can be customized

Mechanical Parameters		Packing	
Solar Cell(Type/Size)	MONO(182mm)	Module Type	SP400M-54
Solar Cells Number	54Pcs(6x9)	Carton Size	1745x1160x85mm
Dimension	1725x1134x35mm	Number	2Pcs/Ctn
Weight	21.3Kg/Pcs	Weight	43Kg/Ctn
Tempered Glass	3.2 mm High Permeability Coated	Volume	0.172Cbm/Ctn
Frame	Anodized aluminum alloy	20GP Container	340Pcs
Junction Box	IP67, 3*bypass diode	40HQ Container	810Pcs
Cable	4.0mm², (+)1000mm/(-)1000mm		
Connector	Original MC4/Compatible MC4		
Mechanical Load	Front 5400PA/back 2400PA		

STC: Light intensity 1000W/m² Battery temperature: 25°C atmosphere quality=15

NOCT: Light intensity 800W/m² Battery temperature: 20°C atmosphere quality=15 wind velocity 1m/s

Module Picture



SP360M-60

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

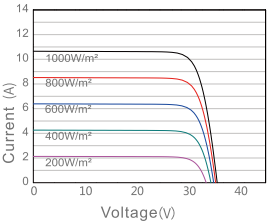


Electrical Parameters at (STC)

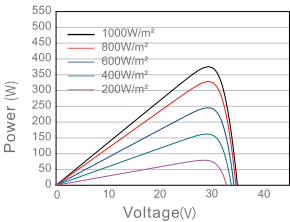
Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)
SP360M	360W	20.60%	34.20	10.53A	41.04	11.16	±3%

Characteristics

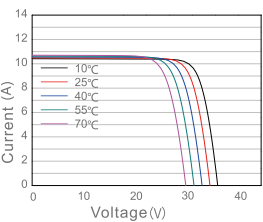
Current Voltage Curve SP360M/60



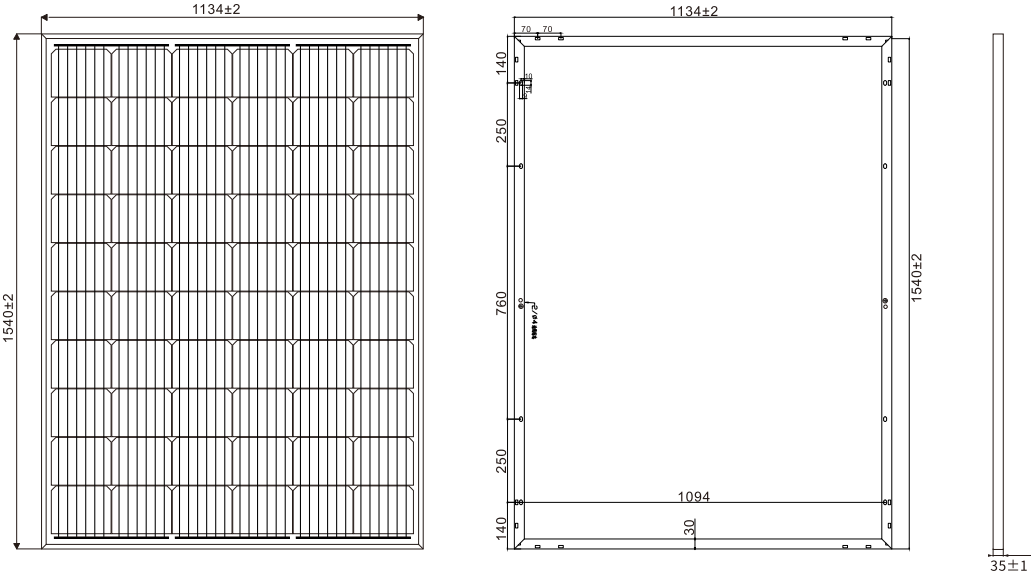
Power Voltage Curve SP360M/60



Current Voltage Curve SP360M/60



Mechanical Diagrams



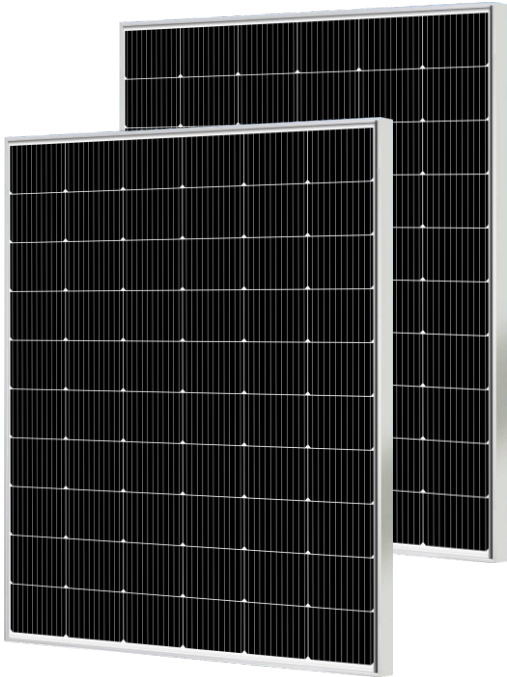
PS:Frame color and cable length can be customized

Mechanical Parameters		Packing	
Solar Cell(Type/Size)	MONO(182mm)	Module Type	SP360M-60
Solar Cells Number	60Pcs(6x10)	Carton Size	1560x1160x85mm
Dimension	1540x1134x35mm	Number	2Pcs/Ctn
Weight	18.8Kg/Pcs	Weight	38Kg/Ctn
Tempered Glass	3.2 mm High Permeability Coated	Volume	0.153Cbm/Ctn
Frame	Anodized aluminum alloy	20GP Container	386Pcs
Junction Box	IP67, 3*bypass diode	40HQ Container	902Pcs
Cable	4.0mm², (+)1000mm/(-)1000mm		
Connector	Original MC4/Compatible MC4		
Mechanical Load	Front 5400PA/back 2400PA		

STC: Light intensity 1000W/m² Battery temperature: 25°C atmosphere quality=15

NOCT: Light intensity 800W/m² Battery temperature: 20°C atmosphere quality=15 wind velocity 1m/s

Module Picture



SP300M-60

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

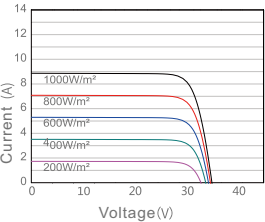


Electrical Parameters at (STC)

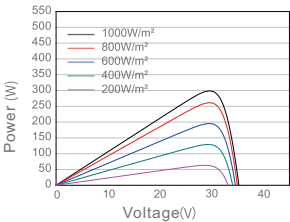
Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)
SP300M	300W	20.50%	34.20	8.77	41.04	9.30	±3%

Characteristics

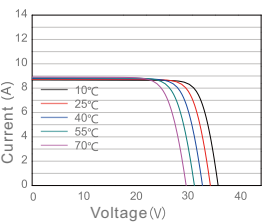
Current Voltage Curve SP300M/60



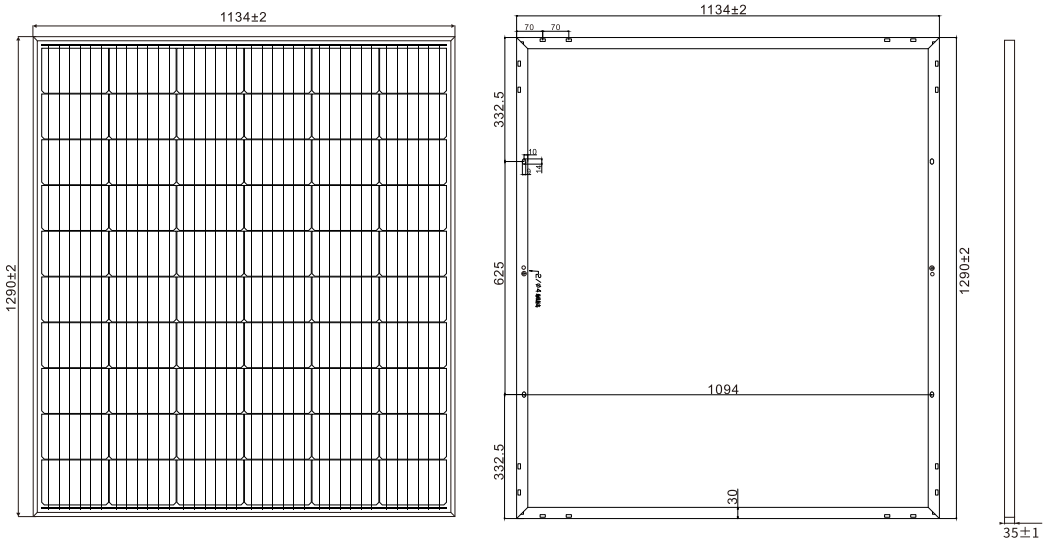
Power Voltage Curve SP300M/60



Current Voltage Curve SP300M/60



Mechanical Diagrams

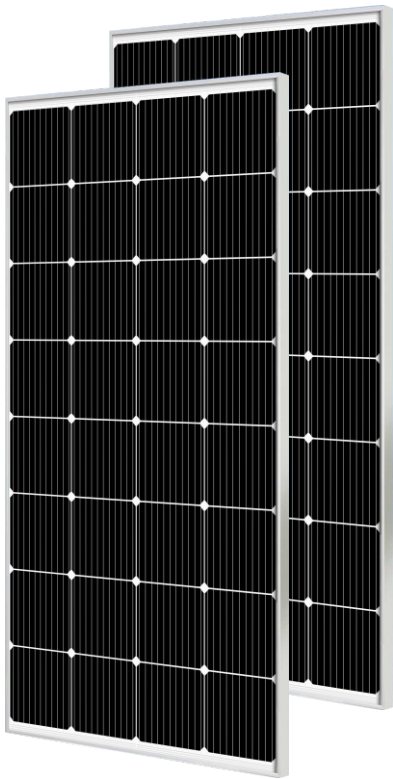


PS:Frame color and cable length can be customized

Mechanical Parameters		Packing	
Solar Cell(Type/Size)	MONO(182mm)	Module Type	SP300M-60
Solar Cells Number	60Pcs(6x10)	Carton Size	1310x1160x85mm
Dimension	1290x1134x35mm	Number	2Pcs/Ctn
Weight	14.3Kg/Pcs	Weight	29Kg/Ctn
Tempered Glass	3.2 mm High Permeability Coated	Volume	0.129Cbm/Ctn
Frame	Anodized aluminum alloy	20GP Container	444Pcs
Junction Box	IP67、3*bypass diode	40HQ Container	1088Pcs
Cable	4.0mm², (+)1000mm/(-)1000mm		
Connector	Original MC4/Compatible MC4		
Mechanical Load	Front 5400PA/back 2400PA		

- STC: Light intensity 1000W/m² Battery temperature:25°C atmosphere quality=15
- NOCT: Light intensity 800W/m² Battery temperature:20°C atmosphere quality=15 wind velocity 1m/s

Module Picture



SP240M-32

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

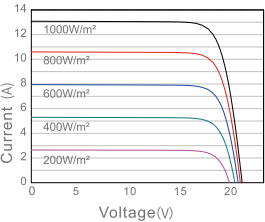


Electrical Parameters at (STC)

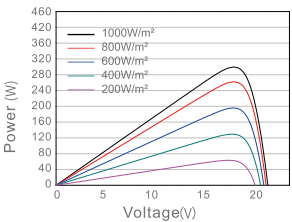
Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)
SP240M	240W	20.70%	18.24	13.16	21.80	13.95	±3%

Characteristics

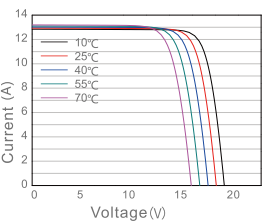
Current Voltage Curve SP240M/32



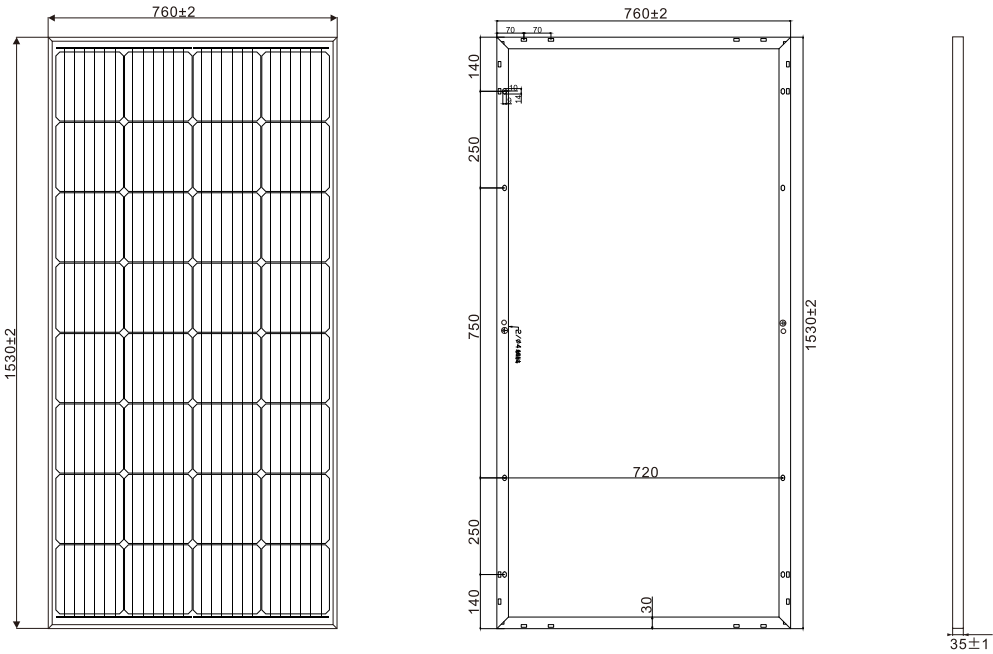
Power Voltage Curve SP240M/32



Current Voltage Curve SP240M/32



Mechanical Diagrams



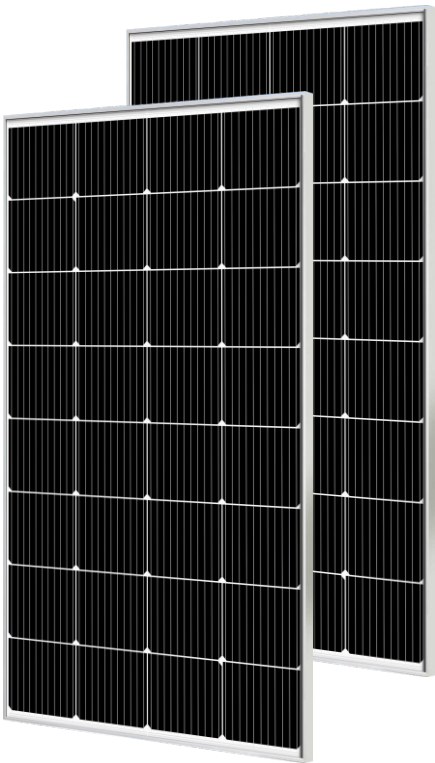
PS:Frame color and cable length can be customized

Mechanical Parameters		Packing	
Solar Cell(Type/Size)	MONO(182mm)	Module Type	SP240M-32
Solar Cells Number	32Pcs(4x8)	Carton Size	1550x780x85mm
Dimension	1530x760x35mm	Number	2Pcs/Ctn
Weight	11.8Kg/Pcs	Weight	24Kg/Ctn
Tempered Glass	3.2 mm High Permeability Coated	Volume	0.100Cbm/Ctn
Frame	Anodized aluminum alloy	20GP Container	532Pcs
Junction Box	IP67、3*bypass diode	40HQ Container	1356Pcs
Cable	4.0mm², (+)1000mm/(-)1000mm		
Connector	Original MC4/Compatible MC4		
Mechanical Load	Front 5400PA/back 2400PA		

STC: Light intensity 1000W/m² Battery temperature:25°C atmosphere quality=15

NOCT: Light intensity 800W/m² Battery temperature:20°C atmosphere quality=15 wind velocity 1m/s

Module Picture



SP200M-32

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

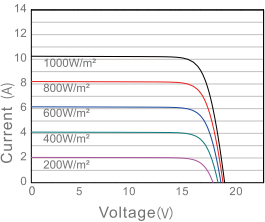


Electrical Parameters at (STC)

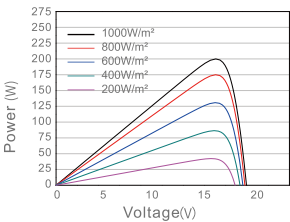
Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)
SP200M	200W	20.40%	18.24	10.96	21.80	11.62	±3%

Characteristics

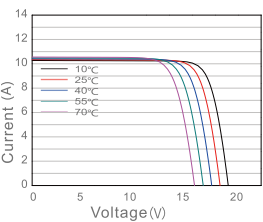
Current Voltage Curve SP200M/32



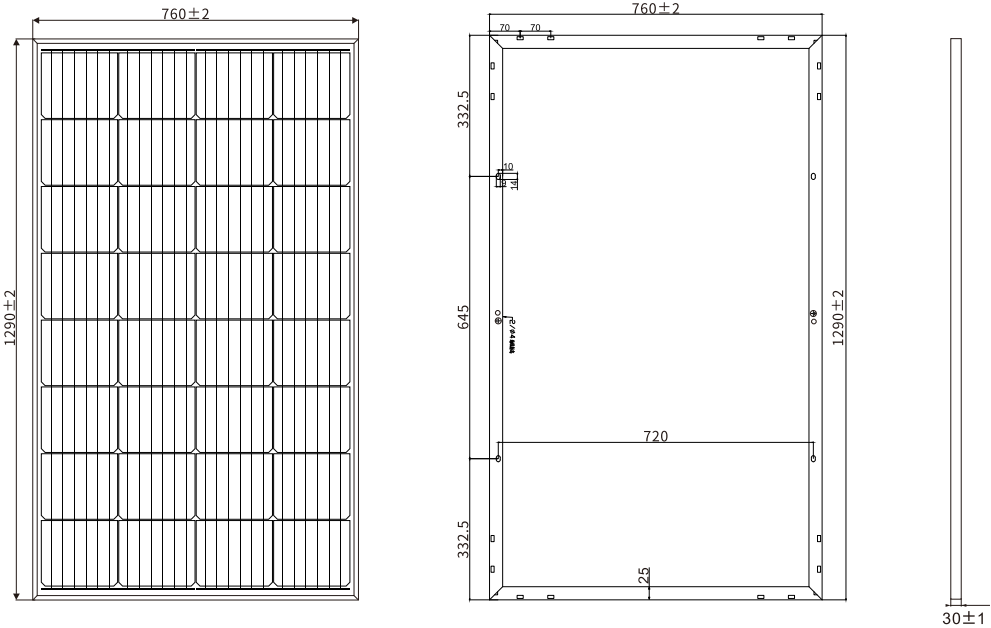
Power Voltage Curve SP200M/32



Current Voltage Curve SP200M/32



Mechanical Diagrams



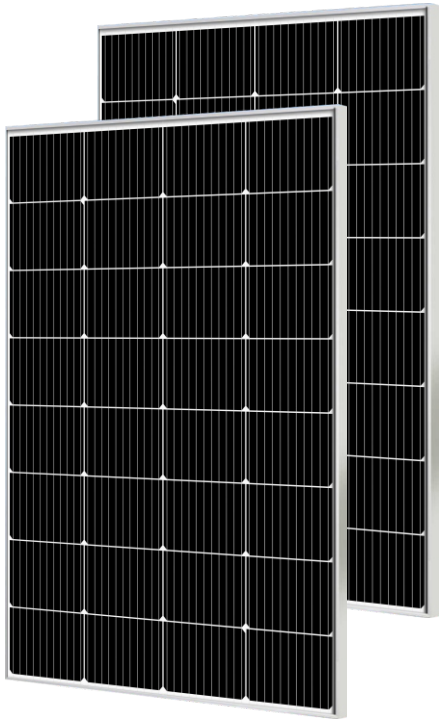
PS:Frame color and cable length can be customized

Mechanical Parameters		Packing	
Solar Cell(Type/Size)	MONO(182mm)	Module Type	SP200M-32
Solar Cells Number	32Pcs(4x8)	Carton Size	1310x780x75mm
Dimension	1290x760x30mm	Number	2Pcs/Ctn
Weight	10.30Kg/Pcs	Weight	21Kg/Ctn
Tempered Glass	3.2 mm High Permeability Coated	Volume	0.077Cbm/Ctn
Frame	Anodized aluminum alloy	20GP Container	784Pcs
Junction Box	IP67, 2*bypass diode	40HQ Container	1836Pcs
Cable	2.5mm², (+)700mm/(-)700mm		
Connector	Original MC4/Compatible MC4		
Mechanical Load	Front 5400PA/back 2400PA		

STC: Light intensity 1000W/m² Battery temperature: 25°C atmosphere quality=15

NOCT: Light intensity 800W/m² Battery temperature: 20°C atmosphere quality=15 wind velocity 1m/s

Module Picture



SP160M-32

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

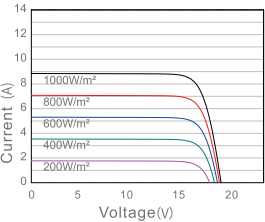


Electrical Parameters at (STC)

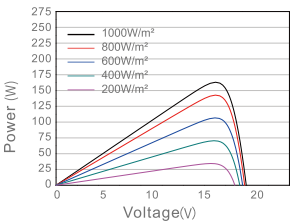
Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)
SP160M	160W	20.20%	18.24	8.77	21.80	9.30	±3%

Characteristics

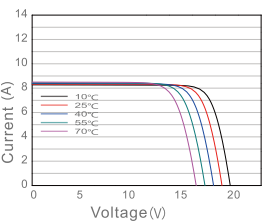
Current Voltage Curve SP160M/32



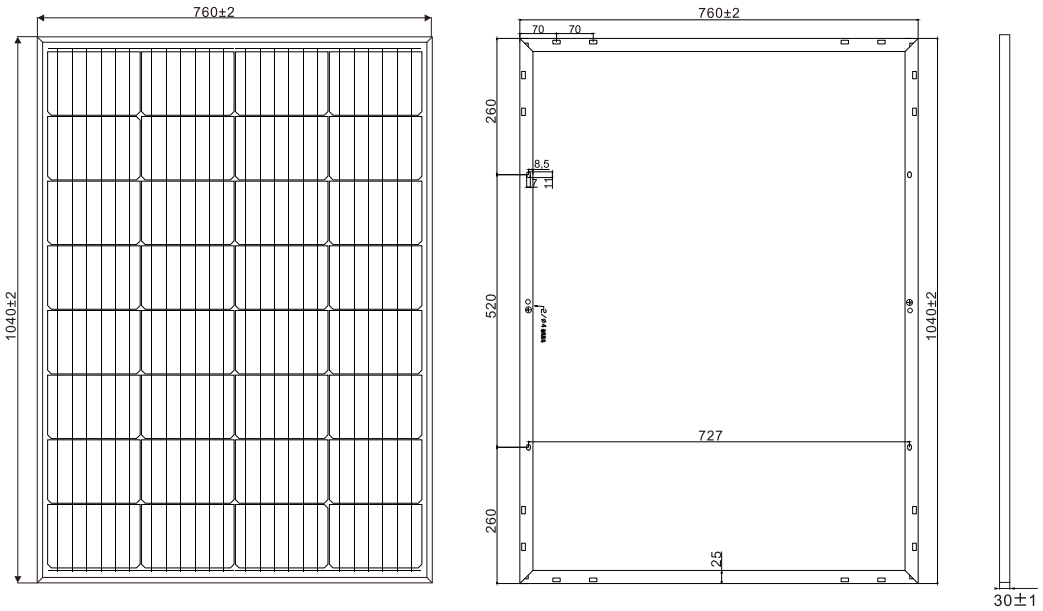
Power Voltage Curve SP160M/32



Current Voltage Curve SP160M/32



Mechanical Diagrams



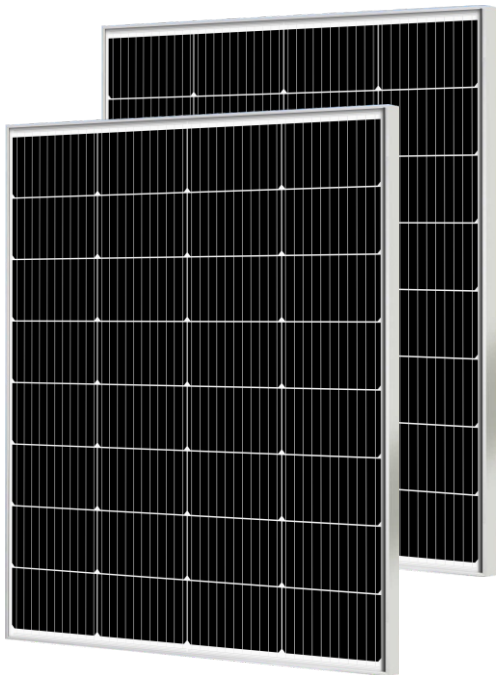
PS:Frame color and cable length can be customized

Mechanical Parameters		Packing	
Solar Cell(Type/Size)	MONO(182mm)	Module Type	SP160M-32
Solar Cells Number	32Pcs(4x8)	Carton Size	1060x780x75mm
Dimension	1040x760x30mm	Number	2Pcs/Ctn
Weight	8.30Kg/Pcs	Weight	17Kg/Ctn
Tempered Glass	3.2 mm High Permeability Coated	Volume	0.062Cbm/Ctn
Frame	Anodized aluminum alloy	20GP Container	984Pcs
Junction Box	IP67, 2*bypass diode	40HQ Container	2280Pcs
Cable	2.5mm², (+)700mm/(-)700mm		
Connector	Original MC4/Compatible MC4		
Mechanical Load	Front 5400PA/back 2400PA		

STC: Light intensity 1000W/m² Battery temperature: 25°C atmosphere quality=15

NOCT: Light intensity 800W/m² Battery temperature: 20°C atmosphere quality=15 wind velocity 1m/s

Module Picture



SP120M-32

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

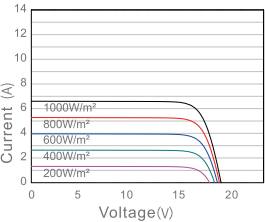


Electrical Parameters at (STC)

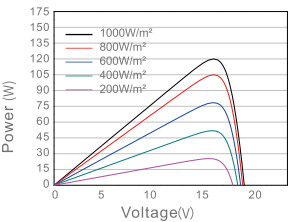
Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)
SP120M	120W	19.70%	18.24	6.58	21.80	6.97	±3%

Characteristics

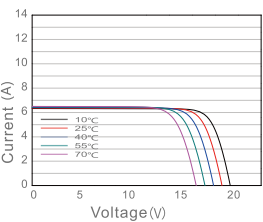
Current Voltage Curve SP120M/32



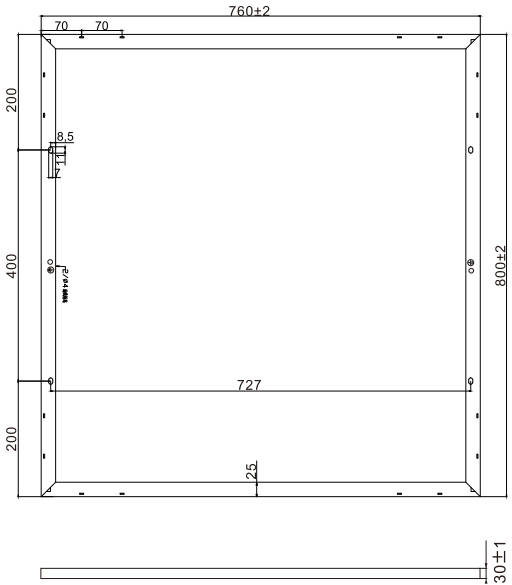
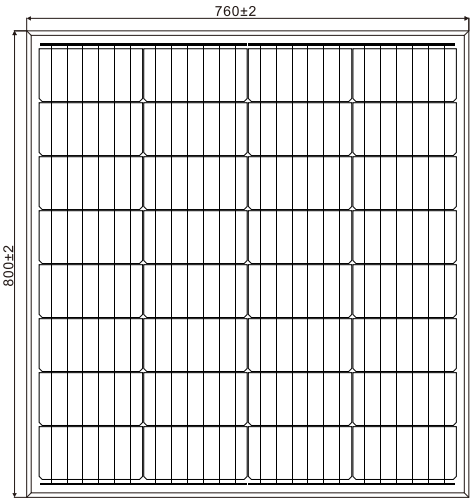
Power Voltage Curve SP120M/32



Current Voltage Curve SP120M/32



Mechanical Diagrams



PS:Frame color and cable length can be customized

Mechanical Parameters	
Solar Cell(Type/Size)	MONO(182mm)
Solar Cells Number	32Pcs(4x8)
Dimension	800x760x30mm
Weight	7.30Kg/Pcs
Tempered Glass	3.2 mm High Permeability Coated
Frame	Anodized aluminum alloy
Junction Box	IP67、1*bypass diode
Cable	2.0mm², (+)500mm/(-)500mm
Connector	Original MC4/Compatible MC4
Mechanical Load	Front 5400PA/back 2400PA

Packing	
Module Type	SP120M-32
Carton Size	820x780x75mm
Number	2Pcs/Ctn
Weight	15Kg/Ctn
Volume	0.048Cbm/Ctn
20GP Container	1284Pcs
40HQ Container	2280Pcs

STC: Light intensity 1000W/m² Battery temperature:25°C atmosphere quality=15

NOCT: Light intensity 800W/m² Battery temperature:20°C atmosphere quality=15 wind velocity 1m/s

Module Picture



SP100M-32

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

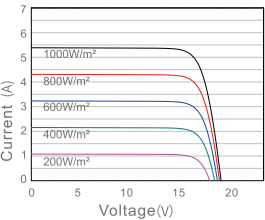


Electrical Parameters at (STC)

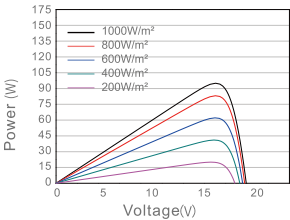
Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)
SP100M	100W	19.30%	18.24	5.48	21.80	5.81	±3%

Characteristics

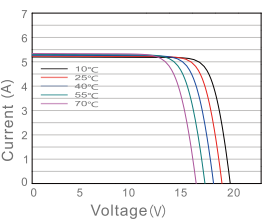
Current Voltage Curve SP100M/32



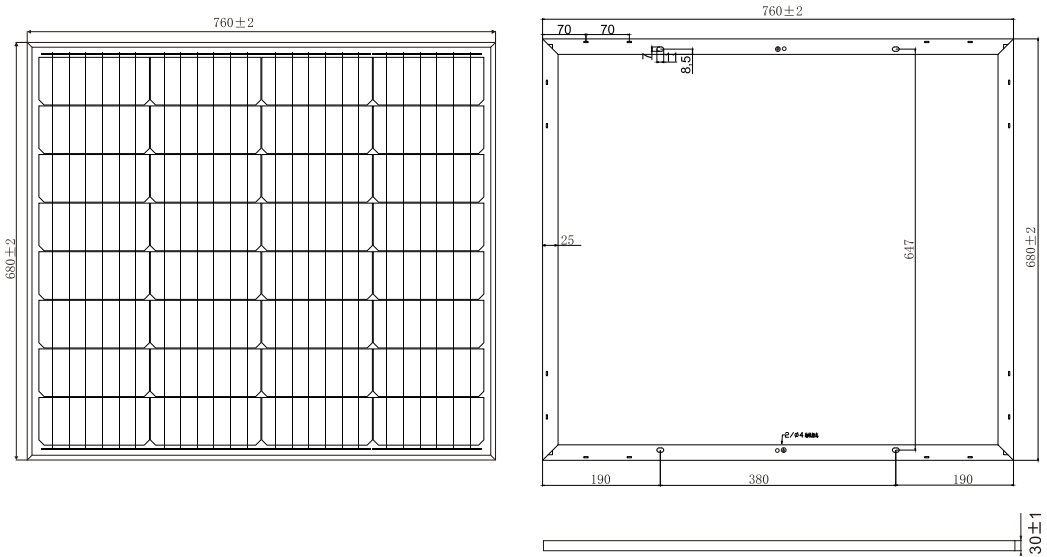
Power Voltage Curve SP100M/32



Current Voltage Curve SP100M/32



Mechanical Diagrams

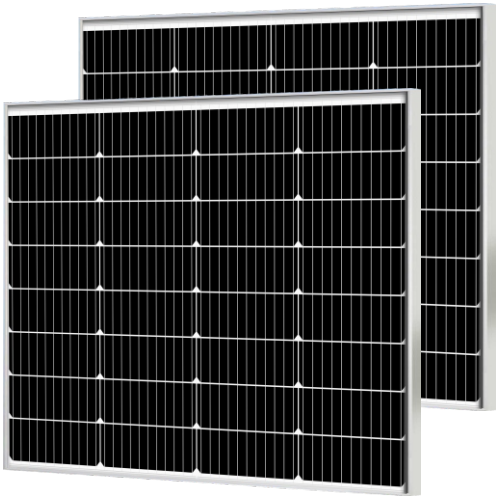


PS:Frame color and cable length can be customized

Mechanical Parameters		Packing	
Solar Cell(Type/Size)	MONO(182mm)	Module Type	SP100M-32
Solar Cells Number	32Pcs(4x8)	Carton Size	700x780x75mm
Dimension	680x760x30mm	Number	2Pcs/Ctn
Weight	6.30Kg/Pcs	Weight	13Kg/Ctn
Tempered Glass	3.2 mm High Permeability Coated	Volume	0.040Cbm/Ctn
Frame	Anodized aluminum alloy	20GP Container	1494Pcs
Junction Box	IP67、1*bypass diode	40HQ Container	3366Pcs
Cable	2.0mm², (+)500mm/(-)500mm		
Connector	Original MC4/Compatible MC4		
Mechanical Load	Front 5400PA/back 2400PA		

- STC: Light intensity 1000W/m² Battery temperature: 25°C atmosphere quality=15
- NOCT: Light intensity 800W/m² Battery temperature: 20°C atmosphere quality=15 wind velocity 1m/s

Module Picture



SP080M-32

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

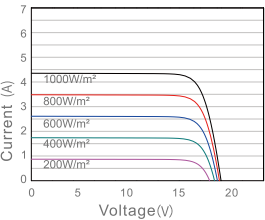


Electrical Parameters at (STC)

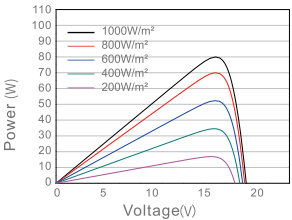
Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)
SP080M	80W	19.10%	18.24	4.39	21.80	4.65	±3%

Characteristics

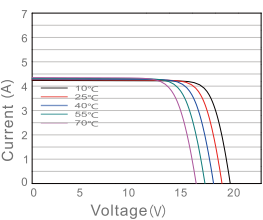
Current Voltage Curve SP080M/32



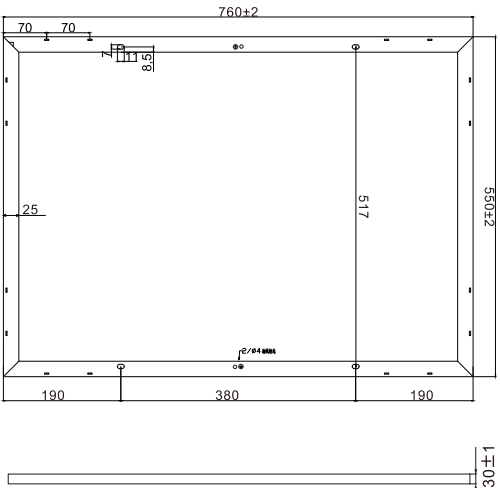
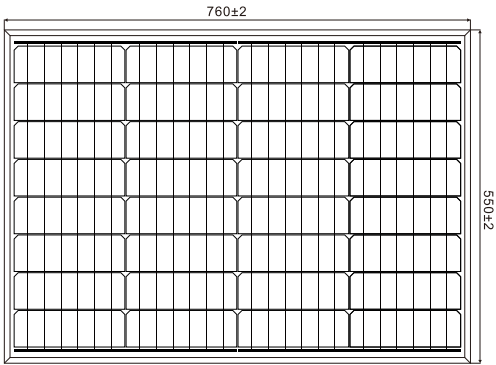
Power Voltage Curve SP080M/32



Current Voltage Curve SP080M/32



Mechanical Diagrams



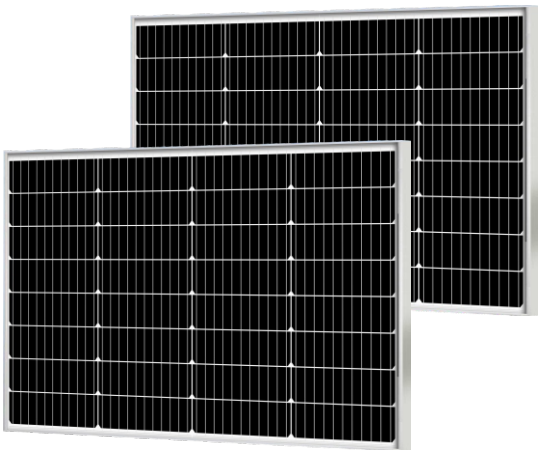
PS:Frame color and cable length can be customized

Mechanical Parameters	
Solar Cell(Type/Size)	MONO(182mm)
Solar Cells Number	32Pcs(4x8)
Dimension	550x760x30mm
Weight	5.30Kg/Pcs
Tempered Glass	3.2 mm High Permeability Coated
Frame	Anodized aluminum alloy
Junction Box	IP67、1*bypass diode
Cable	2.0mm², (+)500mm/(-)500mm
Connector	Original MC4/Compatible MC4
Mechanical Load	Front 5400PA/back 2400PA

Packing	
Module Type	SP080M-32
Carton Size	570x780x75mm
Number	2Pcs/Ctn
Weight	11Kg/Ctn
Volume	0.030Cbm/Ctn
20GP Container	1776Pcs
40HQ Container	4032Pcs

- STC: Light intensity 1000W/m² Battery temperature:25°C atmosphere quality=15
- NOCT: Light intensity 800W/m² Battery temperature:20°C atmosphere quality=15 wind velocity 1m/s

Module Picture



SP060M-32

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

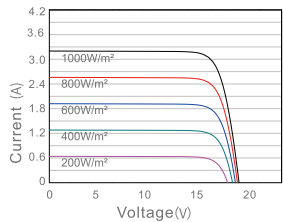


Electrical Parameters at (STC)

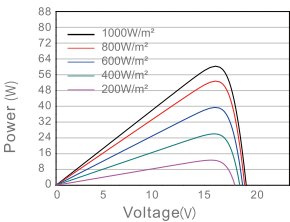
Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)
SP060M	60W	18.30%	18.24	3.29	21.80	3.49	±3%

Characteristics

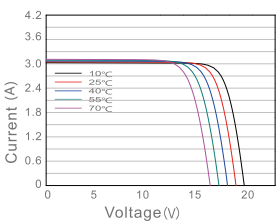
Current Voltage Curve SP060M/32



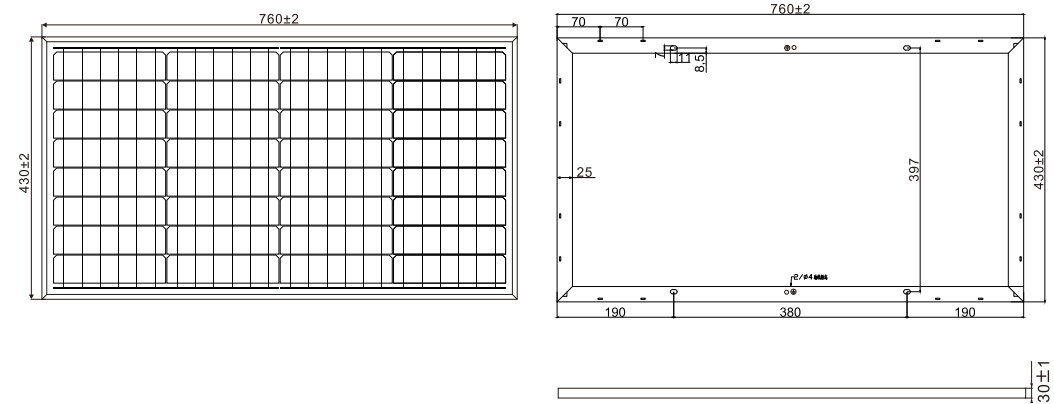
Power Voltage Curve SP060M/32



Current Voltage Curve SP060M/32



Mechanical Diagrams

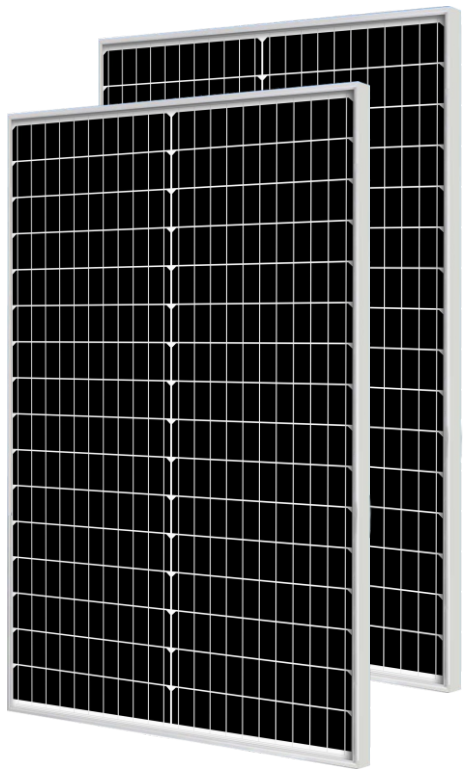


PS:Frame color and cable length can be customized

Mechanical Parameters		Packing	
Solar Cell(Type/Size)	MONO(182mm)	Module Type	SP060M-32
Solar Cells Number	32Pcs(4x8)	Carton Size	450x780x75mm
Dimension	430x760x30mm	Number	2Pcs/Ctn
Weight	4.30Kg/Pcs	Weight	9Kg/Ctn
Tempered Glass	3.2 mm High Permeability Coated	Volume	0.026Cbm/Ctn
Frame	Anodized aluminum alloy	20GP Container	2600Pcs
Junction Box	IP67、1*bypass diode	40HQ Container	5340Pcs
Cable	2.0mm², (+)500mm/(-)500mm		
Connector	Original MC4/Compatible MC4		
Mechanical Load	Front 5400PA/back 2400PA		

- STC: Light intensity 1000W/m² Battery temperature:25°C atmosphere quality=15
- NOCT: Light intensity 800W/m² Battery temperature:20°C atmosphere quality=15 wind velocity 1m/s

Module Picture



SP050M-32

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

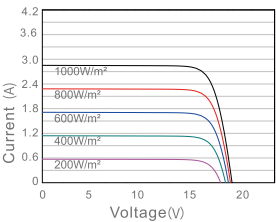


Electrical Parameters at (STC)

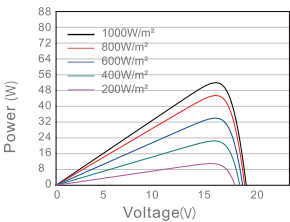
Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)
SP050M	50W	18.60%	18.24	2.74	21.80	2.97	±3%

Characteristics

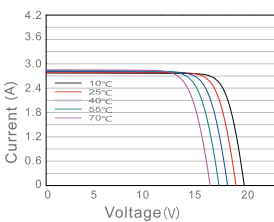
Current Voltage Curve SP050M/32



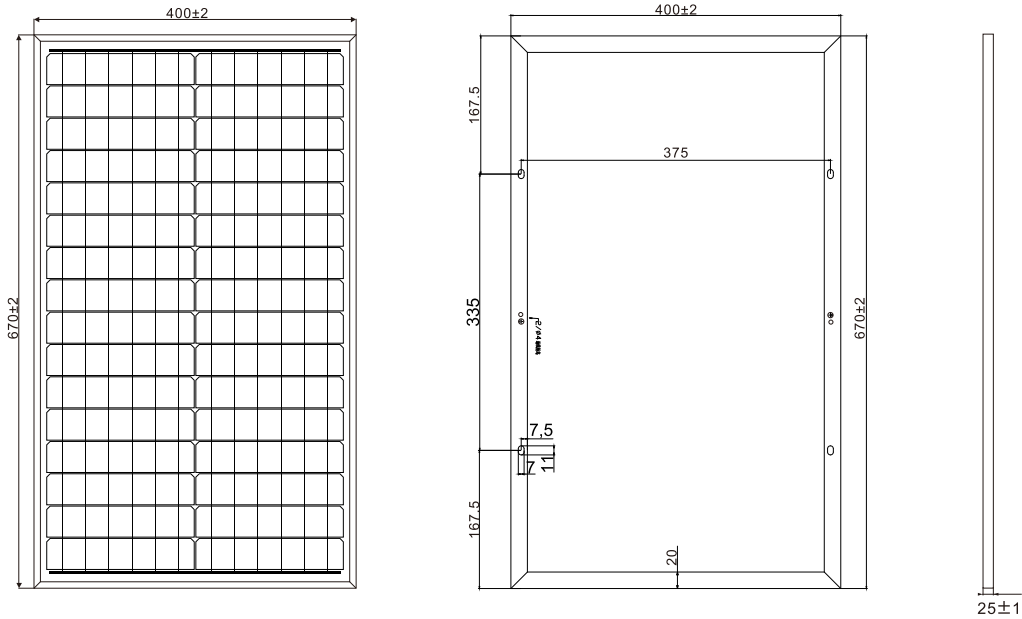
Power Voltage Curve SP050M/32



Current Voltage Curve SP050M/32



Mechanical Diagrams



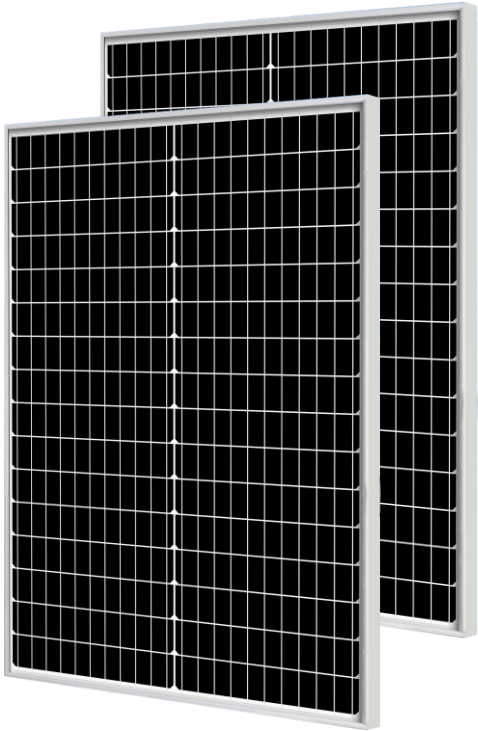
PS:Frame color and cable length can be customized

Mechanical Parameters		Packing	
Solar Cell(Type/Size)	MONO(182mm)	Module Type	SP050M-32
Solar Cells Number	32Pcs(2x16)	Carton Size	780x430x170mm
Dimension	670x400x25mm	Number	5Pcs/Ctn
Weight	3.80Kg/Pcs	Weight	20Kg/Ctn
Tempered Glass	3.2 mm High Permeability Coated	Volume	0.052Cbm/Ctn
Frame	Anodized aluminum alloy	20GP Container	2690Pcs
Junction Box	IP67、0*bypass diode	40HQ Container	6540Pcs
Cable	//		
Connector	Original MC4/Compatible MC4		
Mechanical Load	Front 5400PA/back 2400PA		

STC: Light intensity 1000W/m² Battery temperature: 25°C atmosphere quality=15

NOCT: Light intensity 800W/m² Battery temperature: 20°C atmosphere quality=15 wind velocity 1m/s

Module Picture



SP040M-32

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

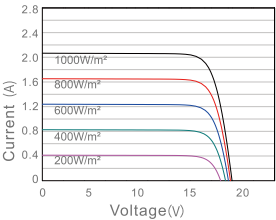


Electrical Parameters at (STC)

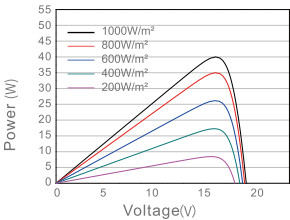
Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)
SP040M	40W	17.50%	18.24	2.19	21.80	2.39	±3%

Characteristics

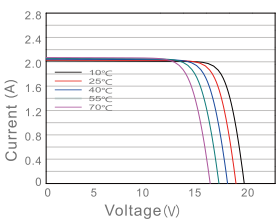
Current Voltage Curve SP040M/32



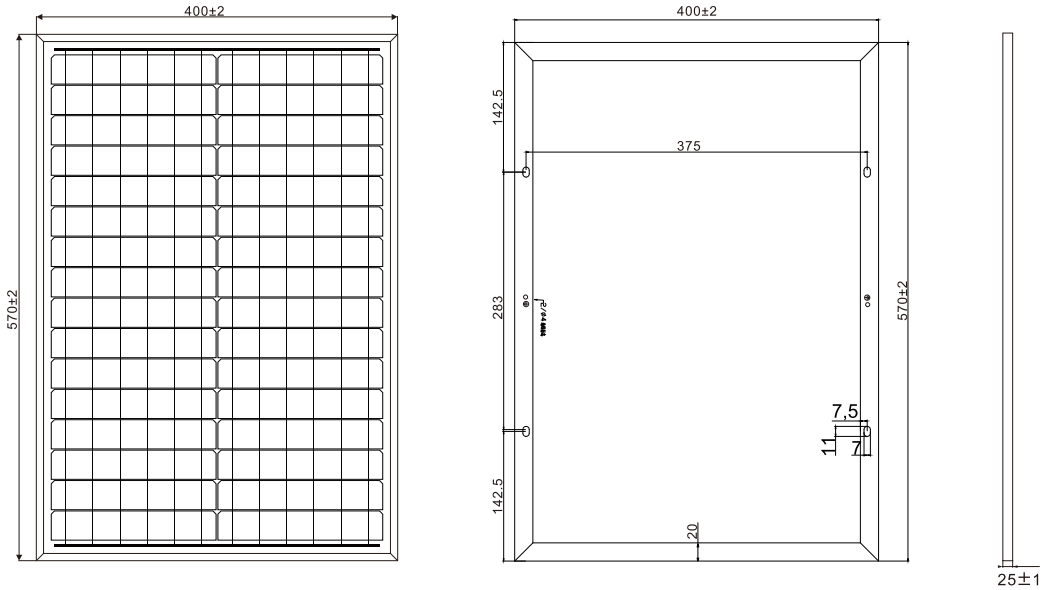
Power Voltage Curve SP040M/32



Current Voltage Curve SP040M/32



Mechanical Diagrams



PS:Frame color and cable length can be customized

Mechanical Parameters		Packing	
Solar Cell(Type/Size)	MONO(182mm)	Module Type	SP040M-32
Solar Cells Number	32Pcs(2x16)	Carton Size	600x430x170mm
Dimension	570x400x25mm	Number	5Pcs/Ctn
Weight	2.80Kg/Pcs	Weight	15Kg/Ctn
Tempered Glass	3.2 mm High Permeability Coated	Volume	0.044Cbm/Ctn
Frame	Anodized aluminum alloy	20GP Container	3180Pcs
Junction Box	IP67、0*bypass diode	40HQ Container	7730Pcs
Cable	//		
Connector	Original MC4/Compatible MC4		
Mechanical Load	Front 5400PA/back 2400PA		

STC: Light intensity 1000W/m² Battery temperature: 25°C atmosphere quality=15

NOCT: Light intensity 800W/m² Battery temperature: 20°C atmosphere quality=15 wind velocity 1m/s