

## MONOCRYSTALLINE SILICON MODULE



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### Products Characteristics



Widely using of the most popular and mature type of modules for on-grid system.



Leading manufacturing technology in PV industry, strictly controlling the quality of raw materials and the process of producing



100% EL inspection, ensures modules are defects free.



Cells binned by current to improve module performance



Anti reflective glass. Not only to increase the light absorption, but also to make the module has the function of self-cleaning in water environment, effectively reducing the power loss caused by dust.



Outstanding performance in low-light irradiance environments.



Excellent mechanical load resistance: Certified to withstand high wind loads(2400pa) and snow loads(5400pa).



High salt and ammonia resistance



Positive power tolerance: 0~+5w

**10** years  
products  
warranty

**25** year  
power output  
warranty

### Warranty

- 10 years product warranty
- 10-years 90% of Min. rated output power, and 25-years 80% of Min. rated output power warranty

### Comprehensive Certificates

- IEC61215、IEC61730 Certificate
- SGS-TUV Certificate
- CE Certificate

Specifications subject to technology and test conditions,

Engineering Drawings (Front Side)



## Raw materials and Mechanical Parameters

M-450	
Type of Cells(mm)	166*83
NO. of Cells and Connections	6*12*2 =144
Dimensions(mm)(L*W*H)	2095x1039x35
Weight(kg)	23.5
Glass	3.2mm Tempered Glass
Encapsulation	EVA
Backsheet	Multilayer Composite
Aluminium-Frame	Silvery/Black Anodized aluminium alloy
Junction-Box	IP68
Cable	4mm <sup>2</sup>
Connector	MC4 and MC4 Compatible
Package Configuration	31pcs/pallet
20GP	250
40HQ	682

## Performance Parameters

M-450	
Maximum System Voltage	1500V
Operating Temperature	-45~+85°C
Maximum Series Fuse	20A
Maximum Static Load,Front Side (e.x. Snow,Wind)	5400Pa
Maximum Static Load, Back Side(e.x. Wind)	2400Pa
Application Grade	Class A

## Electrical Parameters (Standard Test Condition)

M-450	
Module Type	M-450
Test condition	STC
Rated Maximum Power(Mp)	450W
Maximum Power Voltage(Vmp)	41.5
Maximum Power Current(Imp)	10.85
Open Circuit Voltage(Voc)	49.3
Short Circuit Current(Isc)	11.6
Module Efficiency(%)	20.67
Temperature Coefficient of Isc	+0.048%/C
Temperature Coefficient of Voc	-0.270%/C
Temperature Coefficient of Pmp	-0.350%/C
Standard Test Condition	Irradiance:1000W/M2,Cell Temperature:25°C,Spectrum AM:1.5

The Electrical Parameters of the module are the average theory figure under the standard test condition, each one exists difference. Can not be treated as the basis of module delivery.