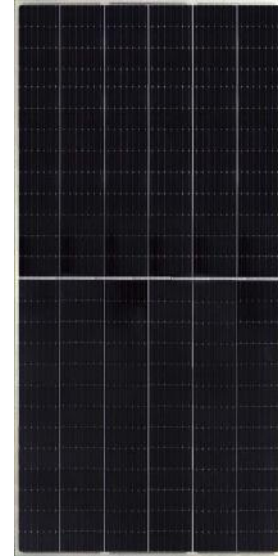


# 445W

## SQUARE MONO PAVING MODULE

IEC61215 / IEC61730 / IEC61701 /  
IEC62716 / IEC62804



### High output power



The monolithic perc cell structure technology (low resistance characteristics) is adopted. The maximum output power of 78 cells mono crystalline is up to 455w ( the maximum conversion efficiency of modules is up to 21.12%);

### 7BB PV cell



More uniform current collection ability, which reduces the current loss of the battery inside the module;

### Connection of triangular welding belt



The utilization rate of incident light irradiated on the triangle welding belt is over 90%. The triangle welding belt has a visual invisible effect, and the solar PV module looks more beautiful;

### 1500V system voltage



1500V dc voltage of the system, reducing the cost of the system side;

### Super strong frame



The overflow tank is waterproof with double layers, and the cross section contains hooked aluminum frame, which enhances the mechanical load strength by 10%;

### Strong mechanical load capacity



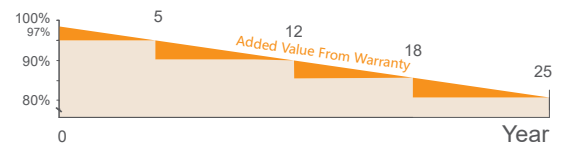
Passed the certification test of 5400pa snow pressure and 2400pa wind pressure load;

### QUALIFICATIONS AND CERTIFICATES

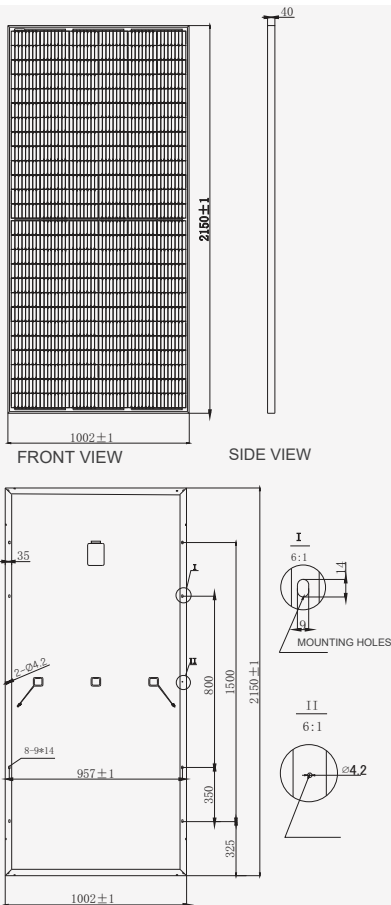


### LINEAR PERFORMANCE WARRANTY

- 12 Years Manufacturing Warranty
- 12 Years 90% Power Output
- 25 Years 80% Power Output



## MECHANICAL DRAWINGS



## MECHANICAL SPECIFICATION

Cell Type	Mono Crystalline (PERC) 158.75x158.75mm
Number Of Cells	156 (6x26)
Dimensions(AxBxC)	2150x1002x40mm
Weights	24.5kg
Front Glass	3.2mm Tempered Low Iron Glass
Frame	Anodised Aluminium
Junction Box	Split Junction Box (IP67 ,three diode)
Connector	Mc4 Compatible
Output Cables	4.0mm <sup>2</sup> , +300mm,-300mm Customized Length

## ELECTRICAL CHARACTERISTICS

Maximum Power At STC(Pmax)	445W
Short Circuit Current(Isc)	10.64A
Open Circuit Voltage(Voc)	54.1V
Maximum Power Current(Imp)	10.09A
Maximum Power Voltage(Vmpp)	44.1V
Module Efficiency	20.66%
Power Tolerance	0~+3%

## NOCT

Maximum Power At STC(Pmax)	334.5
Short Circuit Current(Isc)	8.61
Open Circuit Voltage(Voc)	50.5
Maximum Power Current(Imp)	8.17
Maximum Power Voltage(Vmpp)	41.0

NOCT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, wind speed 1m/s.

STC: 1000W/m<sup>2</sup> irradiance, 25°C cell temperature, AM1.5.

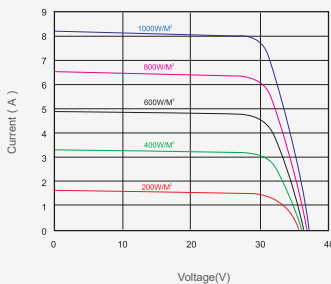
## SYSTEM INTEGRATION PARAMETERS

Maximum System Voltage	VDC 1500V
Maximum Series Fuse	15A
Increased Snowload Acc.to Iec 61215	5400Pa
Operating Temperature	-40~+85°C
Number Of Bypass Diodes	3

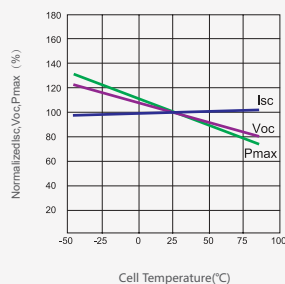
## I-V CURVES

I-V Curves at SUN430-78M-HF at different Irradiances

Cell Temp : 25°C



Power voltage current curve at different temperature



## TEMPERATURE CHARACTERISTICS

Normal Operating Cell Temperature(Noct)	45°C±2°C
Temperature Coefficient Of Pmax	-0.36%/°C
Temperature Coefficient Of Voc	-0.29%/°C
Temperature Coefficient Of Lsc	0.05%/°C

## PACKING CONFIGURATION

Container	40' GP
Pieces Per Pallet	27
Pallets Per Container	20
Pieces Per Container	548