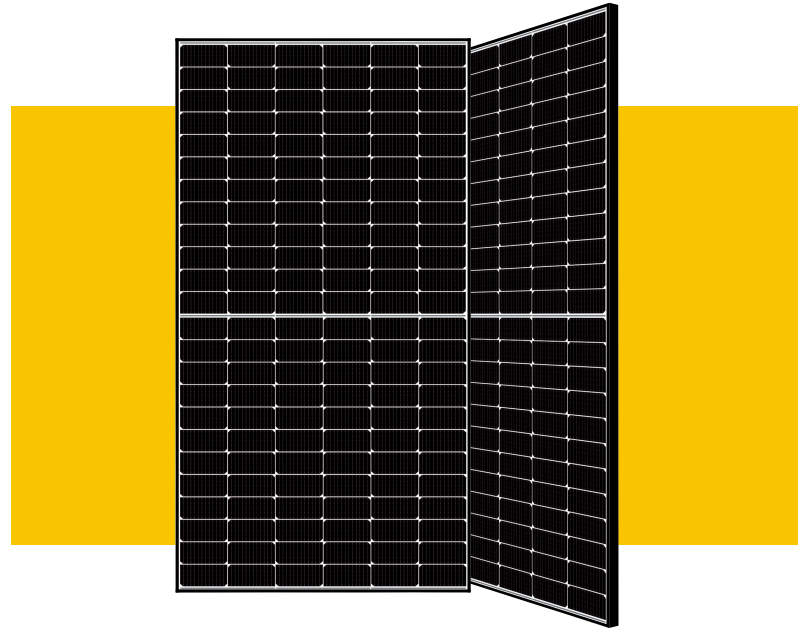


MSMDxxxM6-HJT144DS

460-480W

144-cell Bifacial HJT Half Cell Solar Module



Product Advantages

HJT

Heterojunction
Technology

M6

166mm Cell

22.1%

Module
efficiency

480W

Highest
power output

SMBB

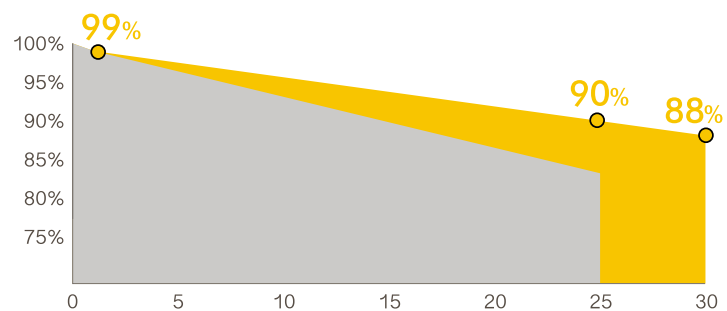
SMBB Half-Cut
Cell Technology



Up to 85% Bifaciality

Performance Warranty

● Standard Module ● MSMD HJT Module



Reliable · Durable
· Sustainable

-1.00%

First year power degradation

-0.375%

Annual degradation

15
Years

Materials and
workmanship warranty

30
Years

Linear power
warranty

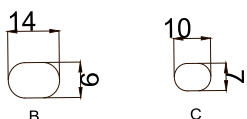
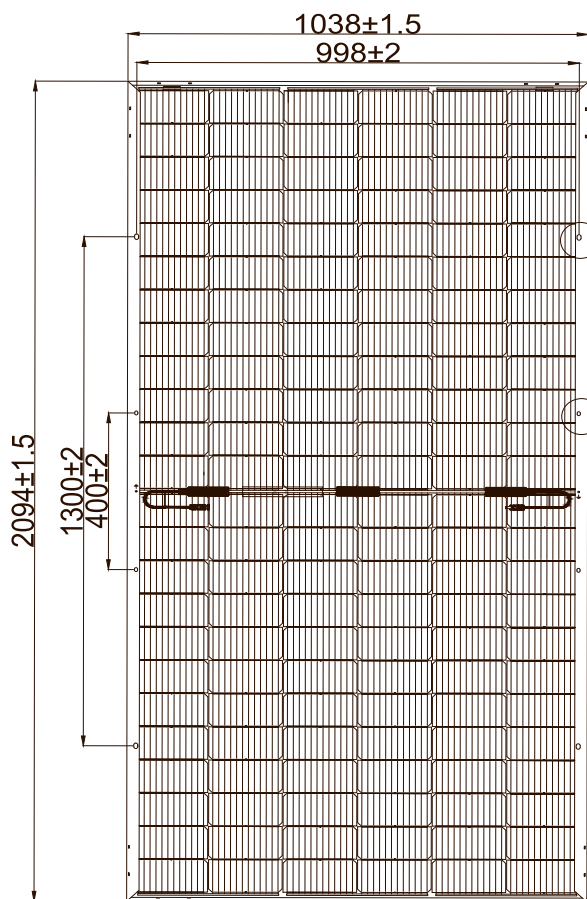
Product Certification



MSMDxxxM6-HJT144DS

Engineering Drawings

Unit: mm



Electrical Characteristics (STC*)

MSMDxxxM6-HJT144DS	460	465	470	475	480
Maximum Power (Pmax)	460W	465W	470W	475W	480W
Module Efficiency (%)	21.2%	21.4%	21.6%	21.9%	22.1%
Optimum Operating Voltage (Vmp)	45.24V	45.44V	45.66V	45.86V	46.08V
Optimum Operating Current (Imp)	10.18A	10.24A	10.30A	10.36A	10.43A
Open Circuit Voltage (Voc)	53.22V	53.35V	53.48V	53.61V	53.74V
Short Circuit Current (Isc)	10.58A	10.64A	10.70A	10.76A	10.82A
Operating Module Temperature	-40 to +85 °C				
Maximum System Voltage	DC1500V (IEC)				
Maximum Series Fuse	20A				
Power Tolerance	0~+5W				
Bifaciality	80% ± 5%				

*STC: Irradiance 1000 W/m², cell temperature 25 °C, AM=1.5. Tolerance of Pmax is within +/- 3%.

BSTC**

	510W	515W	520W	525W	530W
Maximum Power (Pmax)	510W	515W	520W	525W	530W
Optimum Operating Voltage (Vmp)	46.20V	46.40V	46.60V	46.80V	47.00V
Optimum Operating Current (Imp)	11.14A	11.19A	11.24A	11.29A	11.34A
Open Circuit Voltage (Voc)	54.33V	54.73V	55.33V	55.93V	56.53V
Short Circuit Current (Isc)	11.53A	11.57A	11.61A	11.65A	11.69A

**BSTC: Front side irradiation 1000W/m², back side reflection irradiation 135W/m², AM=1.5, ambient temperature 25 °C.

Mechanical Characteristics

Cell Type	HJT Mono 166 × 83mm
Cell Connection	144 (72 × 2)
Module Dimension	2094 × 1038 × 30 mm
Weight	27.5 kg
Junction Box	IP67 / IP68
Output Cable	4mm ² , 200mm in length, length can be customized / UV Resistant
Connectors Type	MC4 Compatible
Frame	Anodised Aluminum Alloy
Encapsulant	POE
Front Load	5400 Pa
Rear Load	2400 Pa
Glass Thickness	(F) 2.0mm Anti-reflective surface Solar glass (B) 2.0mm Solar glass

Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44 °C ± 2 °C
Temperature coefficient of Pmax	-0.26%/°C
Temperature coefficient of Voc	-0.24%/°C
Temperature coefficient of Isc	0.04%/°C

Safety & Warranty

Safety Class	Fire Class A
Product Warranty	15 yrs Workmanship
Performance Warranty	30 yrs Linear Warranty*

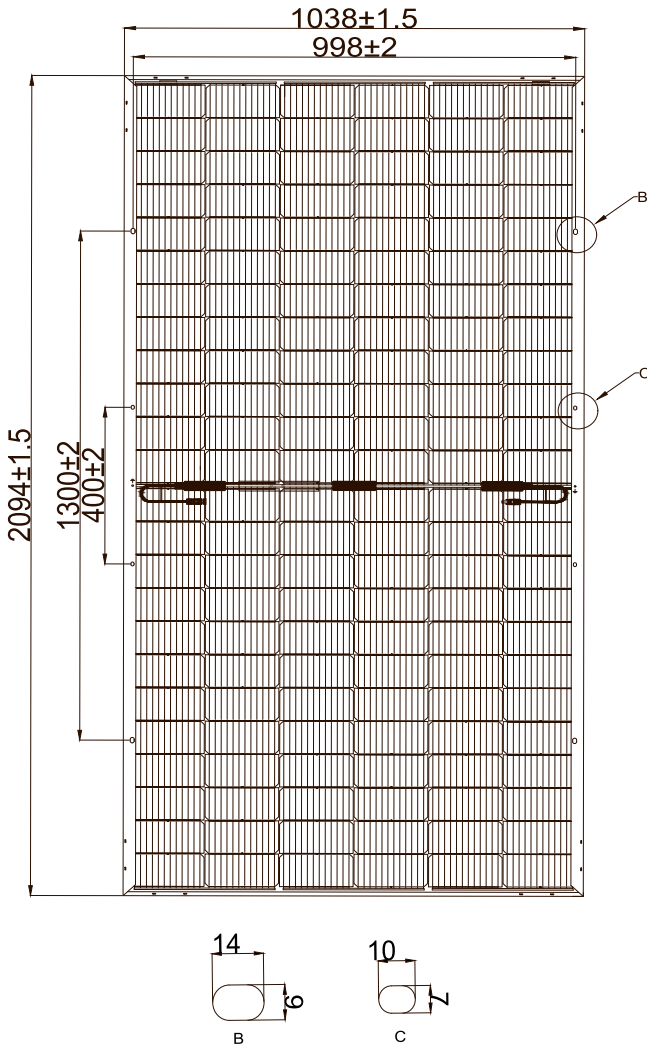
* 1st year 99%, after 2nd year 0.375% annual degradation to year 30.

Shipping Configurations

	HC	GP
Container Length	40'	20'
Pallets Per Container	22	5
Modules Per Pallet (pcs)	36	36
Modules Per Container (pcs)	792	180

Engineering Drawings

Unit: mm



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