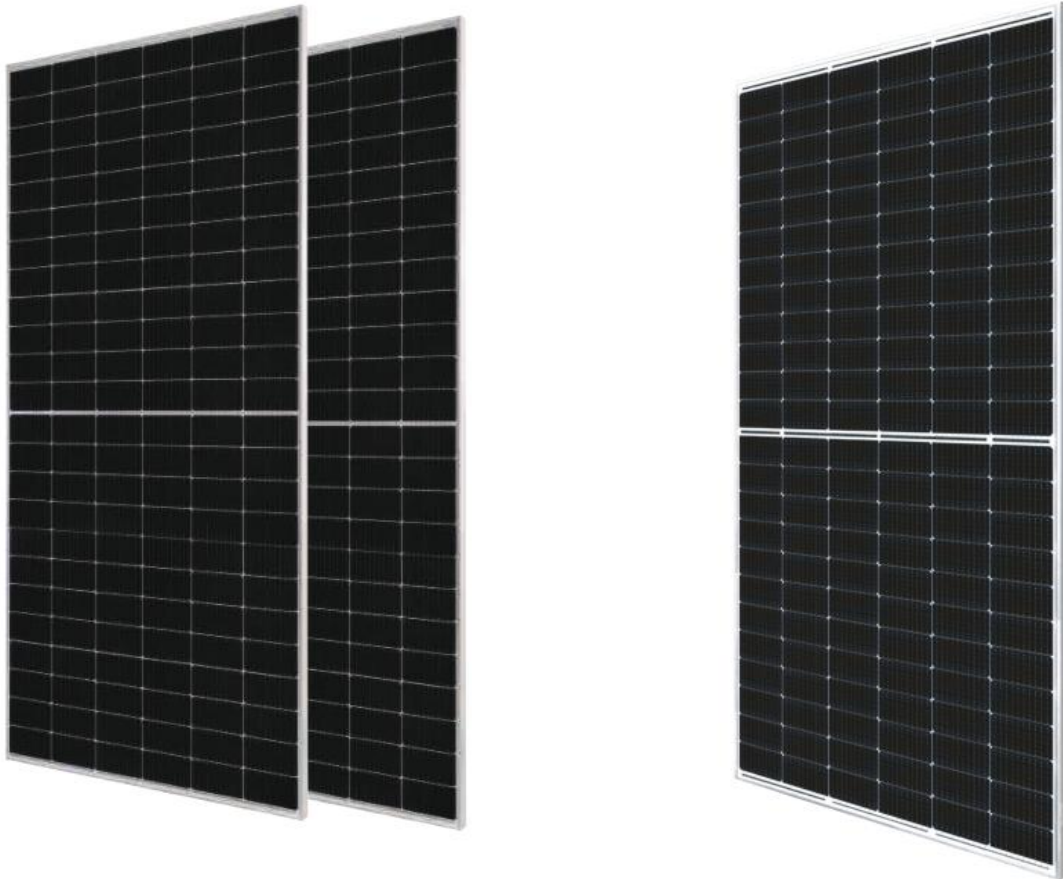




MSDXXXP-144M Module Specification

Module Pictures



Electrical Parameters at STC

Module Type	MSD535P-144M	MSD540P-144M	MSD545P-144M	MSD550P-144M
Maximum Power Pmax/W	535	540	545	550
Module Efficiency (%)	20.7%	20.9%	21.1%	21.3%
Open Circuit Voltage (Voc/V)	49.35	49.55	49.75	49.95
Short Circuit Current (Isc/A)	13.82	13.89	13.97	14.05
Voltage at Max. Power (Pmp/V)	41.45	41.62	41.80	41.97
Current at Max. Power (Imp/A)	12.91	12.98	13.05	13.11
Power Tolerance	0 to +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/m ² Cell Temperature 25°C AM1.5				

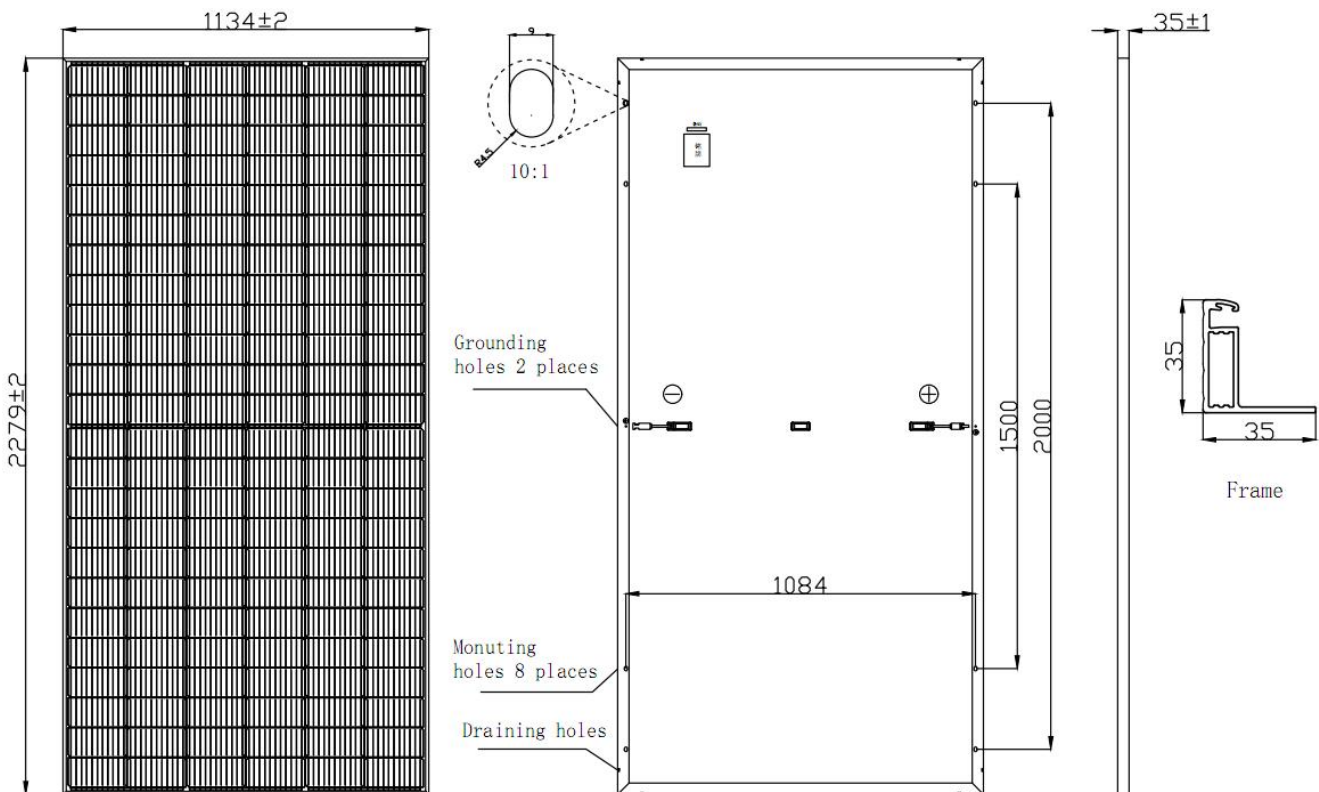


Electrical Parameters at NOCT

Module Type	MSD535P-144M	MSD540P-144M	MSD545P-144M	MSD550P-144M
Maximum Power Pmax/W	404	407	411	414
Open Circuit Voltage (Voc/V)	46.26	46.38	46.50	46.63
Short Circuit Current (Isc/A)	11.03	11.08	11.12	11.17
Voltage at Max. Power (Pmp/V)	38.76	38.95	39.16	39.31
Current at Max. Mower (Imp/A)	10.43	10.46	10.50	10.53
NOCT: Irradiance 800W/m ² Ambient Temperature 20°C Wind at 1m/S AM1.5				

Mechanical Diagrams

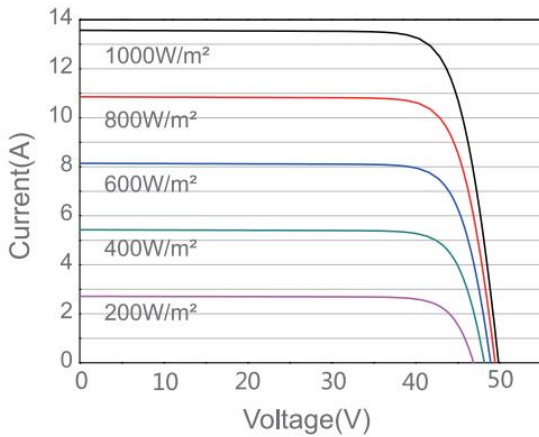
Overall dimensions (L×W×H)	Power range	Weight
2279mm×1134mm×35mm	520-550W	About 27.3kg±3%



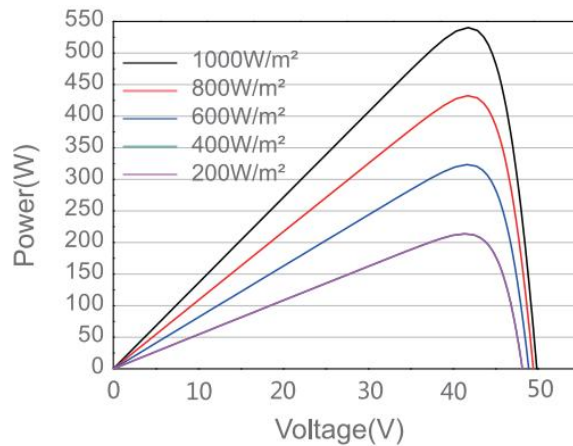


Characteristics

Current-voltage curve (540W)



Power - voltage curve (540W)



Operating Parameters

Maximum System Voltage 1500V DC

Operating Temperature $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Maximum Series Fuse 20A

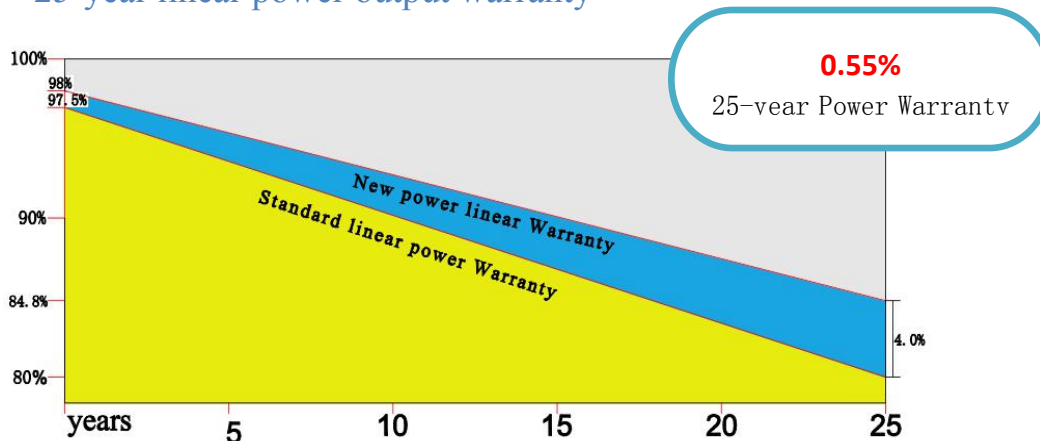
NOCT $45 \pm 2^{\circ}\text{C}$

Fireproof Performance Glass C

Maximum Static Load, Front 5400Pa (112 lb/ft²)
Maximum Static Load, Back 2400Pa (50 lb/ft²)

Quality warranty and Certification system

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





Comprehensive Certificates

- IEC 61215, IEC 61730, UL 61215, UL 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001:2018 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules – Guidelines for increased confidence in PV module design qualification and type approval



Mechanical Parameters

Cell	Mono
Solar Cells	144pcs (6*24)
Dimension	2279×1134×35mm
Weight	27.3kg±3%
Structure	3.2 glass + EVA film + back
Cable Cross Section Size	4mm ² (IEC)
Junction Box	IP68、3*bypass diode
Cable Length (Including Connector)	4.0mm ² , (+)280mm/(-)280mm(custom)
Connector	MC4/Compatible with MC4

Module Excellence

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 to550W.

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.

Module Packaging

Module Type	MSDXXXP-144M
Dimension	2279*1134*35mm
Number	31pcs/pallet
Volume	3.372m ³
Weight	N.W-846.3kg/G.W-871.3kg
40'HQ Container	620pcs
Trailer (17.5m)	868pcs