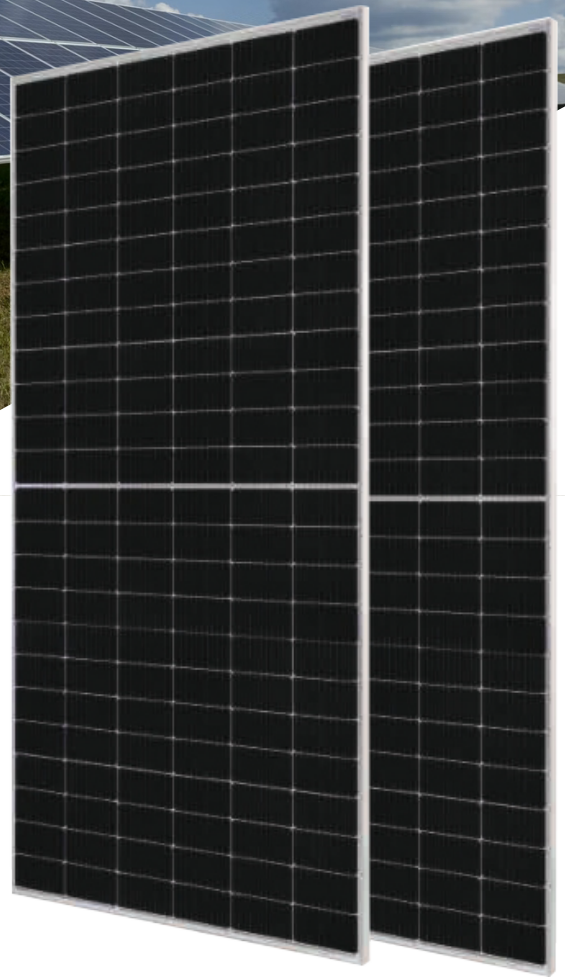


MSD144M/540W

Mono Half-cut single/Double Glass Module

INTRODUCTION

MONO half-cut single glass module, assembled with multi-busbar PERC technique and half-cut structure, offer the advantages of higher power output, reduce shading effect on the energy generation, enhance the mechanical load bearing capacity as well.

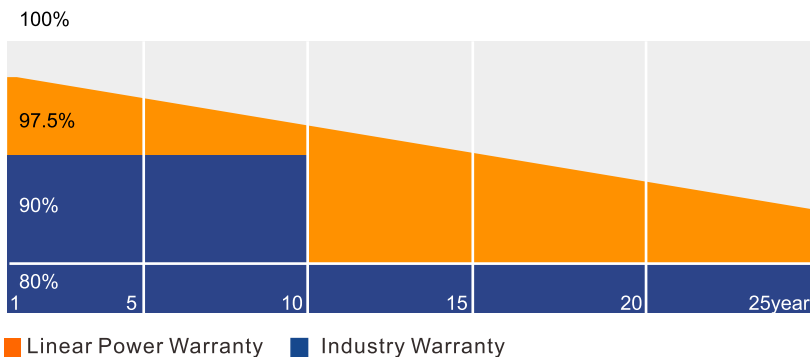


LCOE save 6-8%

- ↓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

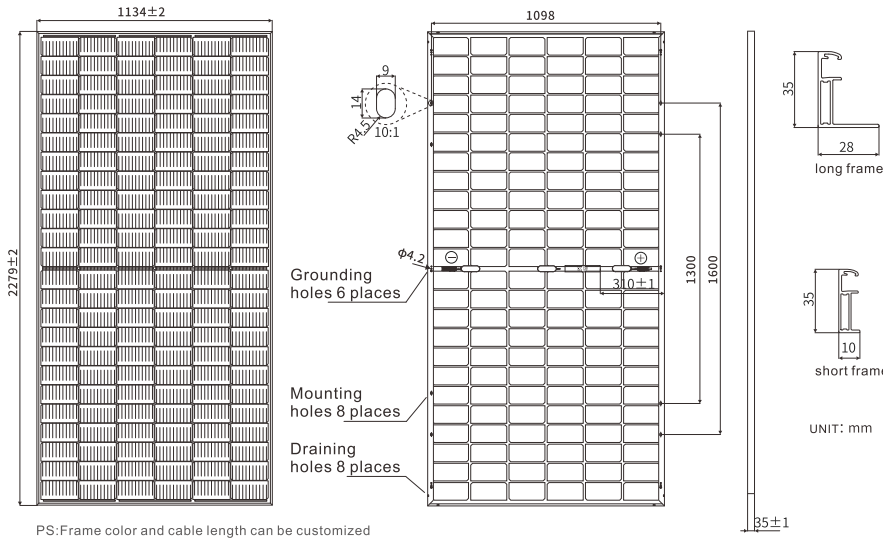


Comprehensive Certificates

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



Mechanical Diagrams



Specifications

Cell	Mono
Weight	27.3kg±3%
Dimensions	2279±2mmX1134±2mmX35±1mm
Cable Cross Section Size	4mm ² (IEC), 12AWG (UL)
Solar Cells	144(6X24)
Junction Box	IP68/FT50XY, 3*bypass diode
Connector	RHC2
Cable Length (Including Connector)	300mm
Front Glass	2.0mm
Packaging	3 1pcs/Pallet, 620 pcs/40HQ

Electrical Parameters at STC

Type	MSD144M/540
Rated Maximum Power (Pmax)[W]	540
Open Circuit Voltage (Voc)[V]	49.55
Maximum Power Voltage (Vmp)[V]	41.62
Short Circuit Current (Isc)[A]	13.89
Maximum Power Current (Imp)[A]	12.89
Module Efficiency[%]	20.8
Power Tolerance	0~+5W
Temperature Coefficient of Isc (α _{Isc})	+0.046%/°C
Temperature Coefficient of Voc (β _{Voc})	-0.276%/°C
Temperature Coefficient of Pmax (γ _{Pmp})	-0.350%/°C
STC	Irradiance 1000W/m ² , 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 (Suppose 10% Ratio of Solar Irradiance)

Type	MSD144M/540
Rated Maximum Power (Pmax)[W]	578
Open Circuit Voltage (Voc)[V]	49.93
Maximum Power Voltage (Vmp)[V]	42.24
Short Circuit Current (Isc)[A]	14.50
Maximum Power Current (Imp)[A]	13.69

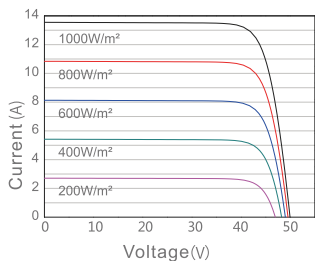
Operating Conditions

Maximum System Voltage	1000V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse	25A
Maximum Static Load, Front	5400Pa (112 lb/ft ²)
Maximum Static Load, Back	2400Pa (50 lb/ft ²)
NOCT	45±2°C
Backside Ratio	70%±10%
Fireproof Performance	UL Type 29

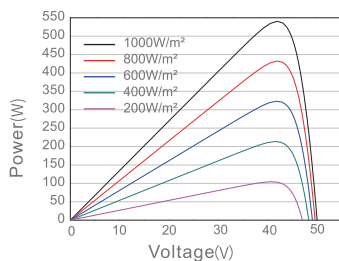
rate of the back of solar panel = peak power of STC / nominal power

Characteristics

Current Voltage Curve MSD144M/540



Power Voltage Curve MSD144M/540



Current Voltage Curve MSD144M/540

