

MSD132-450W

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

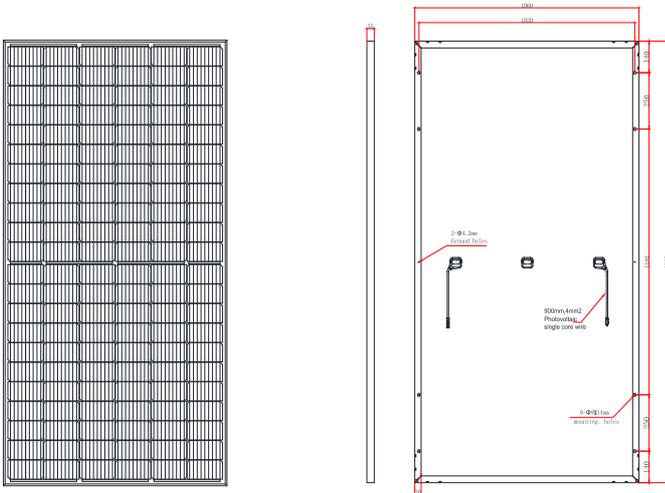


Comprehensive Certificates

- 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	20.2KG
Dimensions	1960*1060*35MM
Cable Cross Section Size	4mm ² (IEC), 12AWG (UL)
Solar Cells	132 (6*22)
Junction Box	IP68/FT50XY, 3*bypass diode
Connector	RHC2
Cable Length (Including Connector)	300mm
Front Glass	2.0mm

Electrical Parameters at STC

Type	MSD132-450W
Rated Maximum Power (Pmax)[W]	450
Open Circuit Voltage (Voc)[V]	47V
Maximum Power Voltage (Vmp)[V]	40V
Short Circuit Current (Isc)[A]	11.9A
Maximum Power Current (Imp)[A]	11.25A
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/m², 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	MSD132-450W
Rated Maximum Power (Pmax)[W]	489
Open Circuit Voltage (Voc)[V]	41.85
Maximum Power Voltage (Vmp)[V]	35.29
Short Circuit Current (Isc)[A]	14.69
Maximum Power Current (Imp)[A]	13.86

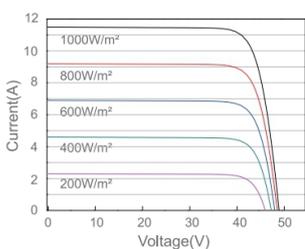
Operating Conditions

Maximum System Voltage	1500V 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 MSD132-450W



Power Voltage Curve MSD132-450W

