TOPRAY Solar

Recommended For

Utility Scale Ground Mounted

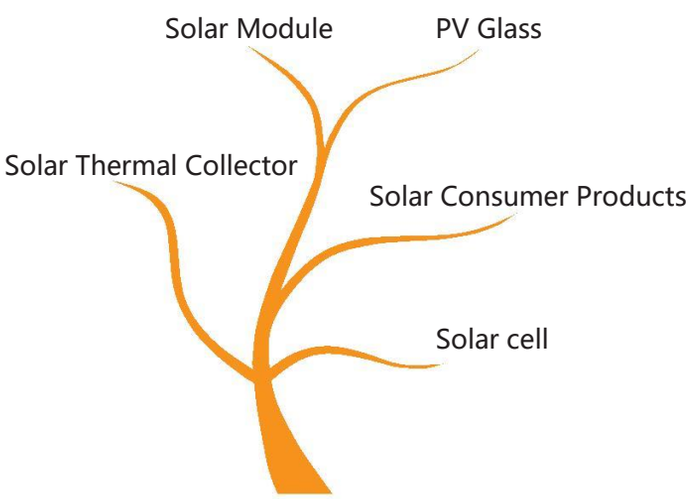
TPSh-M2P112SF1W

520W

Poly Crystalline Photovoltaic Module

Not Your Average Solar Provider

Our Products Categories



Guaranteed Performance**

10 Years Manufacturing Warranty

12 Years Warranty,90% Power Output

25 Years Warranty,80% Power Output

Free module recycling through
membership in the PV Cycle Association

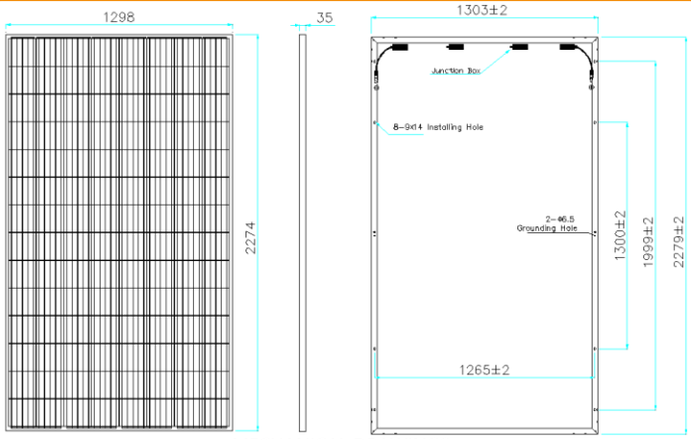
Key Feature

- High module efficiency
- Plus power tolerance:0~+ 3%.
- Independently developed anti-reflective and self-cleaning glass surface reduces power loss from dirt and dust.
- Excellent performance under low light environments, create better kWh/kW ratio and produce 2- 3% more electricity average in average.
- Certified by TUV to withstand high level of wind loads (2400Pa) and snow loads (5400Pa)*.

Best Quality

- Junction box and bypass diodes guarantee the modules free of overheating and "hot spot effect".
- Compatible with industry standard inverters and Mounting systems.
  Guarantee minimal maintenace effort required.
- 100% EL double-inspection ensures modules free of defects.
- Potential Induced Degradation (PID) free.

* Please refer to Topray Safety and Installation Manual for details.
**Please refer to Topray Limited Product Warranty for details.



MECHANICAL DRAWINGS

TPSh-M2P112SF1W

520W
Poly Crystalline Photovoltaic Module

ELECTRICAL CHARACTERISTICS

MECHANICAL SPECIFICATION

Cell Type	Poly Crystalline 157×157 mm
Number of cells	112 (8×14)
Dimensions (A×B×C)	2279×1303×35mm
Weights	31kg
Front Glass	3.2 mm Low iron tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP 67,with bypass diodes
Connector	MC4 compatible
Output Cables	TÜV standard, length 350mm, 4.0mm²

PERFORMANCE AT STANDARD TEST CONDITION (STC:1000W/m²,25°C,AM1.5)

Module Series	TPSh-M2P112SF1W-520W
Maximum Power at STC(Pmax)	520W
Short Circuit Current(Isc)	9.27A
Open Circuit Voltage(Voc)	71.71V
Maximum Power Current(Impp)	8.91A
Maximum Power Voltage(Vmpp)	58.37V
Module Efficiency	17.51%
Power Tolerance	0/+3%

The typical relative change in module efficiency at an irradiance of 200W/m² in relation to 1000W/m² (both at 25°C and AM 1.5 spectrum) is less than 6%.

PACKING CONFIGURATION

Container	20' GP	40' GP	40' HQ
Pieces per container	155	360	360

TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	44±3°C
Temperature Coefficient of Pmax (γ)	- 0.4%/k
Temperature Coefficient of Voc (β)	- 0.37%/k
Temperature Coefficient of Isc (α)	0.05%/k

SYSTEM INTEGRATION PARAMETERS

Maximum system voltage	DC 1500V
Maximum Series Fuse	15A
Maximum reverse current	21.5A
Increased snowload acc. to IEC 61215	5400Pa
Operating Temperature	-40~+85°C
Number of bypass diodes	3

QUALIFICATIONS AND CERTIFICATES

CE-Compliant, IEC 61215 (Ed.2), IEC 61730 (Ed.1) application classA,TÜV Safety Class II,UL 1703

DEALER INFORMATION BOX

NOTE:READ SAFETY AND INSTALLATION INSTRUCTIONS OR CONTACT THE TECHNICAL SERVICE FOR FURTHER INFORMATION BEFORE USING THE PRODUCT.