TPSh-M12M132SH1W

Half Cell:

- Half cell design allows more modules to be operated in half of the original current.
- Low working temperature and decreased the CTM loss, generating more power.
- Topray Solar half cell operates in low working temperature, decreases the risk of hot spot
and the loss due to the protective coefficient, enhancing the performance and reliability.
- Module circuit is optimized into two sections that are connected in parallel diode and with
built-in bypass diodes, providing better performance under shading conditions.
- Advanced laser cutting technology ensures no damage to the cell during cutting process.
- Encapsulated with Topray Solar glass with high transmittance, low iron content and tempered
to withstand harsh environments, guaranteed by multiple stringent quality tests.
- More operations at lower working day to day voltage.
- Equipped with anti-reflective film and hydrophilic coating on the front glass, Topray Solar modules are capable
of self-cleaning, ensuring maximum performance and requiring minimum maintenance.
- Module certified by TUV
  - For EN IEC 61215-2:2021 with increased high level of thermal cycles 600 and damp heat 1000 hours.
  - For PID test with a protection that is aimed at degradation caused by high voltage stress.
  - For salt mist corrosion, ammonia corrosion test.

Qualifications and Certification

TPSh-M12M132SH1W

630-670W

Mechanical Specification

Cell Type	Mono Crystalline 210x105mm
Num bers of cells	132
Dim ensions	2384x1303x35mm
W eight	32kg
Front glass	2.0mm low iron tem pered glass
Fram e	Anodized alum inum
Junction Box	IP67, with 3 bypass diodes
Connector	MC4 com patible
Output Cables	TUV tested, length 400mm/400mm

Module Series	TPSh-M12M132SH1W				
Maximum Power at STC Pm(Wp) W	630	645	660	665	670
Short Circuit Current Isc(A) A	19.14	19.21	19.28	19.35	19.42
Open Circuit Voltage Voc(V) V	41.62	41.67	41.72	41.74	41.77
Maximum Power Current Imp(Wp) A	17.01	17.11	17.21	17.24	17.28
Maximum Power Voltage Vmp(Wp) V	37.04	37.07	37.14	38.16	38.18
Module Efficiency	20.12%	20.60%	20.92%	21.25%	21.57%
Power Tolerance	+/-3%	+/-3%	+/-3%	+/-3%	+/-3%

Mechanical drawings (mm)

TEMPERATURE CHARACTERISTICS

Nom inal operating Cell tem perature NOCT	43±2℃
Tem perature Coefficient of Pmpx	-0.29%/℃
Tem perature Coefficient of Ipx	0.04%/℃
Tem perature Coefficient of Voc	-0.25%/℃

PACKING CONFIGURATION

Packing information: 31 pcs per pallet, 558 pcs per 40'HQ container

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