

TPOWER

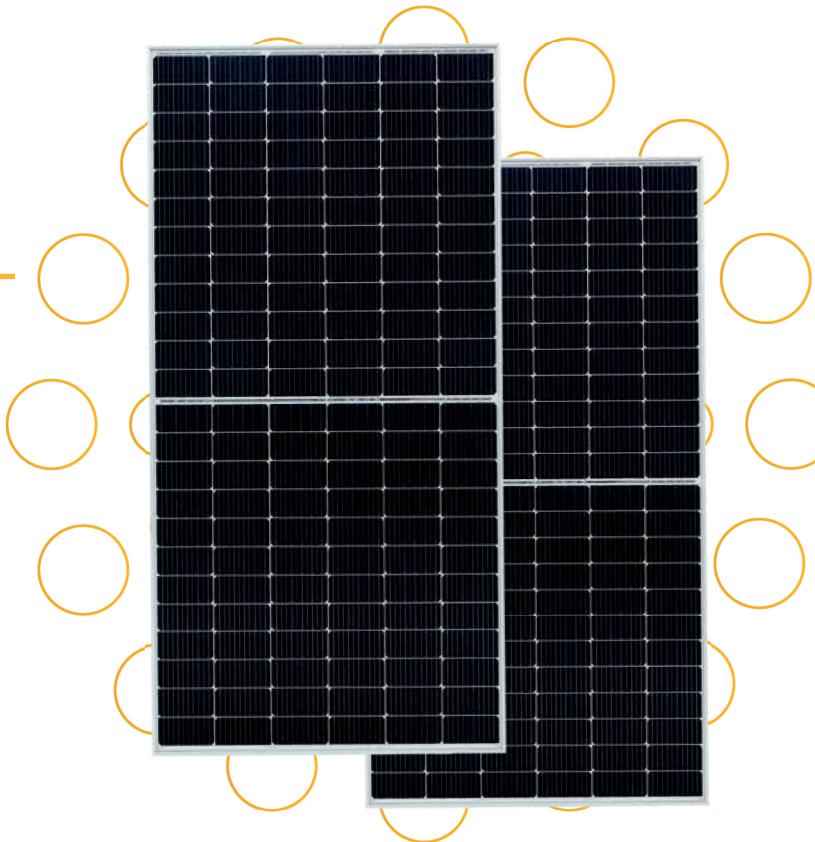
TSM472H

TSM472H(H)

144 half-cell

530 - 550W

10BB half-cut mono perc



KEY FEATURES



10BB half-cut cell technology

New circuit design, lower internal current, lower R_s loss
Ga-doped wafer, attenuation <2% (1st year) / ≤0.55% (Linear)



Significantly lower the risk of hot spot

Special circuit design with much lower hot spot temperature



Lower LCOE

2% more power generation, lower LCOE



Excellent Anti-PID performance

2 times of industry standard Anti-PID test by TUV SUD



IP68 junction box

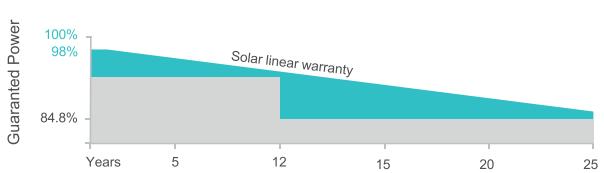
High waterproof level

SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 61730
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems



PERFORMANCE WARRANTY



ELECTRICAL PARAMETERS

(Performance at STC (Power Tolerance 0 - +3%)

Maximum Power (Pmax/W)	530	535	540	545	550
Operating Voltage (Vmpp/V)	417	418	419	420	421
Operating Current (Impp/A)	12.71	12.80	12.89	12.98	13.07
Open-Circuit Voltage (Voc/V)	49.5	49.6	49.7	49.8	49.9
Short-Circuit Current (Isc/A)	13.44	13.53	13.62	13.71	13.80
Module Efficiency m(%)	20.7	20.9	21.1	21.3	21.5

Performance at NMOT

Maximum Power (Pmax/W)	394	398	402	405	409
Operating Voltage (Vmpp/V)	38.8	38.9	39.0	39.1	39.2
Operating Current (Impp/A)	10.16	10.23	10.30	10.37	10.44
Open-Circuit Voltage (Voc/V)	46.3	46.4	46.5	46.6	46.7
Short-Circuit Current (Isc/A)	10.83	10.91	10.98	11.05	11.12

STC: Irradiance 1000W/m², Cell Temperature 25 °C, Air Mass AM1.5

NMOT: Irradiance at 800W/m², Ambient Temperature 20 °C, Air Mass AM1.5, Wind Speed 1m/s

MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	182*182mm
Cell Arrangement	144 (624)
Weight	29kg (63.9lbs)
Module Dimensions	2256*1133*35mm(88.82*44.61*1.38inches)
Cable Length	Portrait 300mm/Landscape 1200mm/Customized
Cable Cross Section Size	TUV: 4mm ² (0.006inches ²)/UL: 12AWG
Front Glass	3.2mm (0.13inches) AR Coating Tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration (1)	31pcs/carton, 620pcs/40hq
Packing Configuration (for USA)	30pcs/carton, 600pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

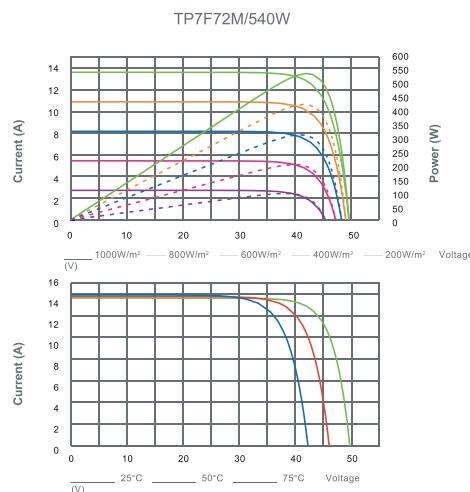
OPERATING CONDITIONS

Maximum System Voltage	1000V/1500V/DC(IEC)
Operating Temperature	-40°C - +85°C
Maximum Series Fuse	25
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	sQ10
Safety Class	II
Resistance	2100MQ
Connector	TO1/LJQ-3-CSY/MC4/MC4-EVO2

TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.36%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.043%/°C
NMOT	43±2°C

I-V CURVE



TECHNICAL DRAWINGS

