

Recommended For



Commercial Roof



Utility Scale Ground Mounted



TPS-M6U Mono Crystalline Photovoltaic Module

- Plus power tolerance(0-3%) to ensure the high reliability of power output
- Module certified by TUV
 - ✦ For SNOW ZONE III, withstand high level of wind loads(2400Pa) and snow loads(5400Pa)
 - ✦ For PID test. No Potential Induced Degradation cause by High Voltage Stress
 - ✦ For Salt mist corrosion, ammonia corrosion test
- Anti-reflective, hydrophobic layer of module surface(proprietary 800° C online coating technology) improves light absorption and reduces surface dust
- Easy installation and minimal maintenance with compatibility to industry standard inverters and mounting system
- Special PV Module Insurances by world leading insurance company guarantees the benefit of PV investors and PV module users
- Junction box and bypass diodes guarantee the module free of overheating and "hot spot effect"
- Modules' excellent performance under low light environments(mornings, evenings, and cloudy days) create better kWh/kW ratio and produce average 2-3% more electricity in the field

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

Choosing Topray Solar

Professional solar producer and solutions provider since 1999, reliable partner of global distributors, installers and project integrators

The most vertically integrated solar manufacturer in the industry with production of ingots, wafer, solar cells and modules using both mono crystalline and poly crystalline technology

Manufacturing with international quality standards and environment management system: ISO 9001 and ISO 14001

Global distribution with local warehousing, delivery and after sales services

Minimal wiring effort required as the module has high reverse current resistance

Most updated design with drainage holes in the frame ensures the modules to withstand various weather conditions



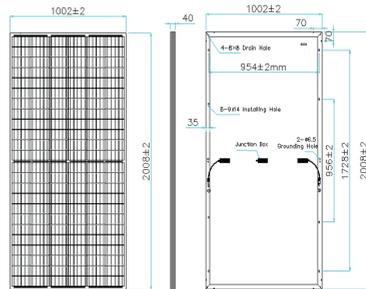
QUALIFICATIONS AND CERTIFICATES



MECHANICAL SPECIFICATION

Cell Type	Mono crystalline 158.75x79.38mm
Number of cells	144 (6x24)
Dimensions(AxBxC)	2008x1002x40mm
Weights	21.5kg
Front Glass	3.2 mm Low iron tempered glass
Frame	Anodized aluminum
Junction Box	IP 67, with bypass diodes
Connector	MC4 compatible
Output Cables	TÜV, length 350mm, 4.0mm ²

MECHANICAL DRAWINGS



ELECTRICAL CHARACTERISTICS

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

Module Series	TPS-M6U(72)-400W
Maximum Power at STC(P _{max})	400W
Short Circuit Current(I _{sc})	10.15A
Open Circuit Voltage(V _{oc})	48.8V
Maximum Power Current(I _{mp})	9.91A
Maximum Power Voltage(V _{mp})	40.37V
Encapsulated Cell Efficiency	22.42%
Module Efficiency	20.16%
Power Tolerance	0/+5%

PERFORMANCE AT NORMAL OPERATING CELL TEMPERATURE

(NOTE: I_r irradiance = 800 W/m², Air Temperature = 20 °C, Wind Velocity = 1 m/s)

Maximum Power(P _{max})	289.92W
Short Circuit Current(I _{sc})	8.28A
Open Circuit Voltage(V _{oc})	45.09V
Maximum Power Current(I _{mp})	7.77A
Maximum Power Voltage(V _{mp})	37.30V

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%

TEMPERATURE CHARACTERISTICS

Nominal Operating Cel Temperature(NOCT)	44±2 °C
Temperature Coefficient of P _{max} (γ)	-0.4%/K
Temperature Coefficient of V _{oc} (β)	-0.37%/K
Temperature Coefficient of I _{sc} (α)	0.05%/K

PACKING CONFIGURATION

Container	20'GP	40'GP	40'HQ
Pieces per container	270	594	638

SYSTEM INTEGRATION PARAMETERS

Maximum system voltage	DC 1000V/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

