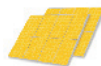


Recommended For



Commercial Roof



Utility Scale Ground Mounted

TPS-P6U Poly 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**

10Years
Manufacturing Warranty

12Years Warranty
90% Power Output

25Years 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		MECHANICAL DRAWINGS	
Cell Type	Poly crystalline 156.75 x 156.75 mm		
Number of cells	60(6x10)		
Dimensions(AxBxC)	1648 x 990 x 35mm		
Weights	17.5kg		
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 900mm, 4.0mm ²		

ELECTRICAL CHARACTERISTICS	
PERFORMANCE AT STANDARD TEST CONDITION(STC:1000W/m ² , 25° C, AM1.5)	
Module Series	TPS-P6U(60)-280W
Maximum Power at STC(Pmax)	280W
Short Circuit Current(Isc)	9.38A
Open Circuit Voltage(Voc)	38.50V
Maximum Power Current(Imp)	9.0A
Maximum Power Voltage(Vmpp)	31.20V
Encapsulated Cell Efficiency	19.18%
Module Efficiency	17.16%
Power Tolerance	0/+3%

PERFORMANCE AT NORMAL OPERATING CELL TEMPERATURE (NOTE: Irradiance = 800 W/m ² , Air Temperature = 20°C, Wind Velocity = 1 m/s)	
Maximum Power(Pmax)	202.9W
Short Circuit Current(Isc)	7.65A
Open Circuit Voltage(Voc)	35.57V
Maximum Power Current(Imp)	7.06A
Maximum Power Voltage(Vmpp)	28.74V
The typical relative change in module efficiency at an irradiance of 200W/m ² in relation to 1000W/m ² (both at 25° C and AM 1.5 spectrum) is less than 6%	

TEMPERATURE CHARACTERISTICS		PACKING CONFIGURATION			
Nominal Operating Cel Temperature(NOCT)	44±2° C	Container	20'GP	40'GP	40'HQ
Temperature Coefficient of Pmax (γ)	-0. 4%/K	Pieces per container	360	840	896
Temperature Coefficient of Voc (β)	-0. 37%/K	SYSTEM INTEGRATION PARAMETERS			
Temperature Coefficient of Isc (α)	0. 05%/K	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		

