

Recommended For



Commercial Roof



Utility Scale Ground Mounted



TPSP6U 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**

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 1992, 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 multi 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 156x156mm(6 inches)	
Number of cells	60(6x10)	
Dimensions(AxBxC)	1640x992x40mm	
Weights	18.6kg	
Front Glass	3.2 mm Low iron tempered glass	
Frame	Anodized aluminum	
Junction Box	IP 65, with bypass diodes	
Connector	Mc4 compatible	
Output Cables	TÜV, length 900mm, 4.0mm ²	

ELECTRICAL CHARACTERISTICS

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

Module Series	TPSP6U-Topray Universal				
	240W	245W	250W	255W	260W
Maximum Power at STC(Pmax)	240W	245W	250W	255W	260W
Short Circuit Current(Isc)	8.62A	8.69A	8.80A	8.88A	8.91A
Open Circuit Voltage(Voc)	36.90V	37.10V	37.20V	37.62V	37.73V
Maximum Power Current(Imp)	8.06A	8.14A	8.26A	8.40A	8.45A
Maximum Power Voltage(Vmpp)	29.80V	30.10V	30.30V	30.36V	30.77V
Encapsulated Cell Efficiency	16.94%	17.30%	17.65%	18.00%	18.36%
Module Efficiency	14.756%	15.06%	15.37%	15.70%	16.00%
Power Tolerance	0/+3%	0/+3%	0/+3%	0/+3%	0/+3%

PERFORMANCE AT NORMAL OPERATING CELL TEMPERATURE(NOTE:800W/m², 47±3°C, AM1.5)

Maximum Power(Pmax)	176W	179W	183W	185W	187W
Short Circuit Current(Isc)	7.27A	7.33A	7.42A	7.51A	7.60A
Open Circuit Voltage(Voc)	34.20V	34.40V	34.50V	34.50V	34.50V
Maximum Power Current(Imp)	6.62A	6.69A	6.79A	6.82A	6.86A
Maximum Power Voltage(Vmpp)	26.50V	26.80V	27.00V	27.32V	27.68V

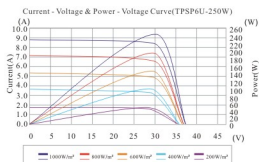
The typical relative change in module efficiency at an irradiance of 200W/m² in relation to 1000W/m² (both at 25°C and AM 1.5 spectrum) is less than 6%

TEMPERATURE CHARACTERISTICS

Nominal Operating Cel Temperature(NOCT)	47±3°C
Temperature Coefficient of Pmax(γ)	-0. 44%/K
Temperature Coefficient of Voc(β)	-0. 36%/K
Temperature Coefficient of Isc(α)	0. 05%/K

PACKING CONFIGURATION

Container	20'GP	40'HQ
Pieces per pallet	25	25
Pallets per container	6	28
Pieces per container	290	700



SYSTEM INTEGRATION PARAMETERS

Maximum system voltage	DC 1000V
Maximum Series Fuse	16A
Maximum reverse current	21.5A
Increased snowload acc. to IEC 61215	5400Pa
Operating Temperature	-40~+85°C
Number of bypass diodes	6