# OnGrid Crystalline-Standard TPS-M6U



# Recommended For











- 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 poly crystalline



Manufacuring with international quality standards and environment management system: ISO 9001 and ISO



Global distribution with local warehousing, delivery and after sales services

OUALIFICATIONS AND CERTIFICATES



















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



# OnGrid Crystalline-Standard TPS-M6U(72)



#### MECHANICAL SPECIFICATION

**Cell Type** Mono crystalline 156 (156.75) x156 (156.75) mm

 $\begin{tabular}{ll} \textbf{Number of cells} & 72 (6x12) \\ \textbf{Dimensions(AxBxC)} & 1956x990x40mm \\ \end{tabular}$ 

Weights 20.5kg

Front Glass 3.2 mm Low iron tempered glass

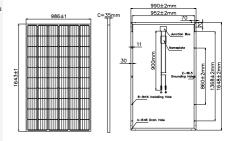
Frame Anodized aluminum

Junction Box IP 67, with bypass diodes

Connector Mc4 compatible

Output Cables TÜV, length 900mm, 4.0mm<sup>2</sup>

#### MECHANICAL DRAWINGS



#### ELECTRICAL CHARACTERISTICS

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

Module Series	TPS-M6U(72)-xxxW								
Maximum Power at STC(Pmax)	335W	340W	345W	350W	355W	360W	365W	370W	375W
Short Circuit Current(Isc)	9.32A	9.35A	9.41A	9.5A	9.6A	9.7A	9.8A	9.85A	9.9A
Open Circuit Voltage(Voc)	47.0V	47.1V	47.3V	47.5V	47.7V	47.9V	48.1V	48.2V	48.3V
Maximum Power Current(Impp)	8.8A	8.91A	9.03A	9.16A	9.28A	9.38A	9.48A	9.54A	9.6A
Maximum Power Voltage(Vmpp)	38.1V	38.2V	38.2V	38.2V	38.3V	38.4V	38.5V	38.8V	39.1V
Encapsulated Cell Efficiency	19.71%	20.0%	20.3%	20.59%	20.89%	21. 18%	21. 48%	21.77%	22.06%
Module Efficiency	17.3%	17.56%	17.82%	18.07%	18.33%	18.59%	18.85%	19.11%	19.37%
Power Tolerance	0/+3%	0/+3%	0/+3%	0/+3%	0/+3%	0/+3%	0/+3%	0/+3%	0/+3%

# PERFORMANCE AT NORMAL OPERATING CELL TEMPERATURE (NOTE:800W/m², 44±2°C, AM1.5)

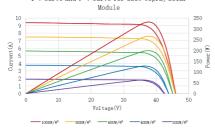
Maximum Power(Pmax)	242.81W	246.43W	250.06W	253.68W	257.3W	260.93W	264.55W	268.18W	271.8W
Short Circuit Current(Isc)	7.61A	7.63A	7.68A	7.75A	7.83A	7.92A	8.0A	8.04A	8.08A
Open Circuit Voltage(Voc)	43.43V	43.52V	43.71V	43.89V	44.07V	44.26V	44.44V	44.54V	44.63V
Maximum Power Current(Impp)	6.9A	6.98A	7.08A	7.19A	7.27A	7.35A	7.44A	7.48A	7.52A
Maximum Power Voltage(Vmpp)	35.2V	35.3V	35.3V	35.3V	35.39V	35.48V	35.57V	35.85V	36.13V

The typical relative changr 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( $\gamma$ )	-0.4%/K
Temperature Coefficient of Voc( $\beta$ )	-0. 37%/K
Temperature Coefficient of Isc( α)	0. 05%/K

I-V curve and P-V curve for 330W Topray Solar



# PACKING CONFIGURATION

THE HIT OF COMPTONIES	
Container	40'HQ
Pieces per pallet	26
Pallets per container	24
Pieces per container	624

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				