# Thaisun Solar Module TSG72 320P/315P/310P/305P/300P



# Thaisun Green Energy Co., Ltd.

Thaisun is a world-leading manufacturer of high-performance PV Products that convert sunlight into electricity for residential, commercial and utility-scale power generation. The factory is based in the Thailand with the capacity of 100MW for the solar cell and solar module. The PV products are approved by worldly certificate as UL, ETL, CEC, TUV, IEC, ROHS, MCS.

We set up a global rapid reaction mechanism and global quality tracking system. As a brand committed to the responsibility of "Sustainable Energy, Aspirational Life", we offer advanced, reliable, safer and cost-effective range of the PV products which are engineered to meet the world's growing energy demands. Thaisun is the most trustworthy long-term partner in the PV industry.



# High Performance & Excellent Reliability



# **High Light Transmission Rate**

Thaisun adopts highly transparent, anti-reflective, low iron tempered glass for the solar modules to reach high light transmission rate.



# **Durability**

Durable PV modules, independently tested for harsh environmental conditions such as exposure to salt mist, ammonia and known PID risk factors. Withstand high wind loads and snow loads (5400Pa).



### **PID Free**

Tested and approved according to the international standard IEC62804. Thaisun PV modules have demonstrated resistance against PID (Potential Induced Degradation), which translates to security for your investment.

# **World-class Quality**

Fully-automated production lines and seamless monitoring of the process and material ensure the quality that the company sets as its benchmark for its sites worldwide.

## **Thaisun Plus-Sorting**

Plus-sorting guarantees highest solar module efficiency. Thaisun only delivers solar modules with positive tolerance up to 3%.

### Module Fire Performance (for USA) Type 1

25-year linear performance warranty, and 12-year warranty on raw materials and workmanship



www.thaisunpv.com

# **Thaisun 72 Cell Polycrystalline Series**

# **ELECTRICAL CHARACTERISTICS**

Characteristics	TSG72-320P	TSG72-315P	TSG72-310P	TSG72-305P	TSG72-300P
Max.Power (Pmax)	320Wp	315Wp	310Wp	305Wp	300Wp
Optimum Operating Voltage (Vm)	39.03V	38.63V	38.02V	37.43V	36.81V
Optimum Operating Current (Im)	8.20A	8.16A	8.16A	8.15A	8.15A
Open-circuit Voltage (Voc)	47.50V	47.21V	46.76V	46.28V	46.17V
Short-circuit Current (Isc)	8.62A	8.56A	8.56A	8.56A	8.55A
Cell Efficiency	18.30%	17.98%	17.70%	17.40%	17.10%
Module Efficiency	16.50%	16.23%	15.98%	15.72%	15.46%

<sup>\*</sup>STC (Standard Test Condition): Irradiance 1000W/m<sup>2</sup>, Module Temperature 25°C, AM=1.5.

# THERMAL CHARACTERISTICS

NOCT	47°C ± 2°C
Temperature Coefficient of Isc	+0.046%/K
Temperature Coefficient of Voc	-0.303%/K
Temperature Coefficient of Pmax	-0.41%/K

# **OPERATING CONDITIONS**

Max. System Voltage	1000V <sub>DC</sub>
Max. Series Fuse Rating	15A
Limiting Reverse Current	15A
Operating Temperature Range	-40 ~ 85°C
Max. Snow Load, Front *	5400Pa
Max. Wind Load, Back *	2400Pa
Max. Hailstone Impact (diameter/velocity)	25mm / 23m/s

# **CONSTRUCTION MATERIALS**

Front and Back Cover (material/thickness)	Low-iron tempered glass/3.2mm
Cell (quantity/material/dimensions/ number of busbar )	72/polycrystalline silicon/ 156mmx156mm/3 or 4
Frame	Anodized aluminum alloy
Junction Box (protection degree)	≥IP67
Cable (length/cross-sectional area)	90cm±5/4mm²
Plug connector (type/protection degree)	Mc4 compatible/IP67

- Due to continuous innovation, research and product improvement, the specifications in this product information sheet are subject to change without prior notice. The specifications may deviate slightly and are not guaranteed.
- The data do not refer to a single module and they are not part of the offer, they only serve for comparison to different module types.



Warning: Read the Installation and User manual in its entirety before handling, installing, and operating Thaisun Solar modules.

Our Partners:			

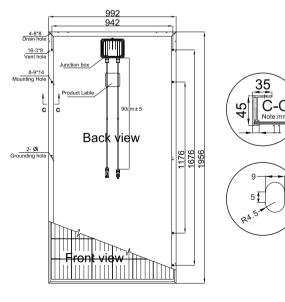
# GENERAL CHARACTERISTICS

Dimensions (L/W/H)	1956mm/992mm/45mm		
Diffierisions (L/ W/ H)	77in/39in/1.77in		
Weight	23kg/50.7lbs		

# PACKAGING SPECIFICATIONS

Noveles of Maddales Day Dellah	27		
Number of Modules Per Pallet	23		
Load Capacity	230 pcs/20'GP		
Load Capacity	600 pcs/40′HQ		
40'HQ Packaging Pallets	2000mm/1130mm/1130mm		
Dimensions (L/W/H)	78.7in/44.5in/44.5in		
Pallet Weight	600kg/1322.77lbs		

# Unit: mm



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<sup>\*</sup>NOCT: Irradiance 800W/m², ambient Temperature 20°C, wind speed 1m/s.