

Solar Module

Model No:
RES-SP320P



RAISE Energy high-performance PV Products convert sunlight into electricity for residential, commercial and utility-scale power generation. The factory is based in 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, we offer advanced, reliable, safer and cost-effective range of the PV products which are engineered to meet the world's growing energy demands.

HIGH PERFORMANCE AND EXCELLENT RELIABILITY



High Light Transmission Rate

We adopt 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 Test

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

World-class Quality

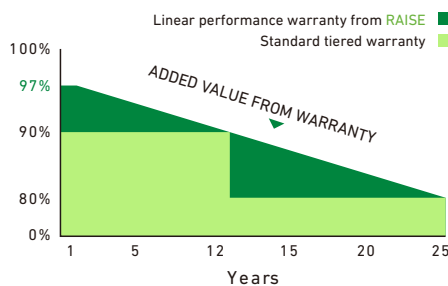
Fully-automated production lines and seamless monitoring of the process and material ensure the quality that the company sets as its benchmark for its sites worldwide.

Plus-Sorting

Plus-sorting guarantees highest solar module efficiency. **RAISE** 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



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Cell Polycrystalline Series

ELECTRICAL CHARACTERISTICS

Characteristics	RES-SP320P
Max.Power (Pmax)	320Wp
Optimum Operating Voltage (Vm)	39.03V
Optimum Operating Current (Im)	8.20A
Open-circuit Voltage (Voc)	47.50V
Short-circuit Current (Isc)	8.62A
Cell Efficiency	18.30%
Module Efficiency	16.50%

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

*NOCT: Irradiance 800W/m , ambient Temperature 20°C, wind speed 1m/s.

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

GENERAL CHARACTERISTICS

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

OPERATING CONDITIONS

Max. System Voltage	1000V _{DC}
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

PACKAGING SPECIFICATIONS

No. of Modules Per Pallet	23
Load Capacity	230 pcs/20'GP
	600 pcs/40'HQ
40'HQ Packaging Pallets Dimensions (L/W/H)	2000mm/ 1130mm/1130mm
	78.7in/44.5in/44.5in
Pallet Weight	600kg/1322.77lbs

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±5/4mm ²
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 Solar modules.

UNIT (mm)

