Preliminary

Vertex S+ G3

N-type i-TOPCon Ultra

DUAL GLASS MONOCRYSTALLINE MODULE



TSM-NEG9RP.25Z **460-480W**

480W MAXIMUM POWER OUTPUT

24.0% MAXIMUM EFFICIENCY

Premium full black aesthetic

- Uniform, all-black, full-screen high density interconnection for a seamless design with no cell gaps

High power & efficiency

- Up to 480 W and 24% efficiency with low-voltage, high-current architecture for more power on limited roof space

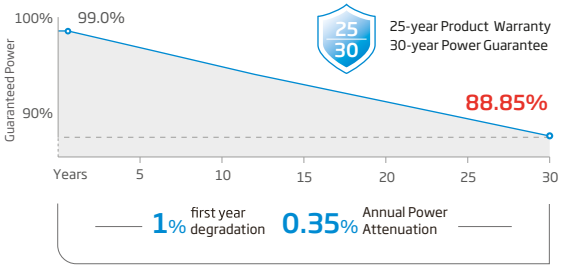
Optimised performance

- Lower temperature coefficient and strong low-irradiance performance maximises power generation on rooftops

Long-term value for residential homes

- Low annual degradation backed by up to 30 year power warranty and 25 year product warranty

Performance Warranty



* Please refer to product warranty for details

Comprehensive Products and System Certificates

ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO14064: Greenhouse Gases Emissions Verification
ISO45001: Occupational Health and Safety Management System

*For ground-mounted installation, please consult Trinasolar sales team.

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
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Version number: TSM_EN_2026_PA2

Trinasolar

Vertex S+ G3

N-type i-TOPCon Ultra DUAL GLASS MONOCRYSTALLINE MODULE

ELECTRICAL DATA (STC)

Peak Power Watts-PMAX(Wp)*	460	465	470	475	480
Power Selection (W)**			0 ~ +5		
Maximum Power Voltage-VMPP (V)	30.90	31.20	31.50	31.80	32.00
Maximum Power Current-IMPP (A)	14.89	14.91	14.93	14.96	15.00
Open Circuit Voltage-VOC (V)	36.90	37.10	37.30	37.50	37.70
Short Circuit Current-ISC (A)	15.93	15.96	15.99	16.02	16.05
Module Efficiency η m (%)	23.0	23.3	23.5	23.8	24.0

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%. **Power selection up to: +3%.

ELECTRICAL DATA (NOCT)

Peak Power Watts-PMAX(Wp)	349	353	357	361	364
Maximum Power Voltage-VMPP (V)	29.00	29.20	29.40	29.60	29.80
Maximum Power Current-IMPP (A)	12.06	12.11	12.16	12.20	12.23
Open Circuit Voltage-VOC (V)	35.00	35.20	35.40	35.60	35.80
Short Circuit Current-ISC (A)	12.80	12.83	12.85	12.88	12.90

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of PMAX	- 0.26% /°C
Temperature Coefficient of VOC	- 0.24% /°C
Temperature Coefficient of ISC	0.04% /°C

Due to different testing methods, the actual performances might differ from the declared specifications.

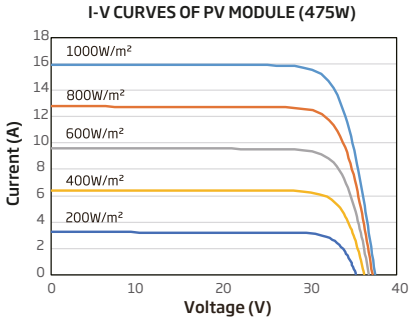
APPLICATION CONDITIONS

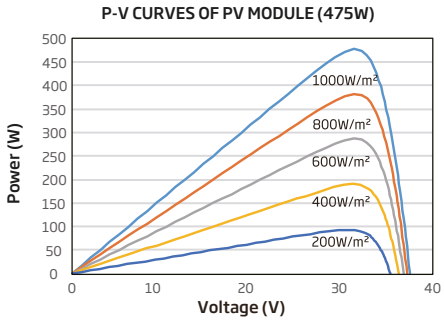
Operating Temperature	-40~+70°C
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	30A

*PV module 98th percentile operating temperature: 70°C

CURVES OF PV MODULE

Preliminary

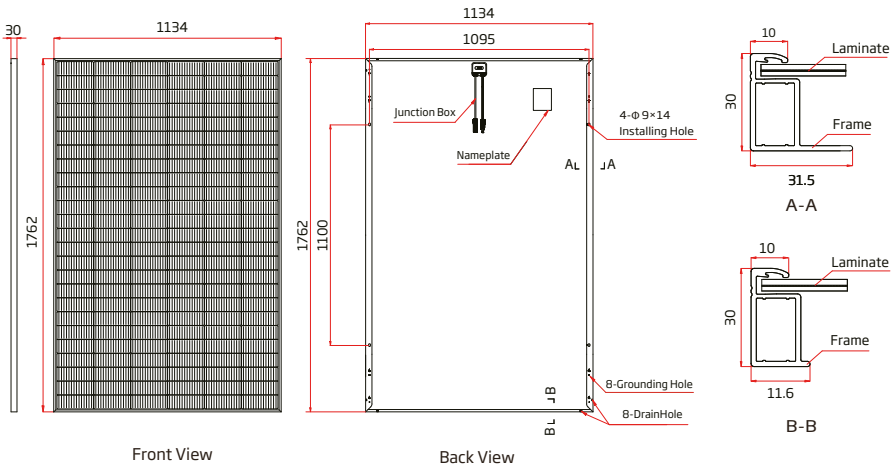




MECHANICAL DATA

Solar Cells	N-type i-TOPCon Monocrystalline
No. of cells	150 cells
Module Dimensions	1762×1134×30 mm (69.37×44.65×1.18 inches)
Weight	21.1 kg (46.52lb)
Front Glass	1.6mm (0.06inches), AR Coating Heat Strengthened Glass
Back Glass	1.6mm (0.06inches), Heat Strengthened Glass
Frame	30mm(1.18 inches) Anodized Aluminium Alloy, Black
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 6.0mm² (0.009 inches²) Landscape :1100/1100 mm(43.31/43.31 inches) Length can be customized
Connector	TS4 Plus / TS4 / MC4 EVO2*
Packaging	Modules per box: 36 pieces Modules per 40' container: 936pieces

*The connector names listed are general names; specific types are subject to the certification documents.



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