# Vertex S+ G3

# N-type i-TOPCon Ultra

## DUAL GLASS MONOCRYSTALLINE MODULE

TSM-NEG9RP.28Z **465-485W**

**485W** / MAXIMUM POWER OUTPUT

**24.3%** / MAXIMUM EFFICIENCY

### Exceptional power & efficiency

- Up to 485 W output and 24.3% efficiency, powered by advanced N type i-TOPCon Ultra cell technology

### Maximised system value for C&I systems

- Low-voltage, high-current architecture for maximum string lengths, simplifying system design and reducing BOS costs

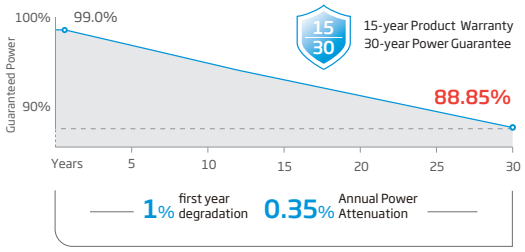
### Long-term value with flexible deployment

- Low annual degradation backed by up to 30 year power warranty and 25 year product warranty
- Mechanical performance up to 5400 Pa positive load and 3600 Pa negative load

### Improved appearance & seamless frontside design

- No cell gaps for improved aesthetics, for diverse installations and flexible system deployment for both C&I and residential applications

### Performance Warranty




* Please refer to product warranty for details

### Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IEC62716
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.
© 2026 Trina Solar Co.,Ltd. All rights reserved. Specifications included in this datasheet are subject to change without notice.
The right of final interpretation belongs to Trina Solar Co.,Ltd

Version number: TSM_EN_2026_B

Trinasolar

# Vertex S+ G3

N-type i-TOPCon Ultra DUAL GLASS MONOCRYSTALLINE MODULE

## ELECTRICAL DATA (STC)

| | | | | | |
|---|---|---|---|---|---|
| Peak Power Watts-PMAX(Wp)* | 465 | 470 | 475 | 480 | 485 |
| Power Selection (W)** | | | 0 ~ +5 | | |
| Maximum Power Voltage-VMPP (V) | 31.20 | 31.50 | 31.80 | 32.00 | 32.30 |
| Maximum Power Current-IMPP (A) | 14.91 | 14.93 | 14.96 | 15.00 | 15.04 |
| Open Circuit Voltage-VOC (V) | 37.10 | 37.30 | 37.40 | 37.70 | 37.90 |
| Short Circuit Current-ISC (A) | 15.96 | 15.99 | 16.02 | 16.05 | 16.08 |
| Module Efficiency ηm (%) | 23.3 | 23.5 | 23.8 | 24.0 | 24.3 |

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) | 353 | 357 | 361 | 364 | 368 |
| Maximum Power Voltage-VMPP (V) | 29.20 | 29.40 | 29.60 | 29.80 | 30.00 |
| Maximum Power Current-IMPP (A) | 12.11 | 12.16 | 12.20 | 12.23 | 12.27 |
| Open Circuit Voltage-VOC (V) | 35.20 | 35.40 | 35.60 | 35.80 | 36.00 |
| Short Circuit Current-ISC (A) | 12.83 | 12.85 | 12.88 | 12.90 | 12.93 |

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

## TEMPERATURE RATINGS

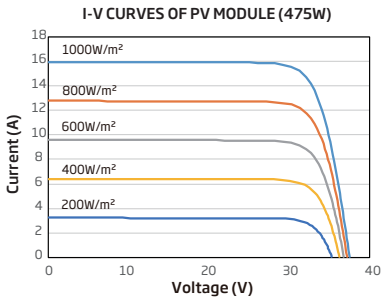
| | |
|---|---|
| NOCT (Nominal Operating Cell Temperature) | 43℃ (±2℃) |
| Temperature Coefficient of PMAX | - 0.26% /℃ |
| Temperature Coefficient of VOC | - 0.24% /℃ |
| Temperature Coefficient of ISC | 0.04% /℃ |

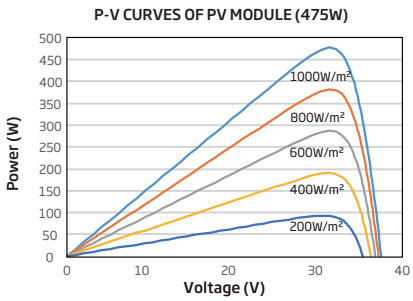
Due to different testing methods, the actual performances might differ from the declared specifications.

## APPLICATION CONDITIONS

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

## CURVES OF PV MODULE

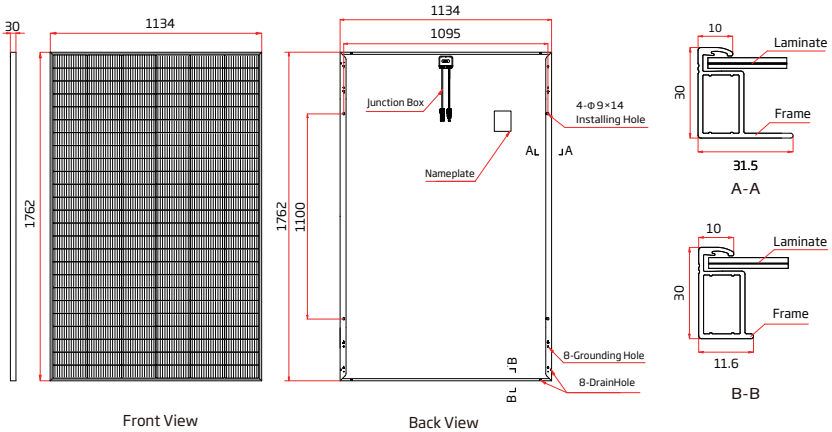



## MECHANICAL DATA

| | |
|---|---|
| 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 | 21.7 kg (47.84lb) |
| Front Glass | 1.6 mm (0.06 inches) AR Coating Heat Strengthened Glass |
| Back Glass | 1.6 mm (0.06 inches), 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: 37 pieces Modules per 40' container: 962pieces |

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




CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
© 2026 Trina Solar Co.,Ltd. All rights reserved. Specifications included in this datasheet are subject to change without notice.
The right of final interpretation belongs to Trina Solar Co.,Ltd

Version number: TSM_EN_2026_B

www.trinasolar.com

Trinasolar