Vertex S
BACKSHEET MONOCRYSTALLINE MODULE

405W+
MAXIMUM POWER OUTPUT

0~+5W
POSITIVE POWER TOLERANCE

21.1%
MAXIMUM EFFICIENCY

Small in size, big on power
- Small form factor. Generate a huge amount of energy even in limited space. Up to 405W, 21.1% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection
- Reduce installation cost with higher power bin and efficiency
- Boost performance in warm weather with lower temperature coefficient (-0.34%) and operating temperature

Universal solution for residential and C&I rooftops
- Designed for compatibility with existing mainstream optimizers, inverters and mounting systems
- Perfect size and low weight. Easy for handling. Economy for transporting
- Diverse installation solutions. Flexible for system deployment

High Reliability
- 25 year performance warranty with lowest degradation;
- Ensured PID resistance through cell process and module material control
- Mechanical performance up to 6000 Pa positive load and 4000 Pa negative load

Trina Solar’s Backsheet Performance Warranty

Guaranteed Power

Years
100%
98.0%
90%
84.8%

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
DIMENSIONS OF PV MODULE (mm)

**ELECTRICAL DATA (STC)**
- Peak Power Watts-PMAX (Wp)*: 390, 395, 400, 405
- Power Tolerance-PMAX (W): 0 ~ ±5
- Maximum Power Voltage-VMP (V): 33.8, 34.0, 34.2, 34.4
- Maximum Power Current-IMP (A): 11.54, 11.62, 11.70, 11.77
- Open Circuit Voltage-VOC (V): 40.8, 41.0, 41.2, 41.4
- Short Circuit Current-ISC (A): 12.14, 12.21, 12.28, 12.34
- Module Efficiency, η (m, %): 20.3, 20.5, 20.8, 21.1

**ELECTRICAL DATA (NOCT)**
- Open Circuit Voltage-VOC (V): 38.4, 38.6, 38.8, 38.9
- Short Circuit Current-ISC (A): 9.78, 9.84, 9.90, 9.95

**MECHANICAL DATA**
- Solar Cells: Monocrystalline
- No. of cells: 120 cells
- Module Dimensions: 1754 x 1096 x 30 mm (69.06 x 43.15 x 1.18 inches)
- Weight: 21.0 kg (46.3 lb)
- Glass: 3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
- Encapsulant material: EVA/POE
- Backsheet: White
- Frame: 30mm (1.18 inches) Anodized Aluminium Alloy
- J-Box: IP 68 rated
- Cables: Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: 280/280mm (11.02/11.02 inches)
- Landscape: 1100/1100 mm (43.31/43.31 inches)
- Connector: MC4 EVO2 / TS4*

**TEMPERATURE RATINGS**
- NOCT (Nominal Operating Cell Temperature): 43°C (±2°C)
- Temperature Coefficient of PMAX: -0.34%/°C
- Temperature Coefficient of VOC: -0.25%/°C
- Temperature Coefficient of ISC: 0.04%/°C

**WARRANTY**
- 12 year Product Workmanship Warranty
- 25 year Power Warranty
- 2% first year degradation
- 0.55% Annual Power Attenuation

**PACKAGE CONFIGURATION**
- Modules per box: 36 pieces
- Modules per 40' container: 936 pieces

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*Please refer to regional datasheet for specified connector.

**I-V CURVES OF PV MODULE (395 W)**

**P-V CURVES OF PV MODULE (395W)**

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