Vertex S
BACKSHEET MONOCRYSTALLINE MODULE

400W
MAXIMUM POWER OUTPUT

0~+5W
POSITIVE POWER TOLERANCE

20.8%
MAXIMUM EFFICIENCY

Outstanding Visual Appearance
• Designed with aesthetics in mind
• Excellent cell color control by dedicated cell blackening treatment and machine selection.
• Thinner wires that appear all black at a distance

Small in size, big on power
• Small form factor. Generate a huge amount of energy even in limited space.
• Up to 400W, 20.8% 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 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 product warranty
• 25 year performance warranty with lowest degradation
• Minimized micro-cracks with innovative non-destructive cutting technology
• 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

Trina standard

84.8%

ISO/IEC 61215/IEC 61701/IEC 61730/IEC 61701/UL 61730
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO 14064: Greenhouse Gases Emissions Verification
ISO 45001: Occupational Health and Safety Management System

Comprehensive Products and System Certificates

EU-28 WEEE
COMPLIANT
RECYCLABLE
PACKAGING
DIMENSIONS OF PV MODULE (mm)

Operational Temperature
-40~+85ºC

Maximum System Voltage
1500V DC (IEC)
1500V DC (UL)

Modules per box: 36 pieces
Modules per 40' container: 828 pieces

Monocrystalline 210mm PERC

Peak Power Watts-PPmax (Wp)*
380 385 390 395 400

Power Tolerance-PPmax (W)
0 ~ +5

Maximum Power Voltage-Vmp (V)
33.4 33.6 33.8 34.0 34.2

Maximum Power Current-Ipp (A)
11.38 11.46 11.54 11.62 11.70

Open Circuit Voltage-Voc (V)
40.4 40.6 40.8 41.0 41.2

Short Circuit Current-Isc (A)
12.00 12.07 12.14 12.21 12.28

Module Efficiency, η (%)
19.8 20.0 20.3 20.5 20.8

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

Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Length 1100/1100 mm (43.31/43.31 inches)

21.0 kg (46.3 lb)

3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass EVA/POE

30mm (1.18 inches) Anodized Aluminium Alloy

IP 68 rated

MC4 EVO2

120 cells

NOCT (Nominal Operating Cell Temperature)
25

Temperature Coefficient ofPmax
4.0%/°C (±2.0°C)

Temperature Coefficient of Voc
-0.34%/°C

Temperature Coefficient of Isc
-0.25%/°C

Temperature Coefficient ofη
0.04%/°C

25 year Product Workmanship Warranty
25 year Power Warranty
2% First Year Degradation
0.55% Annual Power Attenuation

[Please refer to product warranty for details]

ELECTRICAL DATA (STC)

ELECTRICAL DATA (NOCT)

MECHANICAL DATA

Solar Cells
Monocrystalline 210mm PERC

No. of cells
120 cells

Module Dimensions
1754×1096×30 mm (69.06×43.15×1.18 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
Black-White

Frame
30mm (1.18 inches) Anodized Aluminium Alloy

J-Box
IP 68 rated

Cables
Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Length 1100/1100 mm (43.31/43.31 inches)

Connector
MC4 EVO2

Fire Type
Type 1 or Type 2

20 year Product Workmanship Warranty
20 year Power Warranty
2% First Year Degradation
0.55% Annual Power Attenuation

[Please refer to product warranty for details]