THE DUOMAX twin
BIFACIAL DUAL GLASS 144 LAYOUT MODULE

144 LAYOUT MONOCRYSTALLINE MODULE

380-405W POWER OUTPUT RANGE

20.0% MAXIMUM EFFICIENCY

0~+5W POSITIVE POWER TOLERANCE

Founded in 1997, Trina Solar is the world’s leading total solution provider for solar energy. With local presence around the globe, Trina Solar is able to provide exceptional service to each customer in each market and deliver our innovative, reliable products with the backing of Trina as a strong, bankable brand. Trina Solar now distributes its PV products to over 100 countries all over the world. We are committed to building strategic, mutually beneficial collaborations with installers, developers, distributors and other partners in driving smart energy together.

Comprehensive Products and System Certificates
- IEC61215/IEC61730/IEC61701/UL1703
- ISO 9001: Quality Management System
- ISO14001: Environmental Management System
- ISO14064: Greenhouse Gases Emissions Verification
- OHSAS 18001: Occupation Health and Safety Management System

High power
- Up to 405W front power and 20.0% module efficiency with half-cut technology bringing more BOS savings
- Lower resistance of half-cut ensure high power

High reliability
- Ensured PID resistance through cell process and module material control
- Resistant to salt, acid and ammonia
- Proven to be reliable in high temperature and humidity areas
- Certified to fire class A
- Minimizes micro-crack and snail trails
- Mechanical performance: Up to 5400 Pa positive load and 2400 Pa negative load

High energy generation
- Up to 25% additional power gain from back side depending on the albedo
- Excellent IAM and low light performance validated by 3rd party with cell process and module material optimization
- Lower temp coefficient (-0.35%) and NMOT bring more energy leading to lower LCOE
- Better anti-shading performance and lower operating temperature

Easy to install
- Frame design makes module compatible with all racking and installation methods
- Easy to handle and install as normal framed module during transportation

Trina Solar’s DUOMAX Performance Warranty

From the 2nd year to the 30th year, the average annual power decline will be no more than 0.5%.
WARRANTY
(Please refer to product warranty for details)

12 year Product Workmanship Warranty
30 year Power Warranty

PACKAGING CONFIGURATION
Modules per box: 35 pieces
Modules per 40’ container: 770 pieces

MECHANICAL DATA
Solar Cells: Monocrystalline
Cell Orientation: 144 cells (6 × 24)
Module Dimensions: 2024 × 1002 × 30 mm (79.69 × 39.45 × 1.18 inches)
Weight: 26.0 kg (57.3 lb)
Front Glass: 2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material: POE/EVA
Back Glass: 2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)
Frame: 30 mm (1.18 inches) Anodized Aluminum Alloy
J-Box: IP 68 rated
Cables: Photovoltaic Technology Cable 4.0 mm² (0.006 inches²)
Connector: MC4 / TS4*

*Please refer to regional datasheet for specified connector.

ELECTRICAL DATA (STC)
Peak Power Watts-PMAX (Wp)*: 420, 440, 460, 480, 500
Power Output Tolerance-PMAX (W): ±3%
Maximum Power Voltage-VMPP (V): 40.7, 40.7, 40.7, 40.7, 40.7
Maximum Power Current-IMPP (A): 10.32, 10.81, 11.30, 11.80, 12.29
Open Circuit Voltage-Voc (V): 49.9, 50.0, 50.0, 50.0, 50.1
Short Circuit Current-Iscc (A): 10.91, 11.43, 11.95, 12.47, 12.99
Pmax gain: 5%, 10%, 15%, 20%, 25%

ELECTRICAL DATA (NMOT)
Maximum Power-PMAX (Wp): 289, 292, 296, 300, 304, 308
Maximum Power Voltage-VMPP (V): 38.1, 38.2, 38.3, 38.4, 38.6, 38.7
Maximum Power Current-IMPP (A): 7.58, 7.65, 7.73, 7.81, 7.88, 7.95
Open Circuit Voltage-Voc (V): 46.6, 46.8, 47.0, 47.1, 47.2, 47.4
Short Circuit Current-Iscc (A): 8.05, 8.13, 8.21, 8.29, 8.37, 8.45

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TEMPERATURE RATINGS
NMOT (Nominal Module Operating Temperature): 41°C (±3°C)
Temperature Coefficient of PMAX: -0.35%/°C
Temperature Coefficient of Voc: -0.25%/°C
Temperature Coefficient of Iscc: 0.04%/°C

MAXIMUM RATINGS
Operational Temperature: -40° to +85°C
Maximum System Voltage: 1500V DC (IEC)
Max Series Fuse Rating: 20A

WARRANTY
12 year Product Workmanship Warranty
30 year Power Warranty

(Please refer to product warranty for details)

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