

585W SINGLE-FACIAL MONOCRYSTALLINE PHOTOVOLTAIC MODULE WITH DOUBLE GLASS TSM-585-N

TRAMONTINA

PRODUCT FEATURES

Type N / Positive power tolerance: 0~+3% / Maximum module efficiency: 22.65%.

- **Suitable for onshore power plants and distributed generation projects.**
- **Superior Efficiency:** Advanced module technology delivers superior efficiency with a gallium-doped wafer, non-destructive cutting, and MBB half-cut design.
- **High Performance:** Excellent power generation with superior IAM (Incidence Angle Modifier) and low-light response. Low temperature ratings and a linear power decline of only 0.40%.
- **Long-Term Reliability:** Constructed with carefully selected, high-quality materials and advanced technology, ensuring durability and reliability in line with industry-leading standards.
- **Self-cleaning Coating:** Equipped with an ultra-hydrophilic self-cleaning coating, facilitating maintenance and preserving operational efficiency over time.

Full IEC system and product certification

IEC 61215 (2016), IEC 61730 (2016) ISO 9001: 2015: Quality management system.

ISO 14001: 2015: Environmental management system.

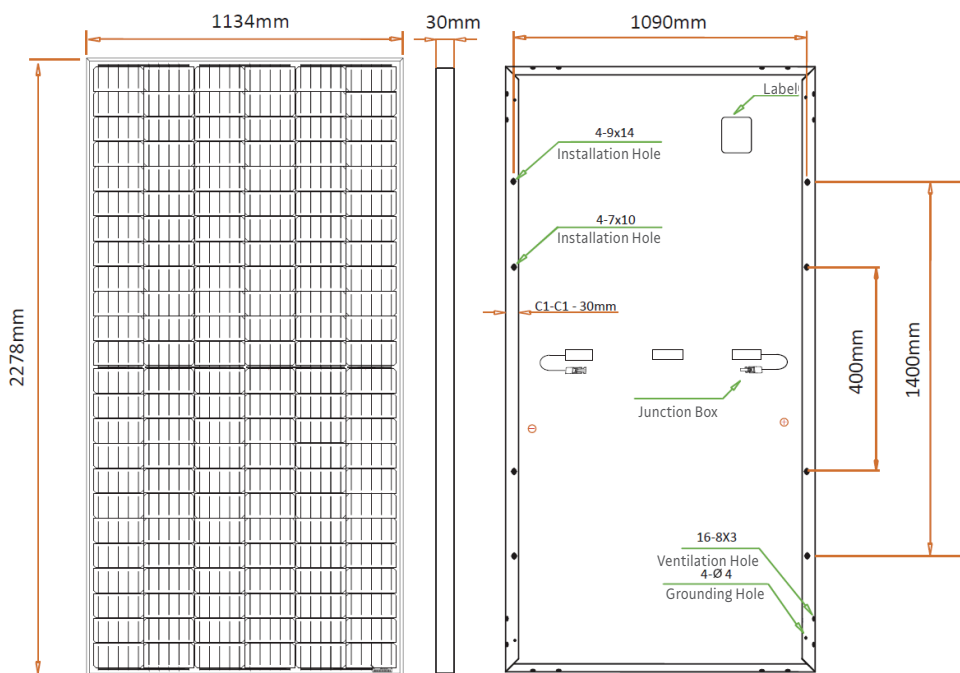
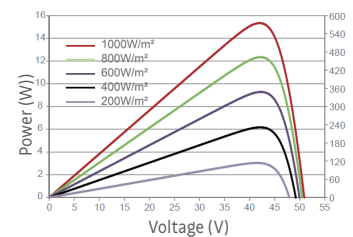
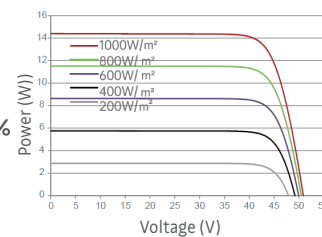
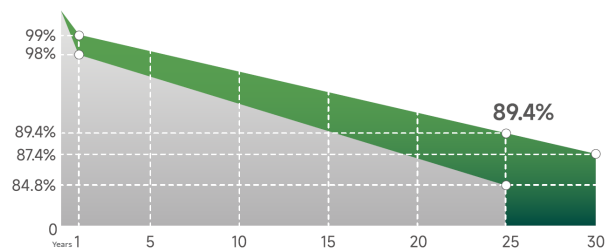
ISO 45001: 2018: Occupational health and safety management system.



WARRANTY

Product – 15 years

Linear Power Performance – 30 years



Drawing for reference only

STC ELECTRICAL FEATURES

Maximum Power (Pmax)	585 W
Power Supply Tolerance	0~+5 W
Module Efficiency	22.65%
Maximum Power Current (Imp)	13.44 A
Voltage at Maximum Power (Vmp)	43.55 V
Short-Circuit Current (Isc)	14.07 A
Open-Circuit Voltage (Voc)	52.68 V

Values according to standard STC test conditions (AM1.5, irradiance 1,000 W/m², cell temperature 25 °C)

NOCT ELECTRICAL CHARACTERISTICS

Maximum Power (Pmax)	444 W
Maximum Power Current (Imp)	10.80 A
Voltage at Maximum Power (Vmp)	41.11 V
Short-Circuit Current (Isc)	11.43 A
Open-Circuit Voltage (Voc)	49.99 V

NOCT, irradiance 800 W/m², AM1.5, ambient temperature 20 °C, wind speed 1 m/s

MECHANICAL FEATURES

Cell Type	Mono Type N, 182 x 182 (+1) mm, 144 (6x24) Half-Cut cells
Glass	2 mm + 2 mm, high transmission, low iron, tempered glass
Structure	Anodized Aluminum Alloy
Junction Box	IP68 rated
Dimension	2278 x 1134 x 30 mm
Output Cable	4 mm ² (EU), 12.00 mm
Weight	31.7 kg
Connector	MC4 compatible

TEMPERATURE CHARACTERISTICS

Temperature Coefficient of Voc	-0.25%/°C
Isc Temperature Coefficient	+0.045%/°C
Pmax Temperature Coefficient	-0.29%/°C
Nominal Operating Cell Temperature (NOCT)	45 °C + 2 °C

PACKAGING INFORMATION

Container	40' HQ
Pallets per Container	20
Pieces per Container	740

MAXIMUM RATINGS

Operating Temperature	-40 °C ~ +85 °C
Maximum System Voltage	1500 V
Maximum Series Fuse Rating	25 A