

Shingled Technology
Innovative structure, low-temperature adhesive bonding, high-density layout.

Beautiful Appearance
Solderless interconnection, uniform appearance, displaying extreme beauty.

TERRA 5K

SHINGLED MONOFACIAL MODULE

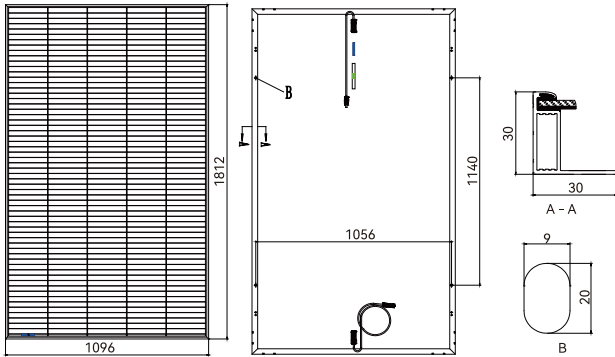
TH405~430PMB7 44SC

www.tw-solar.com



Scan the QR code to get more information

DRAWINGS (Unit: mm)



ELECTRICAL CHARACTERISTICS (STC)

Module Type: TH***PMB7-44SC	430	425	420	415	410	405
Maximum Power: Pmax [W]	430	425	420	415	410	405
Open Circuit Voltage: Voc [V]	41.8	41.7	41.6	41.5	41.4	41.3
Short Circuit Current: Isc [A]	13.05	13.03	12.92	12.80	12.65	12.53
Voltage at Maximum Power: Vmp [V]	34.7	34.6	34.5	34.4	34.4	34.3
Current at Maximum Power: Imp [A]	12.40	12.30	12.19	12.08	11.93	11.82
Module Efficiency: η [%]	21.7	21.4	21.1	20.9	20.6	20.4

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum Power: Pmax [W]	324	320	316	312	309	305
Open Circuit Voltage: Voc [V]	39.8	39.8	39.7	39.6	39.5	39.4
Short Circuit Current: Isc [A]	10.51	10.50	10.41	10.31	10.19	10.09
Voltage at Maximum Power: Vmp [V]	33.1	33.0	32.9	32.8	32.8	32.7
Current at Maximum Power: Imp [A]	9.79	9.70	9.62	9.53	9.41	9.33

- Standard Test Conditions [STC]: irradiance 1000 W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
- Nominal Module Operating Temperature (NMOT): Irradiance 800W/m²; wind speed 1m/s, ambient temperature 20°C.
- Tolerance of Pm: 0~+5W. Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

TEMPERATURE PARAMETERS

NMOT	42.30 °C (±2°C)
Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Pm	-0.34%/°C

MAXIMUM RATINGS

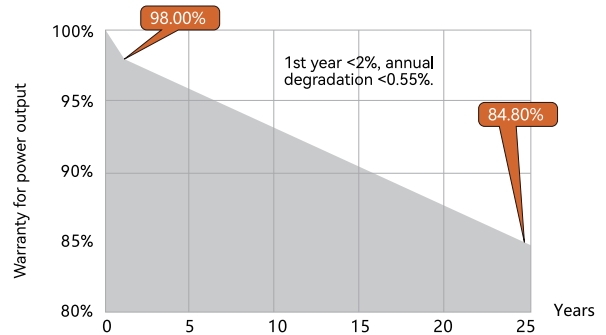
Maximum System Voltage [V]	DC1500 (IEC)
Series Fuse Rating [A]	25
Maximum Surface Load Capacity [Pa]	Front 5400 / Back 2400
Temperature Range [°C]	-40 ~ + 85
Withstanding Hail	Maximum diameter of 25mm with impact speed of 23m/s

MECHANICAL PARAMETERS

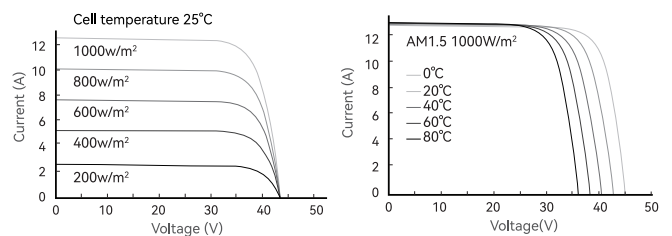
Dimensions	1812 × 1096 × 30mm
Weight	20.8kg±3%
Front glass	tempered glass, 3.2mm
Frame	Anodized aluminum profile
Cells	Mono-crystalline solar cell
Cell Orientation	305 (61 × 5)
Junction Box	IP68, two diodes; Connector : Staubil EVO2
Cable	4mm ² ;+300mm/-1000mm(Vertical), +220mm/-180mm(Horizontal)
Packaging	924pcs (24pallets: 36pcs/pallet +2 pallets: 30pcs/pallet)

WARRANTY

Linear Power Output Warranty



I-V CURVE



CERTIFICATIONS

Quality Management System and Product Certification

- IEC61215/61730、IEC62804(PID)、IEC61701(Salt)、IEC62716 (Ammonia)、IEC60068-2-68(Sand)
- ISO 9001:2015 / quality management system
- ISO 14001:2015 / environmental management system
- ISO 45001:2018 / occupation health safety management system
- ISO 50001:2011 / energy management system
- IEC TS 62941—2016 / PV industry quality management system

