

Shingled monofacial module

TH535~555PMB6 58SC



Features of Module



Shingling Technology

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



Beautiful Appearance

Uniform layout, better aesthetic.



Superior Safety and Reliability

No hidden welding crack, low operating temperature, high pressure resistance.



Low System Cost

High module efficiency, reducing system cost.



Low Hot Spot Risk

Parallel circuit design reduces shading loss.



Low Shading Loss

Full parallel arrangement brings high effective power generation hours.



Eco-friendly

Adhering to green philosophy, no fluorine and low lead.

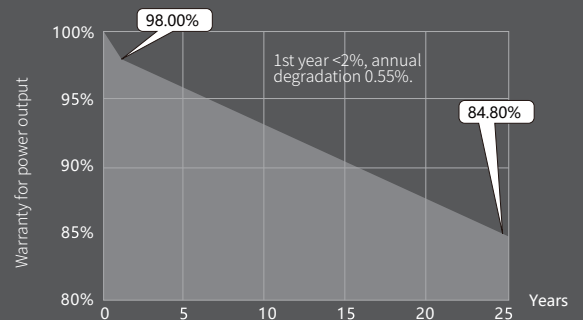
Linear Power Output Warranty

15

15-year warranty for materials.

25

25-year warranty for linear power output.



Quality Management System and Product Certification

IEC61215/61730

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



Electrical Characteristics (STC)

Module Type: TH***PMB6-58SC	555	550	545	540	535
Maximum Power - Pm (W)	555	550	545	540	535
Open Circuit Voltage - Voc (V)	47.2	47.1	47.0	46.9	46.8
Short Circuit Current-Isc [A]	15.07	14.97	14.86	14.76	14.65
Maximum Power Voltage-Vm [V]	39.2	39.1	39.0	38.9	38.8
Maximum Power Current-Im [A]	14.17	14.07	13.97	13.87	13.77
Module Efficiency-η [%]	21.2	21.0	20.9	20.7	20.5

Electrical Characteristics at NMOT

Maximum Power-Pm [W]	418	414	410	407	403
Open Circuit Voltage-Voc [V]	45.0	44.9	44.8	44.7	44.6
Short Circuit Current-Isc [A]	12.14	12.06	11.97	11.89	11.80
Maximum Power Voltage-Vm [V]	37.3	37.3	37.2	37.1	37.0
Maximum Power Current-Im [A]	11.19	11.11	11.03	10.96	10.88

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

Mechanical Parameters

Dimensions	2384 × 1096 × 35mm
Weight	28.3kg
Front glass	tempered glass, 3.2mm
Frame	Anodized aluminum profile
Cells	Mono-crystalline solar cell
Cell Orientation	345 (69°5)
Junction Box	IP68, three diodes
Cable	4mm ² , +500mm/-1100(Vertical), +220mm/-180mm(Horizontal)
Packaging	31pcs/box; 620pcs/40'container; 868pcs/flat car

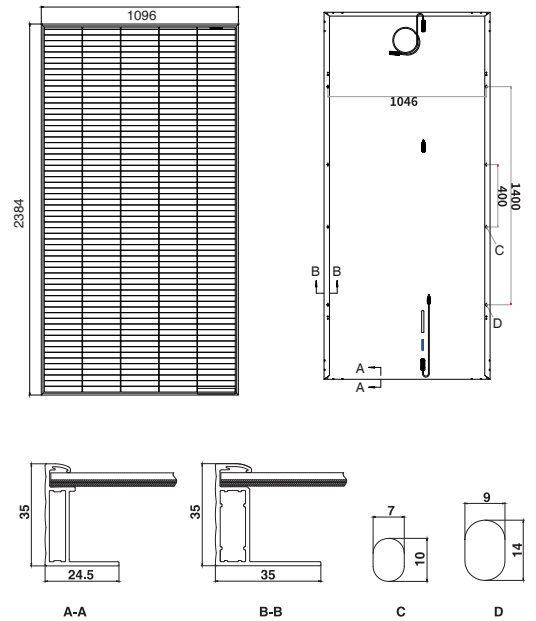
Temperature Parameters

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
Fire class rating	C

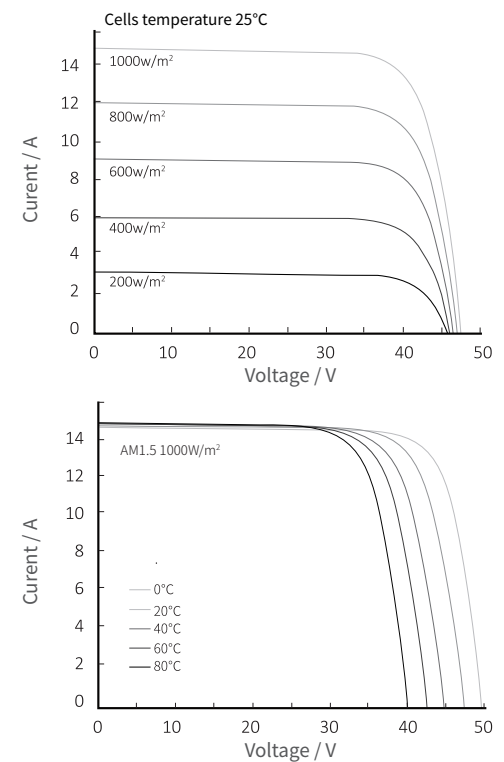
Maximum Ratings

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 25 mm with impact speed of 23 m/s

Drawings



I-V Curve



Declaration:
 With the technical progress and product updates, there exists a deviation between the technical parameter of the TW Solar's future products and the technical parameter in this specification. The TW Solar reserves the right to adjust the technical parameter at any time without notifying the customers, TW Solar reserves the final right of interpretation.

Cable Type

Zhejiang Renhe Photovoltaic Technology Co., Ltd.

Zhejiang Zhonghuan Sunter PV Technology Co., Ltd.

Zhejiang Jiaming Tianheyuan Photovoltaics Technology Co., Ltd

Ningbo Kibor Wire&Cable Co., Ltd.

Wuxi Xinhongye Wire&Cable Co., Ltd.

Trina Solar Co., Ltd.

Changshu JHOSIN Communication Technology Co., Ltd.

SUZHOU YONGHAO CABLE CO LTD

QC Solar (Suzhou) Corporation

Suzhou Baohing Electric Wire & Cable Manufacturer Co., Ltd.

Changshu JHOSIN Communication Technology Co., Ltd.

Jiangsu Tongling Electric Co., Ltd.

Zhejiang Chuangyuan Photovoltaic Technology Co.,Ltd.

Tongwei Solar (Hefei) Co., Ltd.

Connector type

05-8, Zhejiang Renhe Photovoltaic Technology Co., Ltd.

PV-KST4-EVO2/xy_UR , PV-KBT4-EVO2/xy_UR, Stäubli Electrical Connectors AG

PV-KST4-EVO2A/xy, PV-KBT4 EVO2A/xy, Stäubli Electrical Connectors AG

UTXCFabcd, UTXCMabcd, UTXCFabcde, UTXCMabcde, Amphenol Technology (Shenzhen) Co., Ltd.

RHC2xyzu, Zhejiang Renhe Photovoltaic Technology Co., Ltd.

PV-JM608, Zhejiang Jiaming Tianheyuan Photovoltaics Technology Co., Ltd.

PV-JM601A, Zhejiang Jiaming Tianheyuan Photovoltaics Technology Co., Ltd.

H4CFC4DMS; H4CMC4DMS, Amphenol Technology (Shenzhen) Co., Ltd.

PV4-S1yx, Tyco Electronics (Shanghai) Co., Ltd.

HQC4, Hanwha Q CELLS (Qidong) Co., Ltd

PV-CO02-xy, SUZHOU UKT NEW ENERGY TECHNOLOGY CO., LTD

PV-JK03M-2, Jiangxi Jinko PV Material Co., Ltd.

TS4-xz, Trina Solar Co., Ltd.

TS4, Trina Solar Co., Ltd.

Z4S-abcd, Zerun Co., LTD.

H4Cabcdef, Amphenol Technology (Shenzhen) Co., Ltd.

PV-CF-C-2, 5-4-SETxxxx, PV-CM-C-2, 5-4-SETxxxx, Phoenix Contact GmbH & Co.KG

PV-ZH202B, Zhejiang Zhonghuan Sunter PV Technology Co., Ltd.

QC4.10-cds, QC Solar (Suzhou) Corporation

PV-MH5, Ningbo Minghe New Energy Technology Co., Ltd.

TL-CABLE01S-F, TL-CABLE01S, Jiangsu Tongling Electric Co., Ltd.

BIGabc4efgh, Trina Solar Co., Ltd.

PV-KST4-EVO2A/xy_UR; PV-KBT4-EVO2A/xy_UR, Stäubli Electrical Connectors AG

Connector type

PV-XT101.1, Suzhou Xietong Photovoltaic Technology Co., Ltd.

PV-JK03M2/xy, Jiangxi Jinko PV Material Co., Ltd.

TW-PVCON-01, Tongwei Solar (Hefei) Co., Ltd.

PV-CY03L, Zhejiang Chuangyuan Photovoltaic Technology Co., Ltd.

PV-CY20L, Zhejiang Chuangyuan Photovoltaic Technology Co., Ltd.