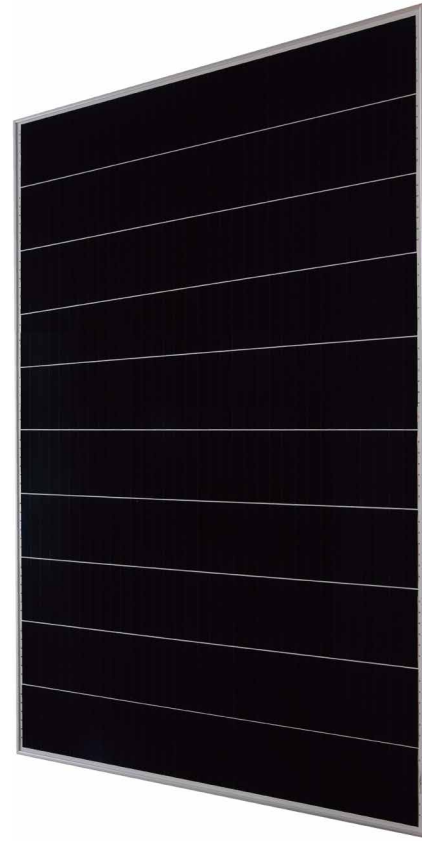


Specification of THxxxPM5-60SB

Monocrystalline PERC shingled solar module



KEY features



Shingled Technology
Shingled Technology provides ultra -high efficiency
Maximizes installation capacity in limited space.



Beautiful appearance
Best choice of C&I, residential applications.



Enhanced weather resistance
Avoid the microcrack of cells caused by traditional welding process; Modules are flexible and compressive resistance; Suitable for all harsh environments.



Reduce system cost
High module efficiency reduces floor space effectively, BOS, transportation and maintenance costs



Strong compatibility
Can be equipped with a variety of mainstream high efficient (PERC, SHJ) cells.



Anti-PID and low LID
To ensure higher actual yield during lifetime.

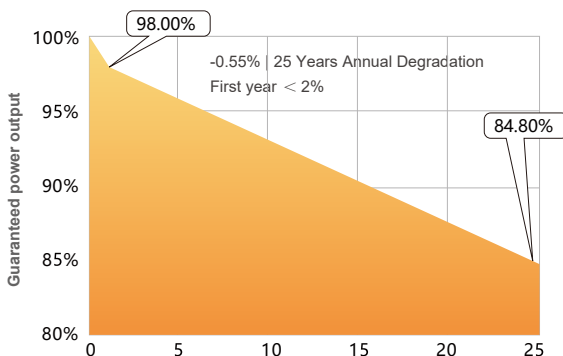
15
year

material process warranty

25
year

linear power output warranty

Warranty



Complete system and product certifications

IEC 61215/61730、IEC61701(Salt)、IEC62716(Ammonia)、

ISO 9001:2015 / Quality management System

ISO 14001:2015 / Environmental management System

ISO 45001:2018 / Occupational health and safety Management System

ISO 50001:2011 / Energy management Systems

IEC TS 62941-2016 / Photovoltaic industry Quality management System



Electrical Characteristics at Standard Test Conditions(STC)

Module Type:TH *** PM5-60SB	410	405	400	395	390
Maximum Power-Pm [W]	410	405	400	395	390
Open Circuit Voltage-Voc [V]	46.6	46.5	46.4	46.3	46.3
Short Circuit Current-Isc [A]	11.07	11.02	10.97	10.92	10.87
Maximum Power Voltage-Vm [V]	38.8	38.7	38.6	38.5	38.5
Maximum Power Current-Im [A]	10.57	10.47	10.36	10.26	10.13
Module Efficiency-η [%]	20.9	20.7	20.4	20.2	19.9

Electrical Characteristics at NMOT

Maximum Power-Pm [W]	309	305	301	297	294
Open Circuit Voltage-Voc [V]	44.4	44.3	44.2	44.1	44.1
Short Circuit Current-Isc [A]	8.93	8.89	8.85	8.81	8.77
Maximum Power Voltage-Vm [V]	37.0	36.9	36.8	36.7	36.7
Maximum Power Current-Im [A]	8.35	8.27	8.18	8.10	8.00

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%.

Temperature Characteristics

NMOT	42.3°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]	DC 1500 (IEC); DC 1000(UL)
Series Fuse Rating [A]	20
Maximum Surface Load Capacity [Pa]	5400
Temperature Range [°C]	- 40~+ 85
Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 m·s ⁻¹

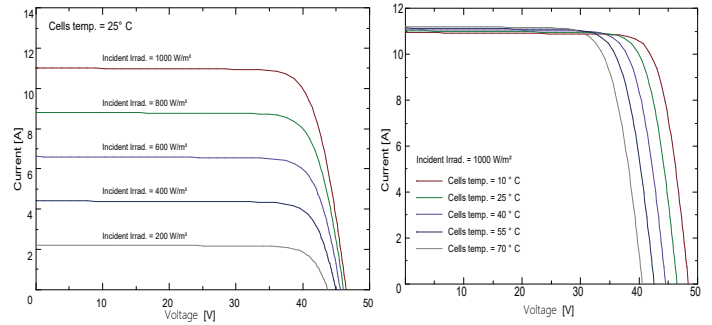
Package

Size	1719×1140×35mm
Number of panels per pallet	31
Number of pallets per 40'GP container	26
Number of modules per container	806

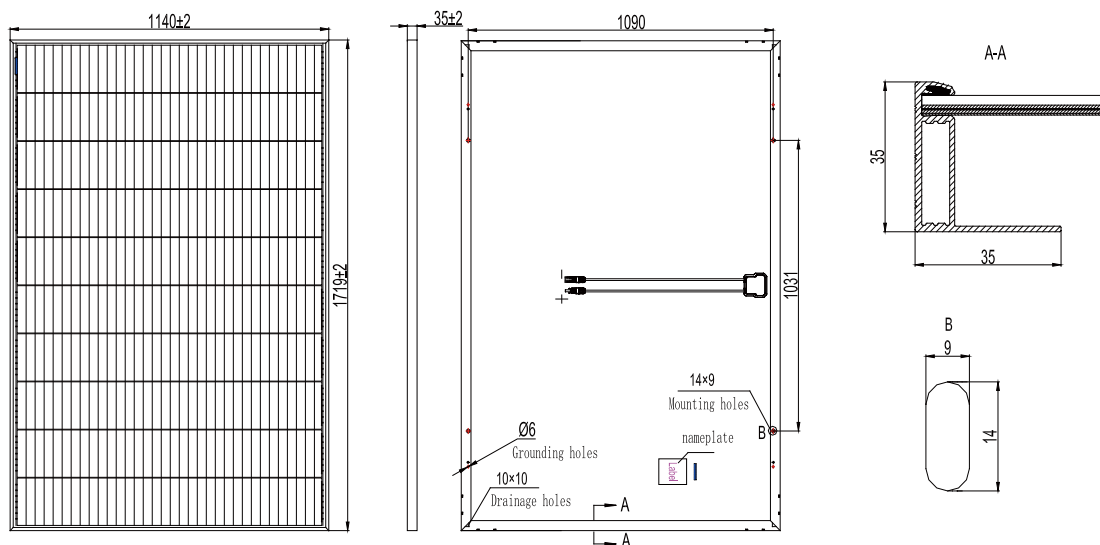
Mechanical Characteristics

Dimensions	1719×1140×35 mm (L×W×H)
Weight	22kg
Front Glass	AR coating tempered glass, 3.2mm
Encapsulation	EVA
Cells	166x166mm PERC solar cells
Back Sheet	high weatherability backsheet
Frame	Anodized aluminum profile
Junction Box	IP67, TUV&UL
Cable	Length 1000mm, 1×4mm ²
Connector	Compatible with MC4

I-V curve



Drawing



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.