

**PERC MONOCRYSTALLINE
44PMSHFB**

305_{cell}



SHINGLED MONOFACIAL MODULE
DARK SERIES



black frame



High Conversion Efficiency

High panel efficiency to guarantee high power output.



Self-Cleaning and Anti-Reflection Glass

Coating glass for self-cleaning reduces surface dust.

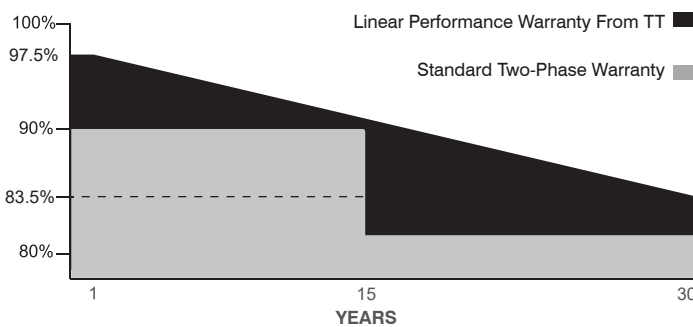


Outstanding Low Irradiation Glass

Outstanding panel performance even in weak light conditions.



Easy Installation



✓ 30 Years Performance Warranty ✓ 15 Years Product Warranty



IEC 61215, IEC 61730-1, IEC 61730-2
IEC 62804 PID (POTENTIAL INDUCED DEGRADATION)
IEC 61701 SALZNEBELKORROSION
IEC 62716 AMMONIAKKORROSION
ISO 9001:2015, ISO 14001:2015, ISO 45001:2018



44PMSHFB

Peak Power (Pmax)
Module Efficiency
Maximum Power Voltage (Vmp)
Maximum Power Current (Imp)
Open Circuit Voltage (Voc)
Short Circuit Current (Isc)
Power Tolerance
Maximum System Voltage
Operating Temperature
Protection Class
Maximum Series Fuse Rating

TT400 44PMSHFB	TT405 44PMSHFB	TT410 44PMSHFB	TT415 44PMSHFB	TT420 44PMSHFB	TT425 44PMSHFB
400Wp	405Wp	410Wp	415Wp	420 Wp	425 Wp
20.10	20.40	20.60	20.90	21.10	21.40
34.20	34.30	34.40	34.40	34.50	34.60
11.71	11.82	11.93	12.08	12.19	12.30
41.20	41.30	41.40	41.50	41.60	41.70
12.41	12.53	12.65	12.80	12.92	13.03
0~+5W					
1500V DC					
-40 ~ +85°C					
Class II					
25A					
305 (61x5)					
20.8±0.3					
1812x1096x30					
2400/5400					
IP68					
1300					

MECHANICAL SPECIFICATION

Cells per Module (pcs)
Weight (kg)
Panel Dimensions (mm)
Max. Wind/Snow Load (Pa)
Junction Box
Junction Box Cable Length (mm)

TEMPERATURE CHARACTERISTICS

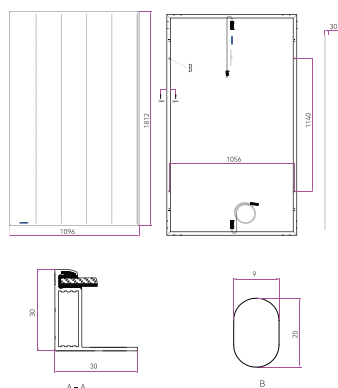
Temp. Coeff. of (Isc)	0.040%/°C
Temp. Coeff. of (Voc)	-0.270%/°C
Temp. Coeff. of (Pmax)	-0.340%/°C

PACKING CONFIGURATION

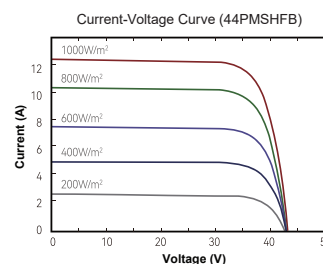
Container 40'

Pieces per Pallet	36
Pieces per Container	1296
Pallets per Container	924

PHYSICAL CHARACTERISTICS



ELECTRICAL CHARACTERISTICS



* The specifications are obtained under the standard test conditions: 1000W/m2 solar irradiance, 1.5 Air Mass and cell temperature of 25°C. Measurement uncertainty for all panels is 6%. The actual transactions will be subject to the contracts. These parameters are for reference only and it is not a part of the contracts. The technical specifications in this document may vary. For more information, refer to the "Installation Manual".

* For roof, facades and installations on similar surfaces, solar panels should be mounted over a fire-resistant covering suitable for this application, with adequate ventilation between the back of the solar panels and the mounting surface. Improper installations are hazardous and may spark a fire. Solar panels must not be mounted on structures and roofs which are made of not fire-resistant materials such as plastic layer, transparent plastic, PVC or similar materials without any fire-protection layer. Usage and installation not in accordance with the guidelines as outlined in the installation manual will terminate the warranty. Please refer to the installation manual and the warranty documents for further details.

* Please note that the color of PERC monocrystalline cells might vary slightly due to their natural structure. Consequently, there might be a color difference between the cells and between the cells and the backsheet.

* TommaTech® GmbH reserves the right to change the specification of products without prior notice.

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