BIFACIAL PERC MONOCRYSTALLINE 108PMB10



- ◆ TT415-108PMB10 415 Wp
 ◆ TT410-108PMB10 410 Wp
- TT405-108PMB10 405 Wp







High Conversion Efficiency High panel efficiency to guarantee high power output



Self-Cleaning And

Coating glass for self-cleaning reduces surface dust



Outstanding Low Irradiation Glass

Outstanding panel performance even in weak light conditions



Excellent Durability

Wind load up to 2400 Pa, Snow load up to 5400 Pa



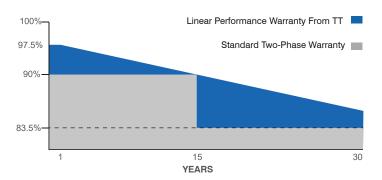
 $0 \sim +5W$ Positive Power Tolerance



Easy Installation

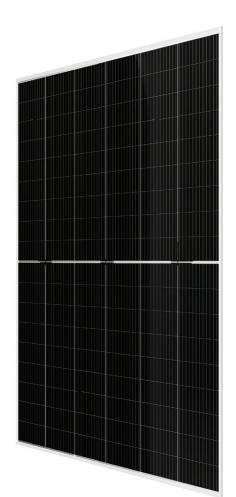


Double Sided Power Generation



30 Years Performance Warranty



















IEC 61215, IEC 61730-1, IEC 61730-2 IEC 62804 PID (POTENTIAL INDUCED DEGRADATION)
IEC 61701 SALT MIST CORROSION
IEC 62716 AMMONIA CORROSION ISO 9001:2015, ISO 14001:2015, ISO 45001:2018





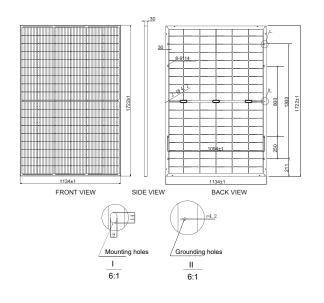


Model Type	TT405 108PMB10	TT410 108PMB10	TT415 108PMB10
Peak Power (Pmax)	405 Wp	410 Wp	415 Wp
Module Efficiency	20.74	21.00	21.25
Maximum Power Voltage (Vmp)	31.30	31.50	31.70
Maximum Power Current (Imp)	12.94	13.02	13.09
Open Circuit Voltage (Voc)	37.40	37.60	37.90
Short Circuit Current (Isc)	13.77	13.85	13.93
Power Tolerance	0~+5W		
Maximum System Voltage	1500V DC		
Operating Temperature	-40 ~ +85°C		
Protection Class	Class II		
Maximum Series Fuse Rating	25A		

MECHANICAL SPECIFICATIONS

Cell Dimensions(mm)	182 x 91		
Cells per Module(pcs)	108 (6x18)		
Weight(kg)	25.5		
Panel Dimensions(mm)	1722x1134x30		
Max. Wind/Snow Load(Pa)	2400/5400		
Junction Box	IP68		
Junction Box Cable Length(mm)	300-1200		
Glass Thickness (mm)	2.0 / 2.0		

PHYSICAL CHARACTERISTICS



REARSIDE POWER GAIN

(405W Front Power Referenced)

Rear Power Gain	5%	10%	15%	20%	25%
Maximum Power (Pmax)	425	446	466	486	506
Short Circuit Current (Isc)	14.45	15.16	15.84	16.47	17.15
Open Circuit Voltage (Voc)	37.5	37.5	37.5	37.7	37.7
Maximum Power Current (Imp)	13.58	14.25	14.89	15.48	16.11
Maximum Power Voltage (Vmp)	31.3	31.3	31.3	31.4	31.4

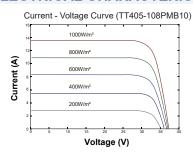
TEMPERATURE CHARACTERISTICS

Temp. Coeff. of (Isc)	0.050%/°C		
Temp. Coeff. of (Voc)	-0.270%/°C		
Temp. Coeff. of (Pmax)	-0.350%/°C		

PACKING CONFIGURATION

Container	40' GP
Pieces per Pallet	35
Pieces per Container	910
Pallet Per Container	26

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.

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