

# BIFACIAL TOPCON MONOCRYSTALLINE 108TNB10

- ◆ TT455-108TNB10 455 Wp
- ◆ TT450-108TNB10 450 Wp
- ◆ TT445-108TNB10 445 Wp
- ◆ TT440-108TNB10 440 Wp
- ◆ TT435-108TNB10 435 Wp
- ◆ TT430-108TNB10 430 Wp
- ◆ TT425-108TNB10 425 Wp
- ◆ TT420-108TNB10 420 Wp



## 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



## Excellent Durability

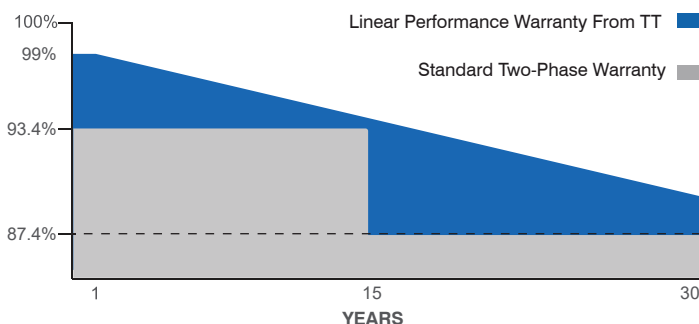
Wind load up to 2400 Pa, Snow load up to 5400 Pa



## 0~+5W Positive Power Tolerance



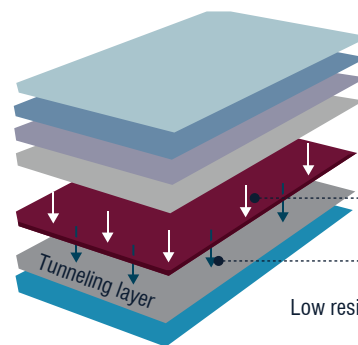
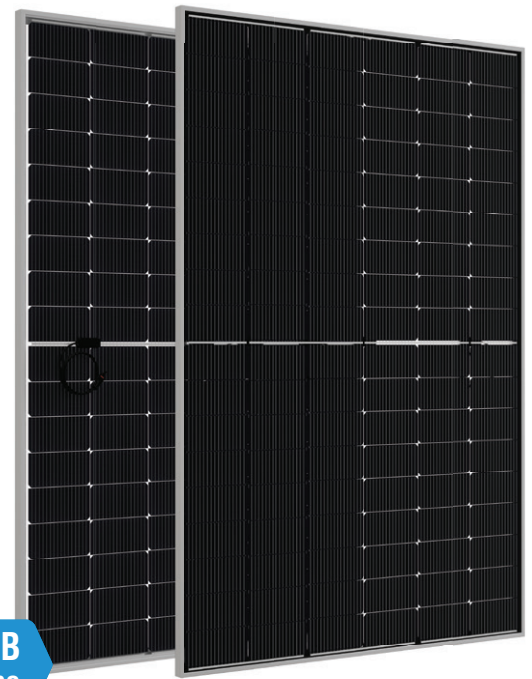
## Easy Installation



30 Years Performance Warranty



15 Years Product Warranty



**Half-Cut**



IEC 61215, IEC 61730-1, IEC 61730-2  
ISO 9001:2015, ISO 14001:2015, ISO 45001:2018



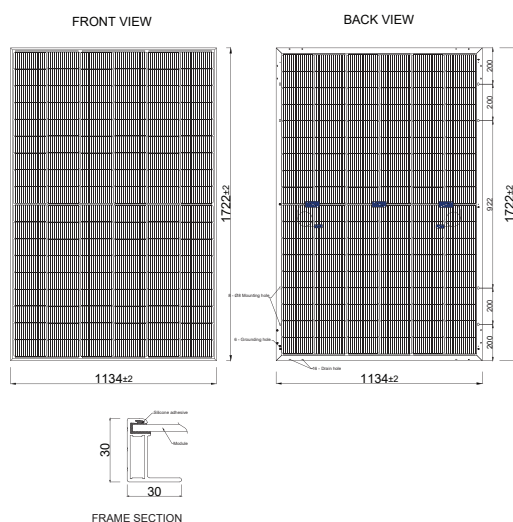
SOMPO

Model Type	TT420 108TNB10	TT425 108TNB10	TT430 108TNB10	TT435 108TNB10	TT440 108TNB10	TT445 108TNB10	TT450 108TNB10	TT455 108TNB10
Peak Power (P <sub>max</sub> )	420 Wp	425 Wp	430 Wp	435 Wp	440 Wp	445 Wp	450 Wp	455 Wp
Module Efficiency	21.51	21.76	22.02	22.28	22.53	22.79	23.04	23.30
Maximum Power Voltage (V <sub>mp</sub> )	31.94	32.14	32.34	32.54	32.74	32.94	33.14	33.34
Maximum Power Current (I <sub>mp</sub> )	13.15	13.23	13.30	13.37	13.44	13.51	13.58	13.65
Open Circuit Voltage (V <sub>oc</sub> )	38.11	38.31	38.51	38.71	38.91	39.11	39.31	39.51
Short Circuit Current (I <sub>sc</sub> )	13.95	14.03	14.10	14.17	14.24	14.31	14.38	14.45
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 (18x6)
Weight(kg)	21.45
Panel Dimensions(mm)	1722x1134x30
Max. Wind/Snow Load(Pa)	2400/5400
Junction Box	IP68
Junction Box Cable Length(mm)	300-1600

## PHYSICAL CHARACTERISTICS



## REAR SIDE POWER GAIN

(435W Front Power Referenced)

Rear Power Gain	5%	10%	15%	20%	25%
Maximum Power (P <sub>max</sub> )	456.75	478.50	500.25	522	543.75
Short Circuit Current (I <sub>sc</sub> )	14.88	15.59	16.30	17.00	17.71
Open Circuit Voltage (V <sub>oc</sub> )	40.65	42.58	44.52	46.45	48.39
Maximum Power Current (I <sub>mp</sub> )	14.04	14.71	15.38	16.04	16.71
Maximum Power Voltage (V <sub>mp</sub> )	34.17	35.80	37.42	39.05	40.68

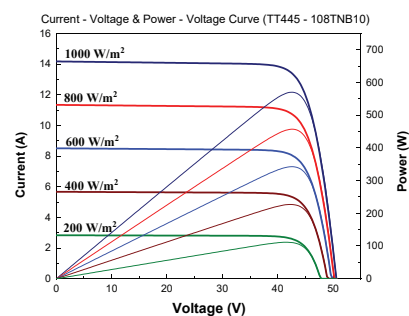
## TEMPERATURE CHARACTERISTICS

Temp. Coeff. of (I <sub>sc</sub> )	0.040%/°C
Temp. Coeff. of (V <sub>oc</sub> )	-0.260%/°C
Temp. Coeff. of (P <sub>max</sub> )	-0.300%/°C

## PACKING CONFIGURATION

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

## ELECTRICAL CHARACTERISTICS



**\*Note 1:** The specifications are obtained under the standard test conditions: 1000W/m<sup>2</sup> 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 specifications are subject to change without prior notice.

**\*Note 2:** 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 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.

Ver.2408.28