

## SOLAR ROOF TILE

WATER PROOF, SUITABLE FOR ROOFTOP  
SOLAR PANEL FRAME SYSTEM

BIFACIALTOPCON N-TYPE • 144TNBCK10

- ◆ TT595-144TNBCK10 595 Wp ◆ TT580-144TNBCK10 580Wp
- ◆ TT590-144TNBCK10 590 Wp ◆ TT575-144TNBCK10 575 Wp
- ◆ TT585-144TNBCK10 585 Wp ◆ TT570-144TNBCK10 570 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

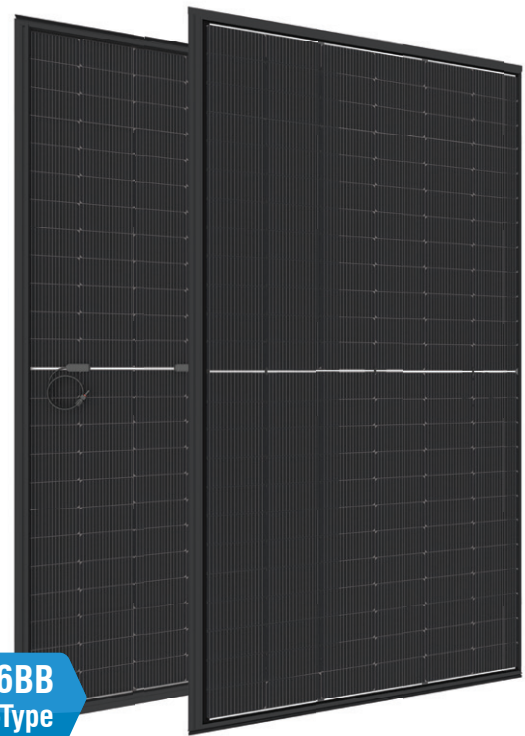
Wind load up to 2400 Pa, Snow load up to 5400 Pa



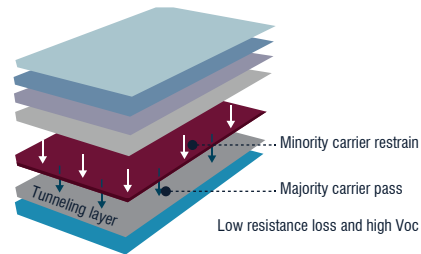
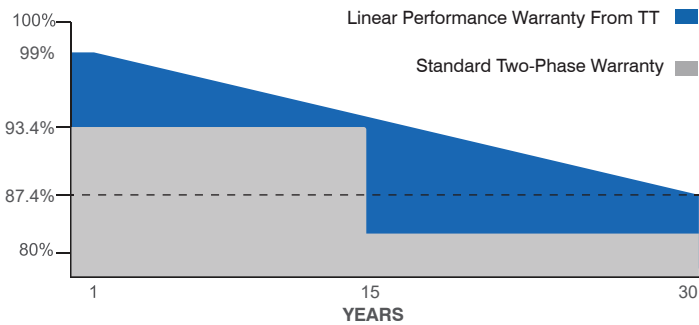
### 0~ +5W Positive Power Tolerance



### Easy Installation



16BB  
n-Type



## Half-Cut



30 Years Performance Warranty 15 Years Product Warranty

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

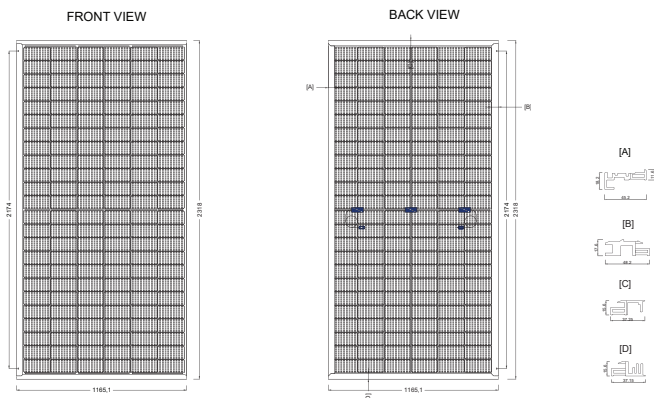


Model Type	TT570 144TNBCK10	TT575 144TNBCK10	TT580 144TNBCK10	TT585 144TNBCK10	TT590 144TNBCK10	TT595 144TNBCK10
Peak Power (Pmax)	570Wp	575 Wp	580 Wp	585 Wp	590 Wp	595 Wp
Module Efficiency	22.07	22.26	22.45	22.65	22.84	23.03
Maximum Power Voltage (Vmp)	42.55	42.75	42.95	43.15	43.35	43.55
Maximum Power Current (Imp)	13.40	13.46	13.51	13.56	13.62	13.67
Open Circuit Voltage (Voc)	50.58	50.78	50.98	51.18	51.38	51.58
Short Circuit Current (Isc)	14.17	14.23	14.31	14.38	14.45	14.53
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)	182x91
Cells per Module(pcs)	144 (6x24)
Weight(kg)	35.6
Panel Dimensions(mm)	2318x1165.1
Max. Wind/Snow Load(Pa)	2400/5400
Junction Box	IP68
Junction Box Cable Length(mm)	350-1600
Purlins Spacing(mm)	1122

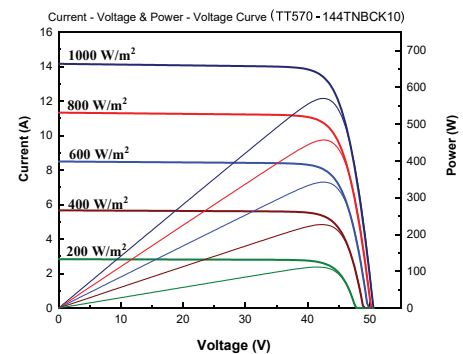
## PHYSICAL CHARACTERISTICS



## TEMPERATURE CHARACTERISTICS

Temp. Coeff. of (Isc)	0.04%/°C
Temp. Coeff. of (Voc)	-0.260%/°C
Temp. Coeff. of (Pmax)	-0.30%/°C

## ELECTRICAL CHARACTERISTICS



**\*Note 1:** 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 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 installation, 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.

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