

# BIFACIAL TOPCON MONOCRYSTALLINE 144TNB10



- ◆ TT620-144TNB10 620 Wp
- ◆ TT600-144TNB10 600 Wp
- ◆ TT615-144TNB10 615 Wp
- ◆ TT595-144TNB10 595 Wp
- ◆ TT610-144TNB10 610 Wp
- ◆ TT590-144TNB10 590 Wp
- ◆ TT605-144TNB10 605 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

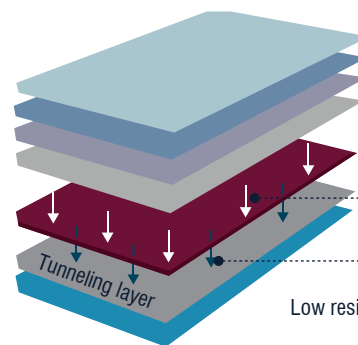
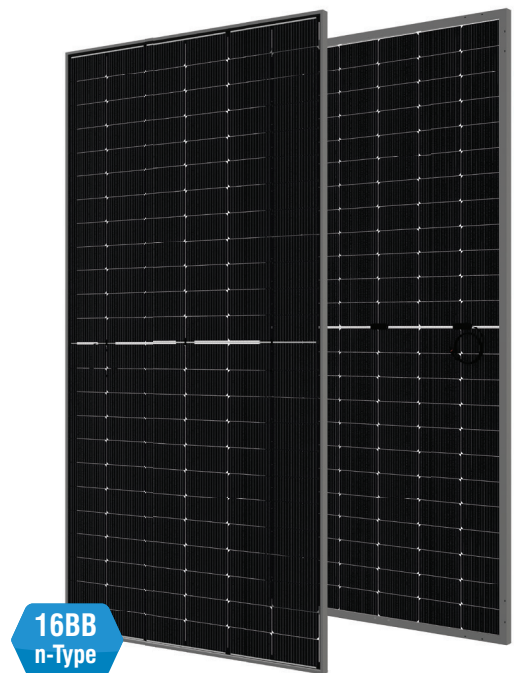
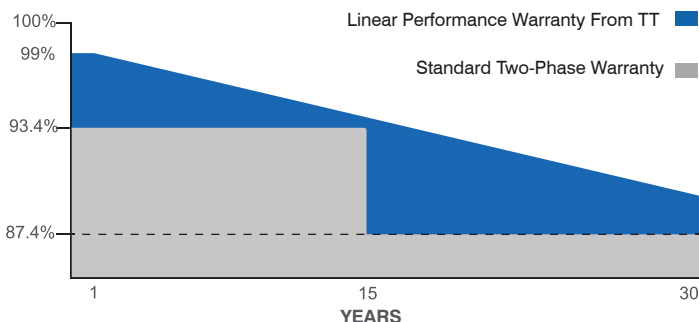
Wind load up to 2400 Pa, Snow load up to 5400 Pa



## 0~ +5W Positive Power Tolerance



## Easy Installation



Low resistance loss and high Voc

# Half-Cut



30 Years Performance Warranty



15 Years Product Warranty

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



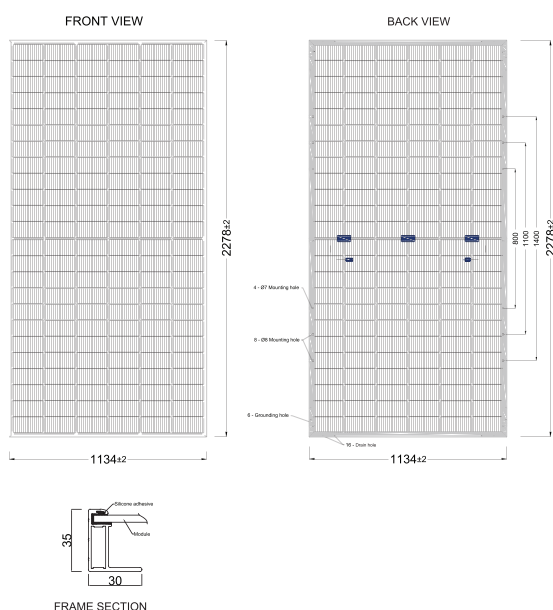
SOMPO

Model Type	TT590 144TNB10	TT595 144TNB10	TT600 144TNB10	TT605 144TNB10	TT610 144TNB10	TT615 144TNB10	TT620 144TNB10
Peak Power (P <sub>max</sub> )	590 Wp	595 Wp	600 Wp	605 Wp	610 Wp	615 Wp	620 Wp
Module Efficiency	22.84	23.03	23.23	23.42	23.61	23.81	24.00
Maximum Power Voltage (V <sub>mp</sub> )	43.35	43.55	43.75	43.95	44.15	44.35	44.55
Maximum Power Current (I <sub>mp</sub> )	13.62	13.67	13.72	13.77	13.82	13.87	13.92
Open Circuit Voltage (V <sub>oc</sub> )	51.98	52.18	52.38	52.58	52.78	52.98	53.18
Short Circuit Current (I <sub>sc</sub> )	14.30	14.36	14.42	14.48	14.54	14.60	14.66
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)	182,2x91,8
Cells per Module(pcs)	144 (24x6)
Weight(kg)	31.0
Panel Dimensions(mm)	2278x1134x35
Max. Wind/Snow Load(Pa)	2400/5400
Junction Box	IP68
Junction Box Cable Length(mm)	300-1600

## PHYSICAL CHARACTERISTICS



## REARSIDE POWER GAIN

(600W Front Power Referenced)

Rear Power Gain	5%	10%	15%	20%	25%
Maximum Power (P <sub>max</sub> )	630	660	690	720	750
Short Circuit Current (I <sub>sc</sub> )	15,14	15,86	16,58	17,30	18,03
Open Circuit Voltage (V <sub>oc</sub> )	55,00	57,62	60,24	62,86	65,48
Maximum Power Current (I <sub>mp</sub> )	14,41	15,09	15,78	16,46	17,15
Maximum Power Voltage (V <sub>mp</sub> )	45,94	48,13	50,31	52,50	54,69

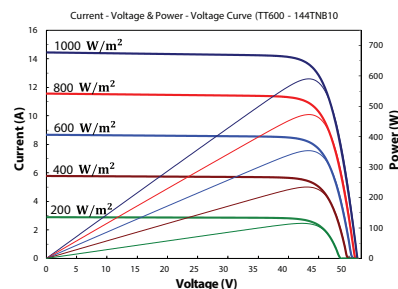
## TEMPERATURE CHARACTERISTICS

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> )	-0.30%/°C

## PACKING CONFIGURATION

Container	40' GP
Pieces per Pallet	31
Pieces per Container	620
Pallet Per Container	20

## 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 specifications are subject to change without prior notice.

\* 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.

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