

# BIFACIAL TOPCON MONOCRYSTALLINE 132TNB12R

**TOMMATECH**  
GmbH  
GERMAN-based company

- ◆ TT655-132TNB12R 655 Wp ◆ TT635-132TNB12R 635 Wp
- ◆ TT650-132TNB12R 650 Wp ◆ TT630-132TNB12R 630 Wp
- ◆ TT645-132TNB12R 645 Wp ◆ TT625-132TNB12R 625 Wp
- ◆ TT640-132TNB12R 640 Wp ◆ TT620-132TNB12R 620 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

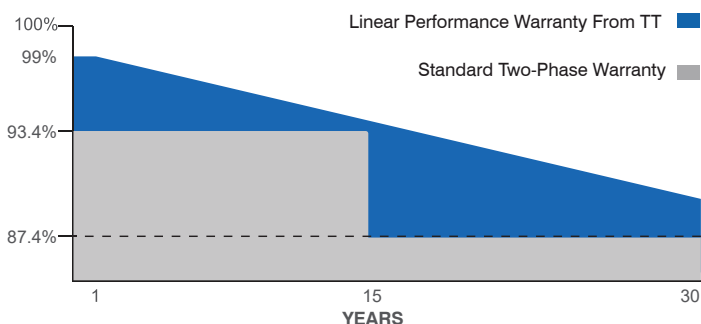
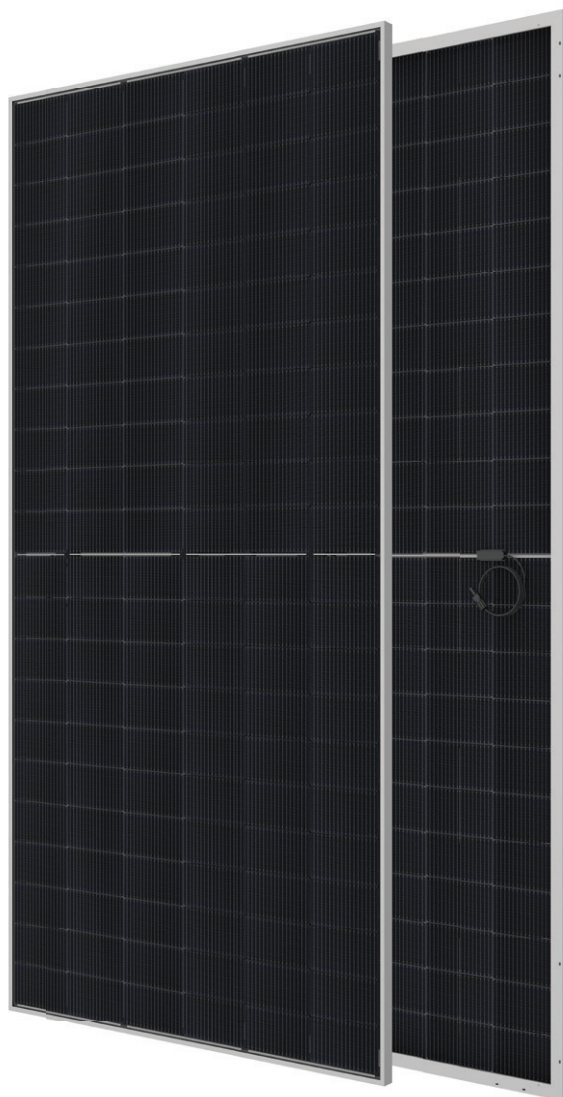
Wind load up to 2400 Pa, Snow load up to 5400 Pa



## 0~+5W Positive Power Tolerance



## Easy Installation



30 Years Performance Warranty



15 Years Product Warranty

**Half-Cut**



SOMPO



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

Model Type	TT620 132TNB12R	TT625 132TNB12R	TT630 132TNB12R	TT635 132TNB12R	TT640 132TNB12R	TT645 132TNB12R	TT650 132TNB12R	TT655 132TNB12R
Peak Power (P <sub>max</sub> )	620	625	630	635	640	645	650	655
Module Efficiency	22.93	23.12	23.30	23.49	23.67	23.86	24.04	24.23
Maximum Power Voltage (V <sub>mp</sub> )	41.02	41.22	41.42	41.62	41.82	42.02	42.22	42.42
Maximum Power Current (I <sub>mp</sub> )	15.12	15.17	15.22	15.26	15.31	15.35	15.40	15.45
Open Circuit Voltage (V <sub>oc</sub> )	48.99	49.19	49.39	49.59	49.79	49.99	50.19	50.39
Short Circuit Current (I <sub>sc</sub> )	16.02	16.08	16.14	16.20	16.26	16.32	16.38	16.44
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

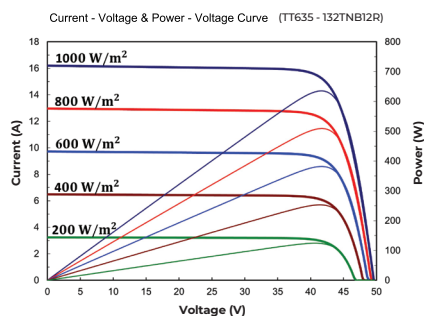
Cell Dimensions (mm/inch)	182x105 / 7.17x4.14
Cells per Module (pcs)	132 (6x22)
Weight (kg/lbs)	29 / 63.93
Panel Dimensions (mm/inch)	2384x1134x30 / 93.85x44.65x1.20
Max. Wind/Snow Load (Pa)	2400/5400
Junction Box	IP68
Junction Box Cable Length (mm/inch)	350-1600 / 13.78-63.00

### REAR SIDE POWER GAIN

(10% rear side power gain)

Rear Side Power Gain	620	625	630	635	640	645	650	655
Peak Power (P <sub>max</sub> )	682	687,5	693	698,5	704	709,50	715	720,5
Short Circuit Current (I <sub>sc</sub> )	17,62	17,69	17,75	17,82	17,89	17,95	18,02	18,08
Open Circuit Voltage (V <sub>oc</sub> )	53,89	54,11	54,33	54,55	54,77	54,99	55,21	55,43
Maximum Power Current (I <sub>mp</sub> )	16,63	16,69	16,74	16,79	16,84	16,89	16,94	17,00
Maximum Power Voltage (V <sub>mp</sub> )	45,12	45,34	45,56	45,78	46,00	46,22	46,44	46,66

### ELECTRICAL CHARACTERISTICS



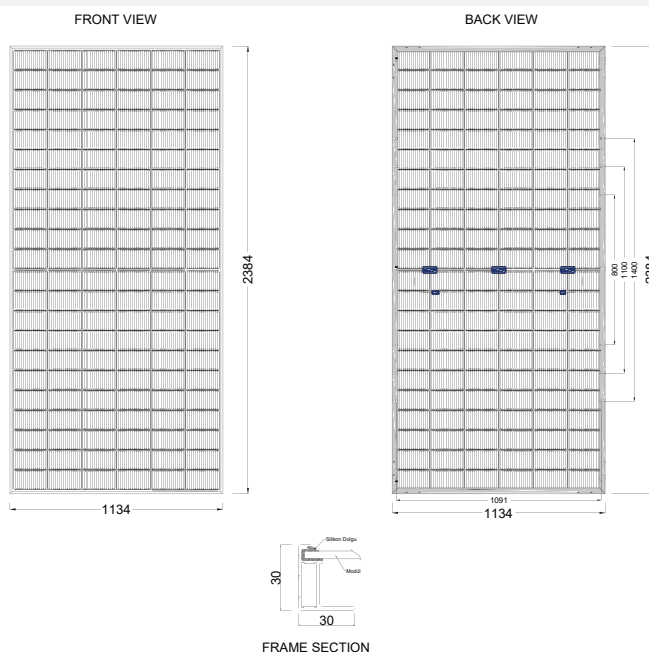
### TEMPERATURE CHARACTERISTICS

Temp. Coeff. of (I <sub>sc</sub> )	0.046%/°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	36
Pieces per Container	720
Pallet Per Container	20

### PHYSICAL CHARACTERISTICS



\* 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 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.

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