

# BIFACIAL BIPV PERC MONOCRYSTALLINE 48PMKB12

## ◆ TT240-48PMKB12 175

**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 **0~ +5W Positive Power Tolerance**

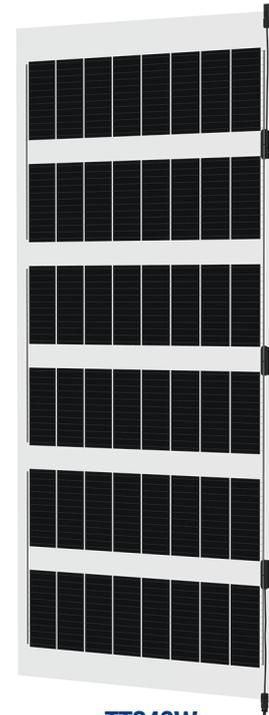
**Easy Installation**

**Twice EVA Laminated Double Glass**

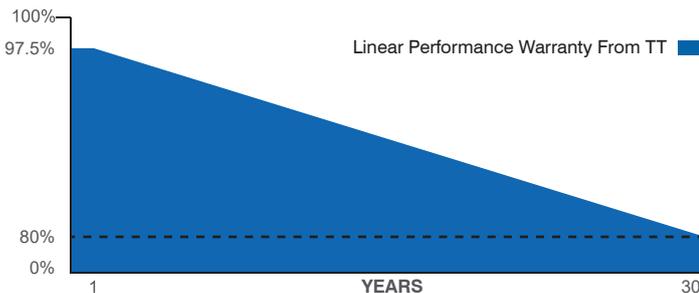
**According to guideline DIN 18008. For vertical and overhead glazing (DIBt Z-70.3-293 Approval).**

Deutsches Institut für Bautechnik **DIBt**

TommaTech GmbH  
Allgemeine bauaufsichtliche Zulassung/  
Allgemeine Bauartgenehmigung  
Nr. Z-70.3-293  
Deutsches Institut für Bautechnik



TommaTech's Building Integrated Solar Modules (BIPV) are designed with the latest generation of high efficiency cells, providing a smart and environmentally friendly energy solution that is also aesthetically pleasing. Designed in 4 main sizes, the solar modules are preferred in many areas such as restaurants, cafes, homes, offices, workplaces, hotels, pools, conservatories and terraces of houses. The system is equipped with aluminum infrastructure and provides both thermal insulation and tightness. The system, which can be designed as an off-grid, grid-tied or hybrid solar energy system, is also a real eye-catcher.



SOMPO

IEC 61215,  
IEC 61730-1,  
IEC 61730-2

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

✓ 30 Years Performance Warranty

✓ 30 Years Product Warranty

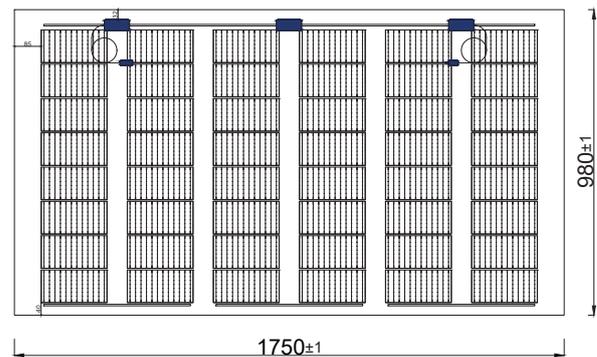
| Model Type                        | 48PMKB12-175 |
|-----------------------------------|--------------|
| Peak Power (Pmax)                 | 240 Wp       |
| Module Efficiency                 | 14           |
| Maximum Power Voltage (Vmp)       | 27.70        |
| Maximum Power Current (Imp)       | 8.67         |
| Open Circuit Voltage (Voc)        | 32.50        |
| Short Circuit Current (Isc)       | 9.11         |
| Cell Dimensions(mm)               | 48(6x8)      |
| Cells per Module                  | 210x105      |
| Panel Dimensions (mm)             | 1750x980x7.6 |
| Weight (kg)                       | 33.66        |
| Transparent Area (%)              | 38           |
| Front / Back Glass Thickness (mm) | 3.2 / 4.0    |
| Power Tolerance                   | 0~+5W        |
| Maximum System Voltage            | 1500V DC     |
| Nominal Operating Cell Temp.      | -40 ~ +85°C  |
| Protection Class                  | Klasse II    |
| Maximum Series Fuse Rating        | 20A          |
| Max. Wind/Snow Load (Pa)          | 2400 / 2400  |
| Junction Box                      | IP68         |
| Junction Box Cable Length(cm)     | 30           |

### TEMPERATURE CHARACTERISTICS

### PHYSICAL CHARACTERISTICS

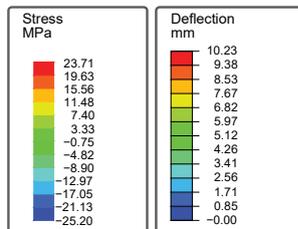
|                      |            |
|----------------------|------------|
| Temp. Coeff. of Isc  | 0.041%/°C  |
| Temp. Coeff. of Voc  | -0.280%/°C |
| Temp. Coeff. of Pmax | -0.360%/°C |

### TT240-48PMKB12 175



### PACKING CONFIGURATION

|                       |          |
|-----------------------|----------|
| Module Model          | 48PMKB12 |
| Container             | 40' GP   |
| Pieces per Pallet     | 20       |
| Pieces per Container  | 560      |
| Pallet per Container  | 28       |
| Weight of Pallet (kg) | 530      |



3.2+4.0mm  
Twice EVA  
Laminated  
Double Glass

\*Simulation Results Under 2400Pa Pressure

\* 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.

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