### **SOLAR ROOF TILE**



# WATER PROOF, SUITABLE FOR ROOFTOP **SOLAR PANEL FRAME SYSTEM**

BIFACIALTOPCON N-TYPE ■ 144TNBCK10

- ◆ TT595-144TNBCK10 595 Wp ◆ TT610-144TNBCK10 610 Wp
- TT600-144TNBCK10 600 Wp ◆ TT615-144TNBCK10 615 Wp
- TT605-144TNBCK10 605 Wp ◆ TT620-144TNBCK10 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**

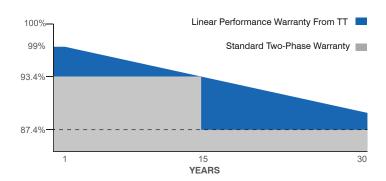
Wind load up to 2400 Pa, Snow load up to 5400 Pa



## $0 \sim +5W$ Positive Power Tolerance



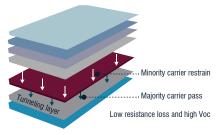
# **Easy Installation**



**30 Years Performance Warranty** 

**15 Years Product Warranty** 

























Model Type	TT595 144TNCK10	TT600 144TNCK10	TT605 144TNCK10	TT610 144TNCK10	TT615 144TNCK10	TT620 144TNCK10
Peak Power (Pmax)	595 Wp	600 Wp	605 Wp	610 Wp	615 Wp	620 Wp
Module Efficiency	23.03	23.23	23.42	23.61	23.81	24.00
Maximum Power Voltage (Vmp)	43.55	43.75	43.95	44.15	44.35	44.55
Maximum Power Current (Imp)	13.67	13.72	13.77	13.82	13.87	13.92
Open Circuit Voltage (Voc)	52.18	52.38	52.58	52.78	52.98	53.18
Short Circuit Current (Isc)	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					
<b>Protection Class</b>	Class II					
<b>Maximum Series Fuse Rating</b>	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			

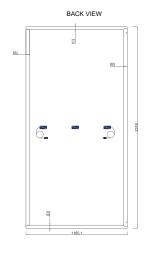
#### **TEMPERATURE CHARACTERISTICS**

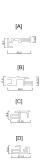
Temp. Coeff. of (Isc)	0.040%/°C
Temp. Coeff. of (Voc)	-0.260%/°C
Temp. Coeff. of (Pmax)	-0.30%/°C

#### **PHYSICAL CHARACTERISTICS**

# ZIUZ

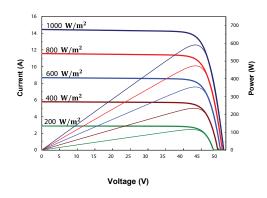
FRONT VIEW





#### **ELECTRICAL CHARACTERISTICS**





<sup>\*</sup>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.

<sup>\*</sup>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.

<sup>\*</sup> TommaTech GmbH reserves the right to change the specification of products without prior notice.