

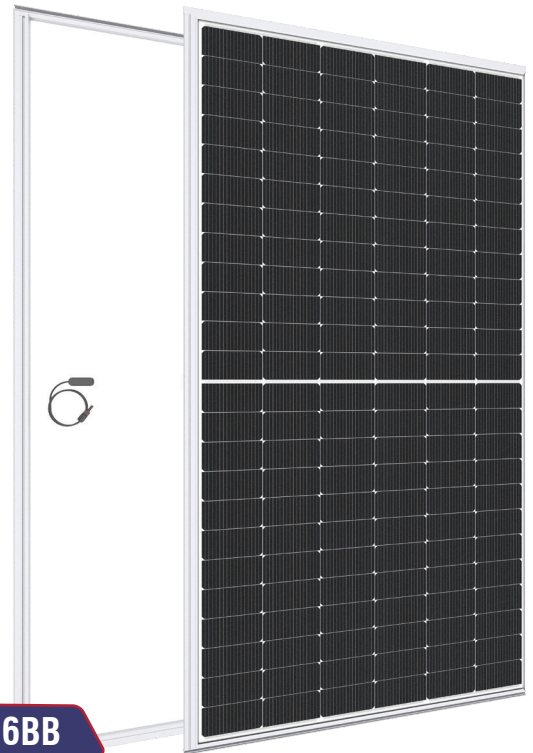
WATER PROOF, SUITABLE FOR ROOFTOP  
SOLAR PANEL FRAME SYSTEM

TOPCON MONOCRYSTALLINE • 144TNCK10

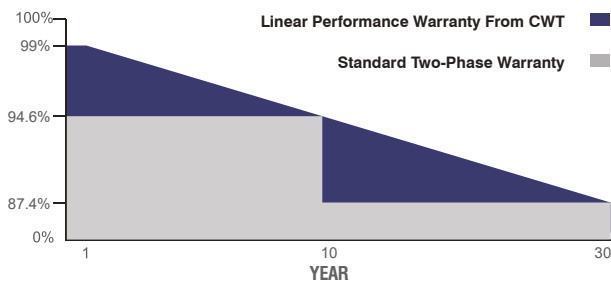
## Half Cut

### SOLAR ROOF TILE

-  **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



 30 Years Performance Warranty  10 Years Product Warranty

CWT595-144TNCK10 595 Wp  
CWT590-144TNCK10 590 Wp  
CWT585-144TNCK10 585 Wp  
CWT580-144TNCK10 580 Wp  
CWT575-144TNCK10 575 Wp  
CWT570-144TNCK10 570 Wp



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

# SOLAR ROOF TILE

TOPCON MONOCRYSTALLINE ● 144TNCK10

# Half-Cut

## ELECTRICAL CHARACTERISTICS

Model Type	CWT570 144TNCK10	CWT575 144TNCK10	CWT580 144TNCK10	CWT585 144TNCK10	CWT590 144TNCK10	CWT595 144TNCK10
Peak Power (P <sub>max</sub> )	570 Wp	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 (V <sub>mp</sub> )	42.55	42.75	42.95	43.15	43.35	43.55
Maximum Power Current (I <sub>mp</sub> )	13.40	13.46	13.51	13.56	13.62	13.67
Open Circuit Voltage (V <sub>oc</sub> )	50.58	50.78	50.98	51.18	51.38	51.58
Short Circuit Current (I <sub>sc</sub> )	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					

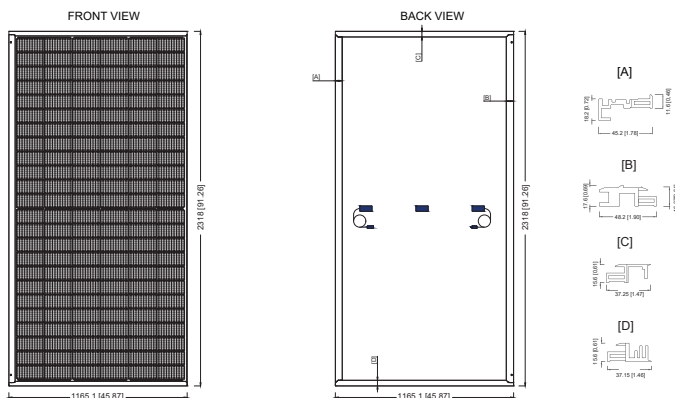
## MECHANICAL SPECIFICATIONS

Cell Dimensions(mm/inch)	182 x 91 / 7.16x 3.58
Cells per Module(pcs)	144 (6x24)
Weight(kg/lbs)	35.6 / 78.49
Panel Dimensions(mm/inch)	2318x1165.1 / 91.26x45.87
Max. Wind/Snow Load(Pa)/(lb/ft <sup>2</sup> )	(2400 / 5400) / (50 / 212)
Junction Box	IP68
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00
Frame Color	Silver / Black
Purlins Spacing(mm/inch)	1291 / 50.83

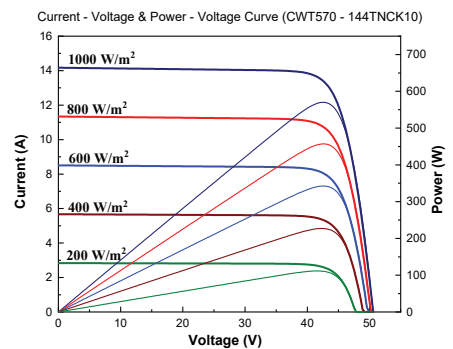
## TEMPERATURE CHARACTERISTICS

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

## PHYSICAL CHARACTERISTICS



## ELECTRICAL 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 3%. 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.

\* CW Energy reserves the right to change the specification of products without prior notice.