CW U.S.A Energy®

USA Technical Datasheet CW Enerji

30 YEARS PERFORMANCE WARRANTY

WATER PROOF, SUITABLE FOR ROOFTOP SOLAR PANEL FRAME SYSTEM

BIFACIAL TOPCON MONOCRYSTALLINE 144TNBCK10

Half Cut

SOLAR ROOF TILE

BIFACIAL 16BB n-Type

High Conversion Efficiency
High panel efficiency to guarantee high power output

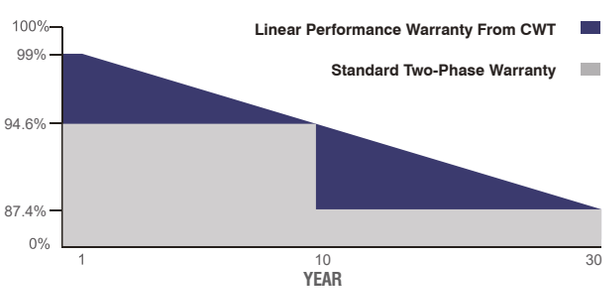
Self-Cleaning And Anti-Reflection Glass
Coating glass for self-cleaning reduces surface dust

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 10 Years Product Warranty

CWT595-144TNBCK10 595 Wp
CWT590-144TNBCK10 590 Wp
CWT585-144TNBCK10 585 Wp
CWT580-144TNBCK10 580 Wp
CWT575-144TNBCK10 575 Wp
CWT570-144TNBCK10 570 Wp

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

SOLAR ROOF TILE

BIFACIAL TOPCON MONOCRYSTALLINE ● 144TNBCK10

Half Cut

ELECTRICAL CHARACTERISTICS

Model Type	CWT570 144TNBCK10	CWT575 144TNBCK10	CWT580 144TNBCK10	CWT585 144TNBCK10	CWT590 144TNBCK10	CWT595 144TNBCK10
Peak Power (P_{max})	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_{mp})	42.55	42.75	42.95	43.15	43.35	43.55
Maximum Power Current (I_{mp})	13.40	13.46	13.51	13.56	13.62	13.67
Open Circuit Voltage (V_{oc})	50.58	50.78	50.98	51.18	51.38	51.58
Short Circuit Current (I_{sc})	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					

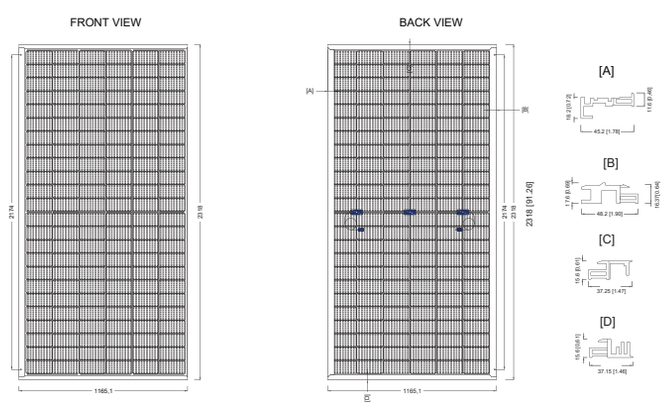
MECHANICAL SPECIFICATIONS

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/ft²)	(2400 / 5400) / (50 / 212)
Junction Box	IP68
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00
Frame Color	Silver / Black
Rear Side Material	Transparent Backsheet
Purlins Spacing(mm/inch)	1291 / 50.83

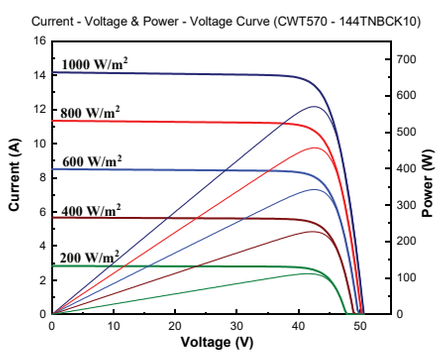
TEMPERATURE CHARACTERISTICS

Temp. Coeff. of (I_{sc})	0.040%/°C
Temp. Coeff. of (V_{oc})	-0.260%/°C
Temp. Coeff. of (P_{max})	-0.30%/°C

PHYSICAL CHARACTERISTICS



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 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 Enerji reserves the right to change the specification of products without prior notice.

CW Energy USA