CW U.S.A Energy®

USA Technical Datasheet CW Enerji

30 YEARS PERFORMANCE WARRANTY

BIFACIAL HIGH-EFFICIENCY SOLAR PANELS 144TNB10

Half Cut

DNV BANKABILITY

CW Enerji Module Bankability Technical Assessment



Reliability Tested & Verified
High Performance Durability Under Extended Stress

High Conversion Efficiency
High panel efficiency to guarantee high power output

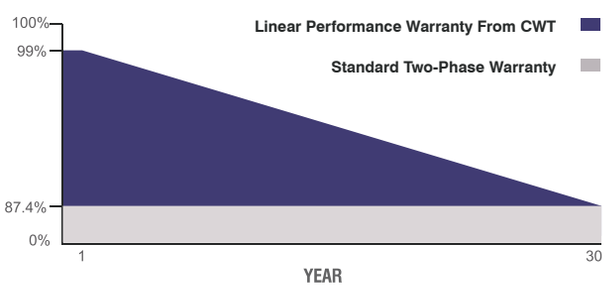
Self-Cleaning And Anti-Reflection Glass
Coating glass for self-cleaning reduces surface dust

Outstanding Low Irradiation Glass
Outstanding panel performance even in weak light conditions

0～+5W Positive Power Tolerance

Easy Installation

Double Sided Power Generation



30 Years Performance Warranty 30 Years Product Warranty

CWT600-144TNB10 600 Wp

CWT595-144TNB10 595 Wp

CWT590-144TNB10 590 Wp

CWT585-144TNB10 585 Wp

ISO PV CYCLE CE CEC ETL Intertek

IEC 61215, IEC 61730-1, IEC 61730-2, IEC 63209-1
ISO 9001:2015, ISO 14001:2015, ISO 45001:2018
UL 61730-1, UL 61730-2

BIFACIAL HIGH-EFFICIENCY SOLAR PANELS ● 144TNB10 Half Cut

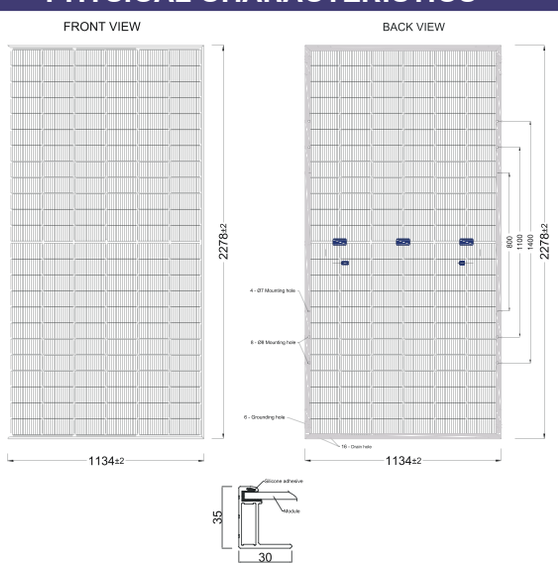
ELECTRICAL CHARACTERISTICS

Model Type	CWT585 144TNB10	CWT590 144TNB10	CWT595 144TNB10	CWT600 144TNB10
Peak Power (P_{max})	585 Wp	590 Wp	595 Wp	600 Wp
Module Efficiency (%)	22.65	22.84	23.03	23.23
Maximum Power Voltage (V_{mp})	43.15	43.35	43.55	43.75
Maximum Power Current (I_{mp})	13.56	13.62	13.67	13.72
Open Circuit Voltage (V_{oc})	51.78	51.98	52.18	52.38
Short Circuit Current (I_{sc})	14.24	14.30	14.36	14.42
Power Tolerance	0~+5W			
Maximum System Voltage	1500V DC			
Operating Temperature	-40 ~ +85°C			
Protection Class	Class II			
Fire Class	UL type 29 / IEC Class C			
Maximum Series Fuse Rating	30A			
Bifaciality Rate	%80±5			

MECHANICAL SPECIFICATIONS

Cell Dimensions(mm/inch)	182,2x91,8 / 7,17x3,61
Cells per Module(pcs)	144 (6x24)
Weight(kg/lbs)	32.3 / 71.21
Panel Dimensions(mm/inch)	2278x1134x35 / 89.69x44.65x1.38
Max. Wind/Snow Load(Pa)/(lb/ft²)	(2400 / 5400) / (50 / 112.8)
Junction Box	IP68
Connector	Original Staubli MC4-EVO2
Junction Box Cable Length(mm/inch)	1300 / 51.18
Glass Thickness(mm/inch)	(2.0 / 2.0) / (0.08 / 0.08)
Frame Color	Silver

PHYSICAL CHARACTERISTICS



MAXIMUM POWER GAIN ON THE BACK SIDE

(600W Front Power Referenced)

Rear Side Power Gain	10%	20%	30%
Peak Power (Pmax)	660.00	720.00	780.00

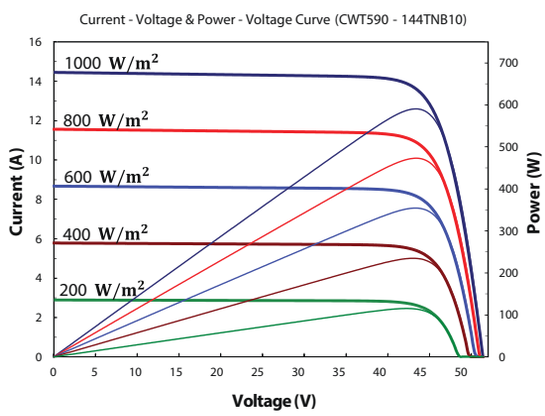
TEMPERATURE CHARACTERISTICS

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

PACKING CONFIGURATION

Container	40' GP
Pieces per Pallet	31
Pieces Per Container	558
Pallet Per Container	18

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 USA Energy®