# CW Enerji®

### **BIFACIAL TOPCON MONOCRYSTALLINE 132TNB12**

## SOLAR PANEL

**CW ENERJİ** 





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



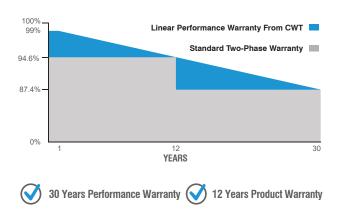
 $0 \sim +5W$  Positive Power Tolerance

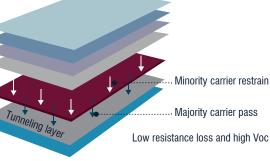


**Easy Installation** 



#### Twice EVA Laminated Double Glass





18BB

n-Tvpe

CWT715-132TNB12 715 Wp CWT710-132TNB12 710 Wp CWT705-132TNB12 705 Wp CWT700-132TNB12 700 Wp CWT695-132TNB12 695 Wp CWT690-132TNB12 690 Wp CWT685-132TNB12 685 Wp CWT680-132TNB12 680 Wp



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

www.cw-enerji.com

# BIFACIAL TOPCON MONOCRYSTALLINE • 132TNB12 • 2 • CUT

#### **ELECTRICAL CHARACTERISTICS**

Model Type	CWT680 132TNB12	CWT685 132TNB12	CWT690 132TNB12	CWT695 132TNB12	CWT700 132TNB12	CWT705 132TNB12	CWT710 132TNB12	CWT715 132TNB12
Peak Power (Pmax)	680 Wp	685 Wp	690 Wp	695 Wp	700 Wp	705 Wp	710 Wp	715 Wp
Module Efficiency	21.89	22.05	22.21	22.37	22.53	22.70	22.86	23.02
Maximum Power Voltage (Vmp)	39.50	39.70	39.90	40.10	40.30	40.50	40.70	40.90
Maximum Power Current (Imp)	17.22	17.25	17.29	17.33	17.37	17.41	17.45	17.49
Open Circuit Voltage (Voc)	46.10	46.30	46.50	46.70	46.90	47.10	47.30	47.50
Short Circuit Current (Isc)	18.26	18.32	18.37	18.42	18.47	18.52	18.57	18.62
Power Tolerance	0~+5W							
Maximum System Voltage	1500V DC							
<b>Operating Temperature</b>	-40 ~ +85°C							
Protection Class	Class II							
Maximum Series Fuse Rating	35A							

#### **MECHANICAL SPECIFICATIONS**

Cell Dimensions(mm)	210x105
Cells per Module(pcs)	132 (6x22)
Weight(kg)	39.5
Panel Dimensions(mm)	2384x1303x35
Max. Wind/Snow Load(Pa)	2400/5400
Junction Box	IP68
Junction Box Cable Length(mm)	350-1600
Glass Thickness (mm)	2.0 / 2.0

BACK VIEW

#### **TEMPERATURE CHARACTERISTICS**

(715W Front Power Referenced)

Rear Side Power Gain	5%	10%	15%	20%	25%
Peak Power (Pmax)	750.75	786.50	822.25	858.00	893.75
Short Circuit Current (Isc)	19.50	20.40	21.29	22.19	23.06
Open Circuit Voltage (Voc)	47.58	47.66	47.73	47.80	47.87
Maximum Power Current (Imp)	18.34	19.20	20.05	20.90	21.75
Maximum Power Voltage (Vmp)	40.94	40.99	41.03	41.06	41.09

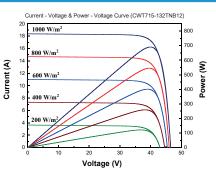
#### **TEMPERATURE CHARACTERISTICS**

Temp. Coeff. of (Isc)	0.040%/°C
Temp. Coeff. of (Voc)	-0.260%/°C
Temp. Coeff. of (Pmax)	-0.320%/°C

#### **PACKING CONFIGURATION**

Container	40' GP
Pieces per Pallet	31
Pieces Per Container	527
Pallet Per Container	17

#### **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".

2384

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



384 8 - Ø8 Mounting I Grounding Ho 16 - Drainage Holes 1303±4 1303±2 Silicone adhesiv 30 FRAME SECTION

#### **PHYSICAL CHARACTERISTICS**

FRONT VIEW