

# Half Cut

## BIFACIAL HIGH-EFFICIENCY SOLAR PANELS • 156TNB10



### 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



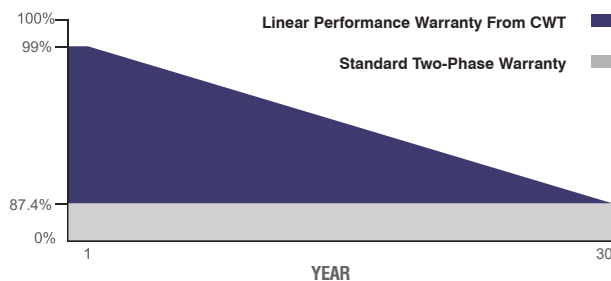
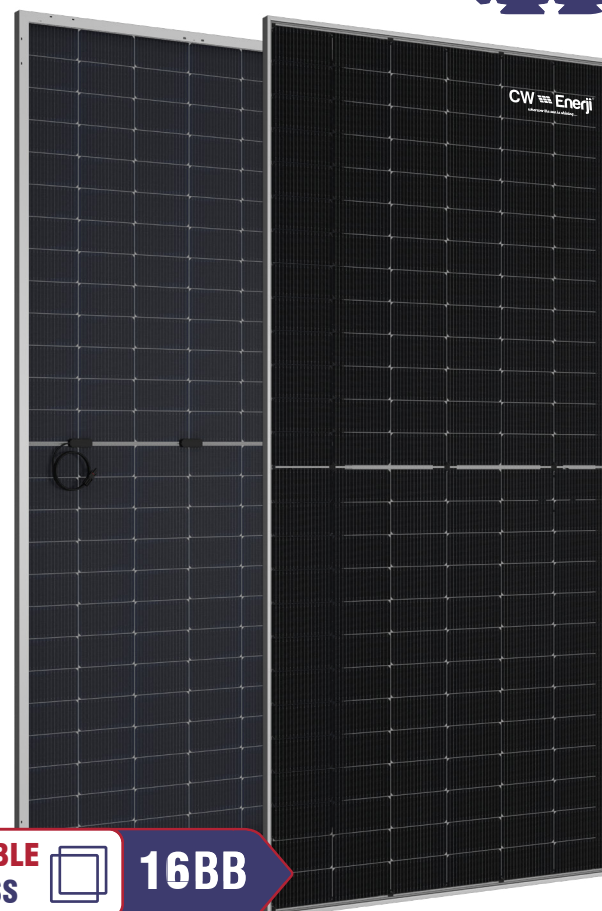
### 0~+5W Positive Power Tolerance



### Easy Installation



### Twice EVA Laminated Double Glass



CWT650-156TNB10 650 Wp CWT630-156TNB10 630 Wp  
CWT645-156TNB10 645 Wp CWT625-156TNB10 625 Wp  
CWT640-156TNB10 640 Wp CWT620-156TNB10 620 Wp  
CWT635-156TNB10 635 Wp CWT615-156TNB10 615 Wp



30 Years Performance Warranty



30 Years Product Warranty



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

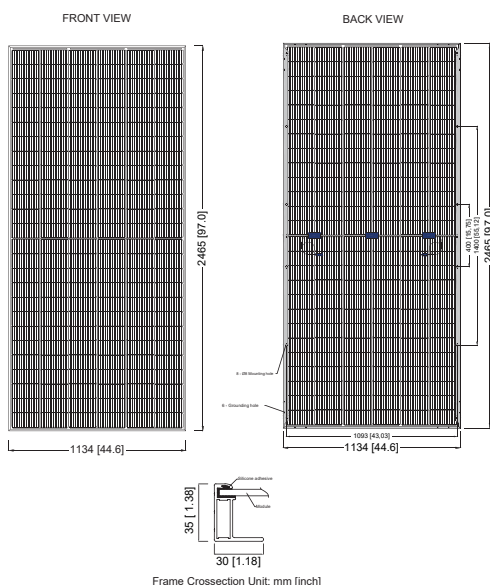
## ELECTRICAL CHARACTERISTICS

Model Type	CWT615 156TNB10	CWT620 156TNB10	CWT625 156TNB10	CWT630 156TNB10	CWT635 156TNB10	CWT640 156TNB10	CWT645 156TNB10	CWT650 156TNB10
Peak Power ( $P_{max}$ )	615 Wp	620 Wp	625 Wp	630 Wp	635 Wp	640 Wp	645 Wp	650 Wp
Module Efficiency (%)	22.00	22.18	22.36	22.54	22.72	22.90	23.07	23.25
Maximum Power Voltage ( $V_{mp}$ )	45.73	45.93	46.13	46.33	46.53	46.73	46.93	47.13
Maximum Power Current ( $I_{mp}$ )	13.45	13.50	13.55	13.60	13.65	13.70	13.75	13.80
Open Circuit Voltage ( $V_{oc}$ )	55.14	55.34	55.54	55.74	55.94	56.14	56.34	56.54
Short Circuit Current ( $I_{sc}$ )	14.16	14.22	14.28	14.34	14.40	14.46	14.52	14.58
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)	156 (6x26)
Weight(kg/lbs)	35.10 / 77.38
Panel Dimensions(mm/inch)	2465x1134x35 / 97.04x44.64x1.37
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
Glass Thickness(mm/inch)	(2.0 / 2.0) / (0.08 / 0.08)
Frame Color	Silver / Black

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

## REAR SIDE POWER GAIN

(620W Front Power Referenced)

Rear Side Power Gain	10%	20%	30%
Peak Power ( $P_{max}$ )	682.00	744.00	806.00

## TEMPERATURE CHARACTERISTICS

Temp. Coeff. of ( $I_{sc}$ )	0.046%/°C
Temp. Coeff. of ( $V_{oc}$ )	-0.250%/°C
Temp. Coeff. of ( $P_{max}$ )	-0.290%/°C

## PACKING CONFIGURATION

Container	40' HQ
Pieces per Pallet	31
Pieces Per Container	496
Pallet Per Container	16

## ELECTRICAL CHARACTERISTICS

Current - Voltage & Power - Voltage Curve (CWT620-156TNB10)

