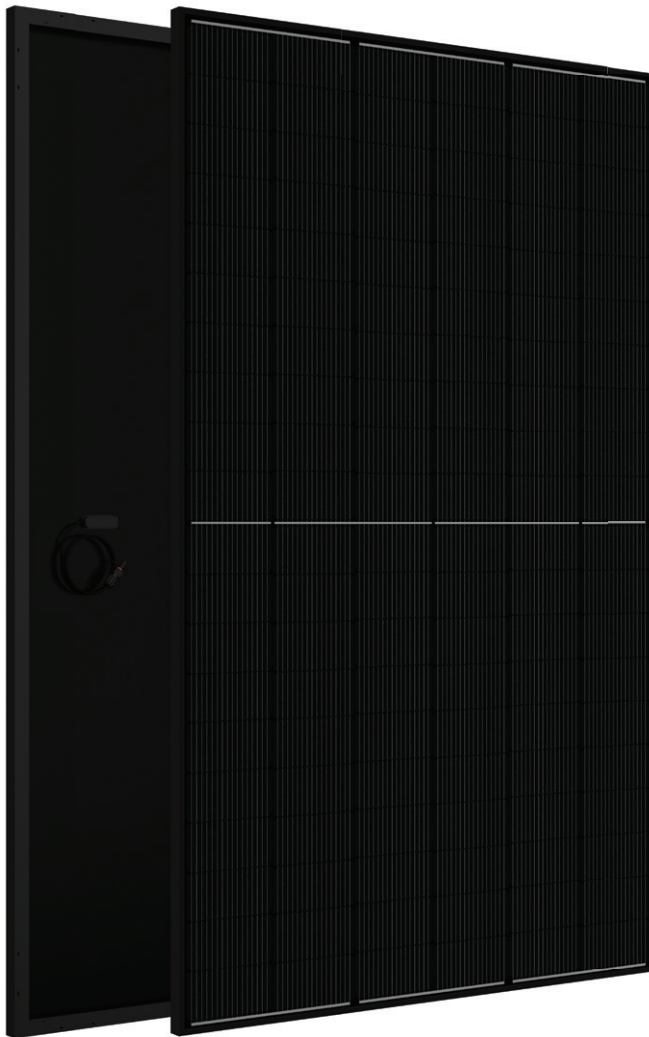
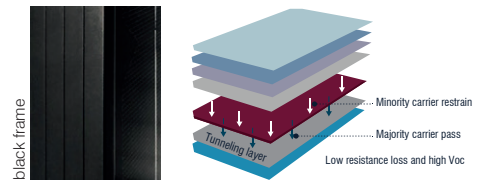


120_{cell}



Half-Cut Multi-BB BLACK SERIES



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.

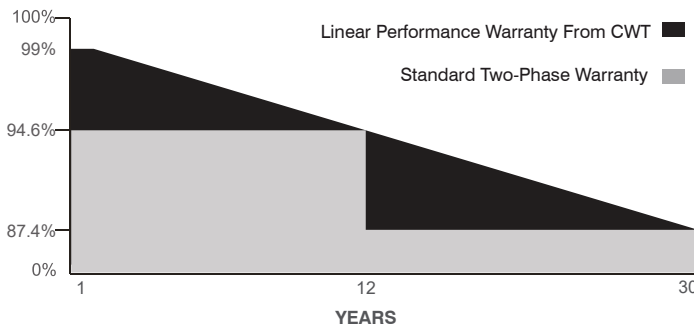


Outstanding Low Irradiation Glass

Outstanding panel performance even in weak light conditions.



Easy Installation



✓ 30 Years Performance Warranty

✓ 12 Years Product Warranty



120TNFB10

- Peak Power (Pmax)
- Module Efficiency
- Maximum Power Voltage (Vmp)
- Maximum Power Current (Imp)
- Open Circuit Voltage (Voc)
- Short Circuit Current (Isc)
- Power Tolerance
- Maximum System Voltage
- Operating Temperature
- Protection Class
- Maximum Series Fuse Rating
- MECHANICAL SPECIFICATION
- Cell Dimensions (mm)
- Cells per Module (pcs)
- Weight (kg)
- Panel Dimensions (mm)
- Max. Wind/Snow Load (Pa)
- Junction Box
- Junction Box Cable Length (mm)

CWT460 120TNFB10	CWT465 120TNFB10	CWT470 120TNFB10	CWT475 120TNFB10	CWT480 120TNFB10
460 Wp	465 Wp	470 Wp	475 Wp	480 Wp
21.25	21.45	21.71	21.94	22.17
35.26	35.46	35.66	35.86	36.06
13.05	13.12	13.19	13.25	13.32
41.90	42.10	42.30	42.50	42.70
13.86	13.93	14.00	14.08	14.14
Power Tolerance				
0~+5W				
Maximum System Voltage				
1500V DC				
Operating Temperature				
-40 ~ +85°C				
Protection Class				
Class II				
Maximum Series Fuse Rating				
25A				
Cell Dimensions (mm)				
182x91				
Cells per Module (pcs)				
120(6x20)				
Weight (kg)				
24.6				
Panel Dimensions (mm)				
1909x1134x35				
Max. Wind/Snow Load (Pa)				
2400/5400				
Junction Box				
IP68				
Junction Box Cable Length (mm)				
350-1600				

TEMPERATURE CHARACTERISTICS

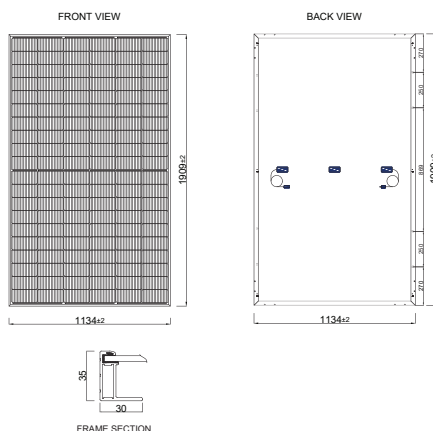
Temp. Coeff. of (Isc)	0.040%/°C
Temp. Coeff. of (Voc)	-0.260%/°C
Temp. Coeff. of (Pmax)	-0.30%/°C

PACKING CONFIGURATION

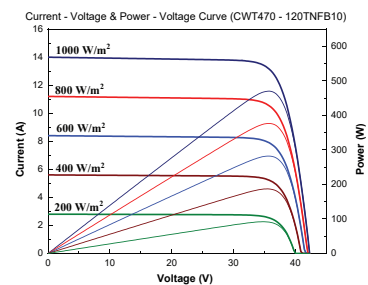
Container 40' GP

Pieces per Pallet	31
Pieces per Container	744
Pallets per Container	24

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.