

PRODUCT CHARACTERISTICS



Multiple Main Gate Technology

Better light utilization and current collection, effectively improve product power output and reliability.



Better Heat Spot Resistance

By optimizing circuit design and working current, better temperature coefficient and heat spot resistance are obtained.



Anti-pid Guarantee

The attenuation rate caused by PID phenomenon is minimized through battery production technology optimization and material control.



Adaptability to Harsh Environments

Third party certification through high salt spray and high ammonia corrosion test, suitable for high temperature and humidity, coastal, desert, lake and other harsh environment.



Super Mechanical Load

It can carry 5400Pa snow load
It can bear 2400Pa wind pressure



Excellent Product Materials

Excellent product material and process quality assurance



Linear Power Warranty

Linear attenuation of 0.55% per year for 25 years



±3% Positive Tolerance

±3% Positive Tolerance

450W SOLAR PANEL MONO-CRYSTALLINE



COMPREHENSIVE SYSTEM AND PRODUCT CERTIFICATION



IEC61215(2016), IEC61730(2016)

ISO 9001:2015 / ISO Quality Management System

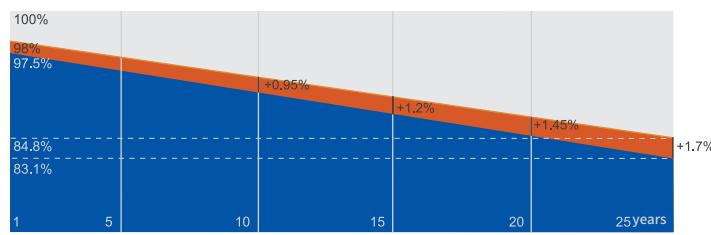
ISO 14001:2015 / Environmental Management System

ISO 45001: 2018 / International Occupational Health and

Safety Management System Certification

INDUSTRY-LEADING QUALITY ASSURANCE

Linear attenuation of 0.55% per year for 25 years



■ New linear power guarantee ■ Quasi linear power guarantee



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<https://www.bluecarbontech.com.cn/en/>
<https://bluecarbon.solar>

Office Location

Building A, International Fortune Center, Rizhao City, Shandong Province, China

Electrical Parameters Under STC

Solar Module Type: BCT-10M-120-450W

| | |
|--|-------|
| Maximum Power at STC (Pmax) [W] | 450 |
| Open-Circuit Voltage (Voc) [V] | 41.22 |
| Optimum Operating Voltage (Vmp) [V] | 36.60 |
| Short-Circuit Current (Isc) [A] | 13.40 |
| Optimum Operating Current (Imp) [A] | 12.30 |
| Wafer Efficiency[%] | 22.8 |
| Standard test conditions (STC) : irradiance 1000W/m ² , battery temperature 25°C, AM1.5, power tolerance: ±3% | |

Mechanical Parameter

| | |
|-----------------------------|---|
| Cell type | MONO-CRYSTALLINE |
| Number of Cells | 120(10×6×2) |
| Component Size | 1909±1mm×1134±1mm×35±0.5mm |
| Component Weight | 22.79kg |
| Front Glass | 3.2mm high permeability, anti-reflection coating tempered glass |
| Backboard | White |
| Component Frame | Anodized aluminium alloy |
| Junction Box | IP68,3 diodes |
| Connector | PV-XT1609Nxyz |
| Cable Cross-Sectional Area | 4mm ² (62930 IEC 131) |
| Cable Length | 300mm |
| Wind Pressure/Snow Pressure | 2400Pa/5400Pa |
| Packaging Information | 31 pcs/pallet |

Electrical Property Parameter

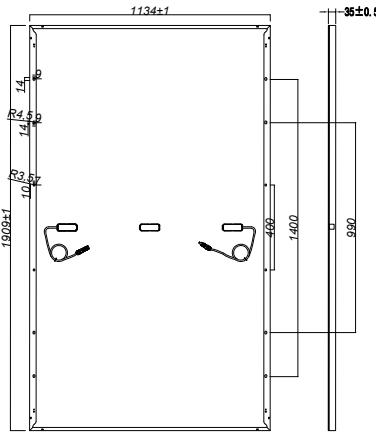
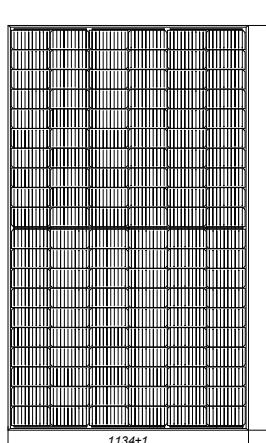
| | |
|----------------------------|-------------|
| Working Temperature | -40°C~+85°C |
| Maximum System Voltage | 1500V DC |
| Maximum Fuse Rated Current | 30A |
| Power Tolerance | ±3% |

Temperature Characteristic

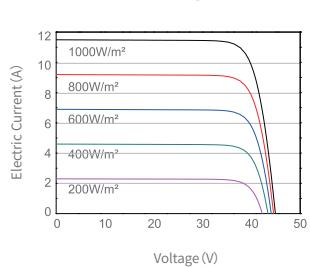
| | |
|--------------------------------------|------------|
| Temperature Coefficient (Pmax) | -0.34%/°C |
| Temperature Coefficient (Voc) | -0.27%/°C |
| Temperature Coefficient (Isc) | +0.045%/°C |
| Nominal Operating Temperature (NOTC) | 45±2°C |

Engineering Drawings

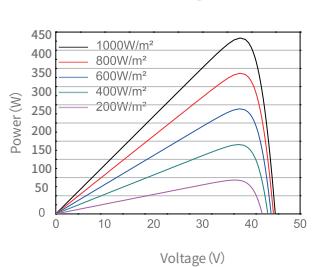
Characteristic Curve



Current Voltage Curve



Power Voltage Curve



* 25-year quality assurance; 25-year linear output power guarantee.

* With the technical progress and product update, the technical parameters of the components of Blue Carbon may differ from the technical parameters contained in this specification.

Blue Carbon has the right to adjust the technical parameters at any time without notifying the customer, and the final interpretation of the technical specification belongs to Blue Carbon.



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