Blue Carbon

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

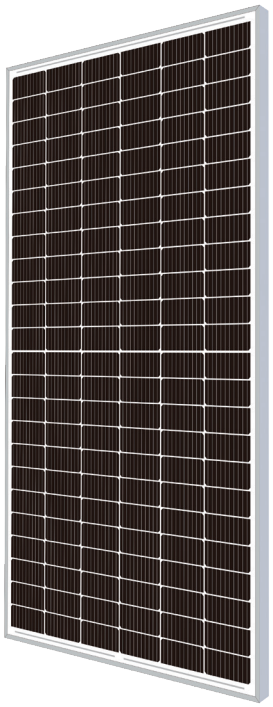
Linear attenuation of 0.55% per year for 25 years

±3% Positive Tolerance

±3% Positive Tolerance

550W

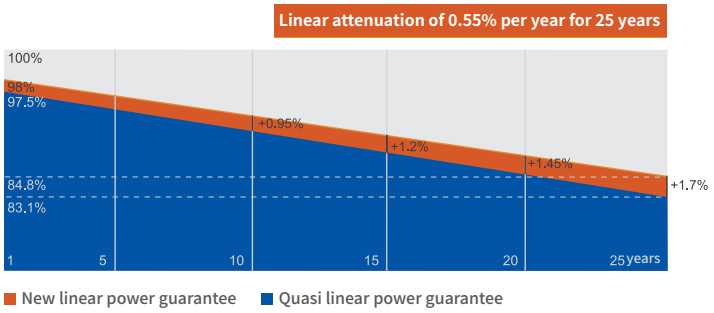
SOLAR PANEL MONO-CRYSTALLINE



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



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Office Location

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

Electrical Parameters Under STC

Solar Module Type：BCT-10M-144-550W	
Maximum Power at STC (Pmax) [W]	550
Open-Circuit Voltage (Voc) [V]	49.68
Optimum Operating Voltage (Vmp) [V]	44.14
Short-Circuit Current (Isc) [A]	13.50
Optimum Operating Current (Imp) [A]	12.46
Wafer Efficiency [%]	23.3
Standard test conditions (STC) : irradiance 1000W/m², battery temperature 25°C, AM=1.5, power tolerance: ±3%	

Electrical Parameters Under NMOT

Maximum Power at STC (Pmax) [W]	416.2
Open-Circuit Voltage (Voc) [V]	47.40
Optimum Operating Voltage (Vmp) [V]	39.55
Short-Circuit Current (Isc) [A]	10.97
Optimum Operating Current (Imp) [A]	10.52
Nominal operating temperature (NMOT) : irradiance 800W/m², ambient temperature 20°C, AM=1.5, wind speed: 1m/s	

Mechanical Parameter

Cell type	MONO-CRYSTALLINE
Number of Cells	144(12×6×2)
Component Size	2278±1mm×1134±1mm×35±0.5mm
Component Weight	27.2kg
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	4mm²(62930 IEC 131)
Cable Length	300mm
Wind Pressure/Snow Pressure	2400Pa/5400Pa
Packaging Information	31 pcs/pallet, 2pcs/set;620pcs/40HQ, 510pcs/40GP, 260pcs/20GP

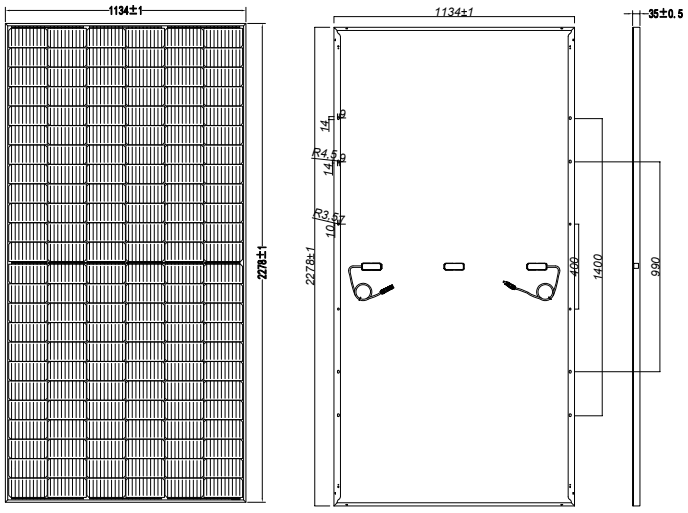
Electrical Property Parameter

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

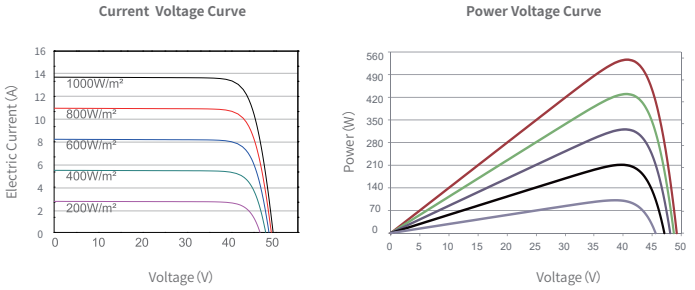
Temperature Characteristic

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



✱ 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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