# **Blue Carbon**

# **SOLAR PANEL MONO-CRYSTALLINE**

## 24V Series



#### **Multiple Main Gate Technology**

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



#### **Lossless Cut**

Advanced non-destructive cutting technology is applied to effectively reduce the risk of hidden cracks.



#### **Better Heat Spot Resistance**

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



#### **High Density Package**

Improve component conversion efficiency by reducing the spacing between cells.



#### **Anti-pid Guarantee**

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



#### **Excellent Product Materials**

Excellent product material and process quality assurance



#### **Super Mechanical Load**

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



#### **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.

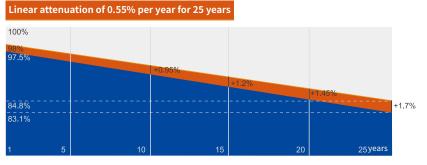
#### **COMPREHENSIVE SYSTEM** AND PRODUCT CERTIFICATION

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**



■ New linear power guarantee ■ Quasi linear power guarantee

### **Electrical Parameters**

Solar Module Type	BCT170M-24	BCT180M-24	BCT190M-24	BCT200M-24	BCT210M-24	BCT220M-24	BCT230M-24	BCT240M-24	BCT250M-24 I	BCT260M-24	BCT270M-24	BCT280M-24	BCT290M-24	BCT300M-24	BCT300M-18	BCT310M-24	BCT320M-24	BCT330M-24	BCT340M-24	BCT350M-24	BCT360M-24	BCT370M-24	BCT380M-24 E	3CT390M-24	BCT400M-24	BCT410M-24	BCT420M-24	BCT430M-24	BCT440M-24
Maximum Power at STC (Pmax) [W]	170W	180W	190W	200W	210W	220W	230W	240W	250W	260W	270W	280W	290W	300W	300W	310W	320W	330W	340W	350W	360W	370W	380W	390W	400W	410W	420W	430W	440W
Optimum Operating Voltage (Vmp) [V]	42.1V	42.1V	42.1V	42.1V	42.1V	42.1V	35.09V	42.1V	42.1V	42.1V	42.1V	42.1V	42.1V	42.1V															
Optimum Operating Current (Imp) [A]	4.04A	4.28A	4.51A	4.75A	4.91A	5.23A	5.46A	5.7A	5.94A	6.17A	6.41A	6.65A	6.88A	7.13A	8.55A	7.36A	7.6A	7.84A	8.08A	7.6A	8.55A	8.79A	9.02A	9.26A	9.5A	9.74A	9.97A	10.21A	10.45A
Open-Circuit Voltage (Voc) [V]	48.96V	48.96V	48.96V	48.96V	48.96V	48.96V	40.8V	48.96V	48.96V	48.96V	48.96V	48.96V	48.96V	48.96V															
Short-Circuit Current (Isc) [A]	4.28A	4.65A	4.91A	5.17A	5.43A	5.69A	5.94A	6.2A	6.46A	6.72A	6.98A	7.24A	7.49A	7.76A	9.31A	8.01A	8.27A	8.53A	8.8A	8.27A	9.31A	9.57A	9.82A	10.08A	10.34A	10.6A	10.85A	11.11A	11.38A
Component Efficiency[%]	18.7%	19.8%	18.2%	19.2%	20.1%	18.7%	19.6%	20.4%	19.1%	19.8%	20.6%	19.3%	20%	20.7%	20.5%	19.3%	20%	20.6%	19.7%	20.2%	20.8%	19.3%	19.8%	20.4%	20.9%	20%	20.5%	21%	21.5%

-0.34%/°C Temperature Coefficient (Pmax)

Temperature Coefficient (Voc) -0.27%/°C

Temperature Coefficient (Tsc) +0.045%/°C

45±2°C

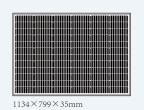
1000V DC Maximum System Voltage

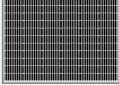
±3% Power Tolerance

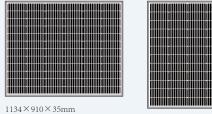
### **Specification**

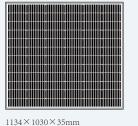
Solar Module Type	BCT170M-24 BCT180M-24	BCT190M-24 BCT200M-24 BCT210M-24	BCT220M-24 BCT230M-24 BCT240M-24	BCT250M-24 BCT260M-24 BCT270M-24	BCT280M-24 BCT290M-24	BCT300M-24 BCT300M-18	BCT310M-24 BCT320M-24 BCT330M-24	BCT340M-24 BCT350M-24 BCT360M-24	BCT370M-24 BCT380M-24 BCT390M-24 BCT400M-24	BCT410M-24 BCT420M-24 BCT430M-24 BCT440M-24
Component Size	799×1134×35mm	910×1134×35mm	1030×1134×35mm	1166×1134×35mm	1290×1	134×35mm	1410×1134×35mm	1539×1134×35mm	1722×1134×30mm	1830×1134×30mm
Number of Cells	72	72	72	72	72	60	72	72	72	72
Cells Arrangement	12×6	12×6	12×6	12×6	12×6	10×6	12×6	12×6	12×6	12×6
Component Weight	10.02kg	11.4kg	12.9kg	14.26kg	1	6.2kg	18.35kg	15.35kg	21.6kg	23.1kg
Package size	815×1150×90mm/ <sub>2pcs</sub>	925×1150×90mm/2pcs	1045×1150×90mm/2pcs	1181×1150×90mm/2pcs	1305×1150	0×90mm/2pcs	1425×1150×90mm/2pcs	1554×1150×90mm/2pcs	1737×1150×90mm/2pcs	1845×1150×90mm/2pcs

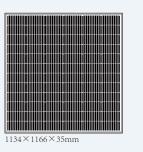
# **Engineering Drawings**

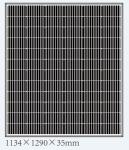


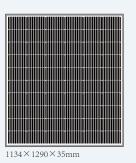


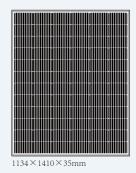


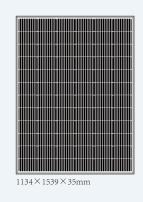


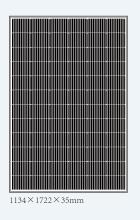


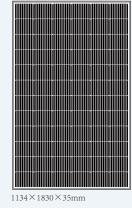












<sup>\* 12-</sup>year quality assurance; 25-year linear output power guarantee.

<sup>\*</sup> 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.