

SOLAR PANEL MONO-CRYSTALLINE

24V Series



Multiple Main Gate Technology

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



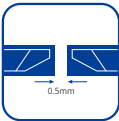
Lossless Cut

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.

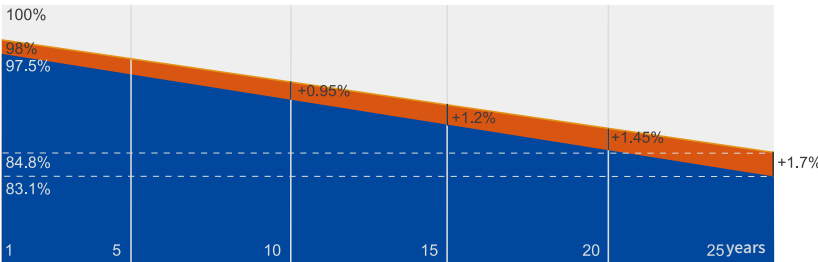
COMPREHENSIVE SYSTEM AND PRODUCT CERTIFICATION

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

Linear attenuation of 0.55% per year for 25 years



■ New linear power guarantee ■ Quasi linear power guarantee



Website: www.bluecarbontech.com
Telephone: 400-061-7071

NO.C1 Technology Innovation Center, High-Tech Zone, Rizhao, Shandong Province, China

Electrical Parameters

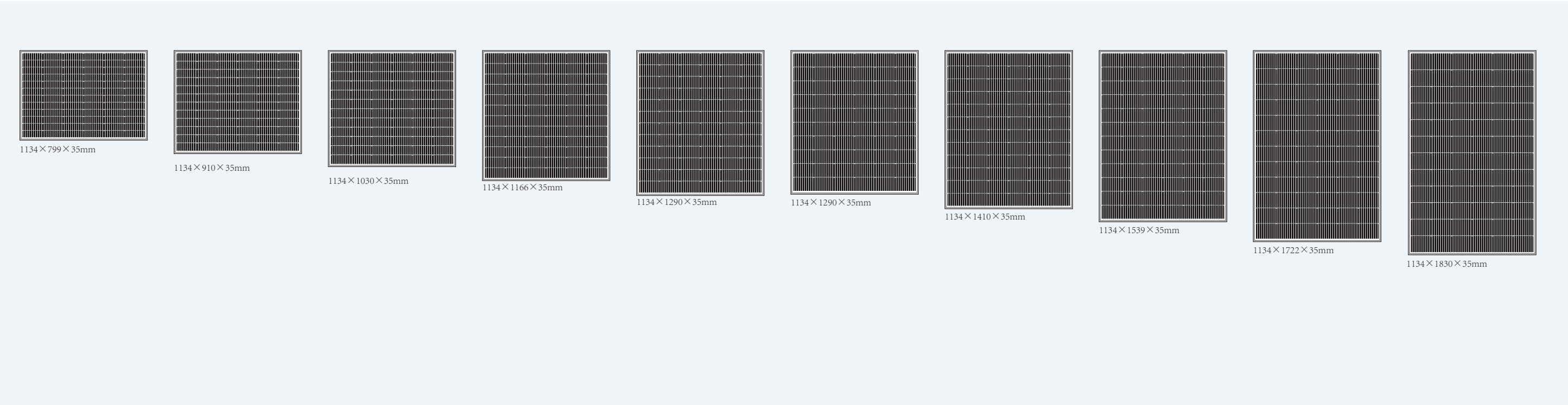
Solar Module Type	BCT170M-24	BCT180M-24	BCT190M-24	BCT200M-24	BCT210M-24	BCT220M-24	BCT230M-24	BCT240M-24	BCT250M-24	BCT260M-24	BCT270M-24	BCT280M-24	BCT290M-24	BCT300M-24	BCT300M-18	BCT310M-24	BCT320M-24	BCT330M-24	BCT340M-24	BCT350M-24	BCT360M-24	BCT370M-24	BCT380M-24	BCT390M-24	BCT400M-24	BCT410M-24	BCT420M-24	BCT430M-24	BCT440M-24
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	42.1V	42.1V	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	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	48.96V	48.96V	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	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%
Temperature Coefficient (Pmax)																-0.34%/°C													
Temperature Coefficient (Voc)																-0.27%/°C													
Temperature Coefficient (Tsc)																+0.045%/°C													
NOCT																45±2°C													
Maximum System Voltage																1000V DC													
Power Tolerance																±3%													

* Standard test conditions (STC) : irradiance 1000W/m², battery temperature 25°C, AM1.5, power tolerance: ±3%

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			1290×1134×35mm			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			16.2kg			18.35kg			15.35kg			21.6kg			23.1kg					
Package size	815×1150×90mm/2pcs		925×1150×90mm/2pcs			1045×1150×90mm/2pcs			1181×1150×90mm/2pcs			1305×1150×90mm/2pcs			1425×1150×90mm/2pcs			1554×1150×90mm/2pcs			1737×1150×90mm/2pcs			1845×1150×90mm/2pcs					

Engineering Drawings



* 12-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.

