

# Photovoltaic Module

## Monocrystalline

### 144Cell 435W-455W

#### Quality and Safety

- \*Rigorous quality control meeting the highest international standards
- \*High-transmissivity low-iron tempered glass, strong aluminium frame Using UV-resistant silicon
- \*ISO 9001:2008 、 ISO 14001:2004 and OHSAS18001
- \*IEC61215,IEC61730,Safety Class II,conformity to CE

#### Features

- \*Aesthetic appearance with excellent efficiency based on innovative photovoltaic technologies
- \*High quality,strong aluminium frame,passing mechanical load testing 5400 Pa and wind pressure 2400Pa

#### Warranties

- \*12 years limited product warranty
- \*12 years at90% of the minimal rated power output
- \*25 years at80% of the minimal rated power output

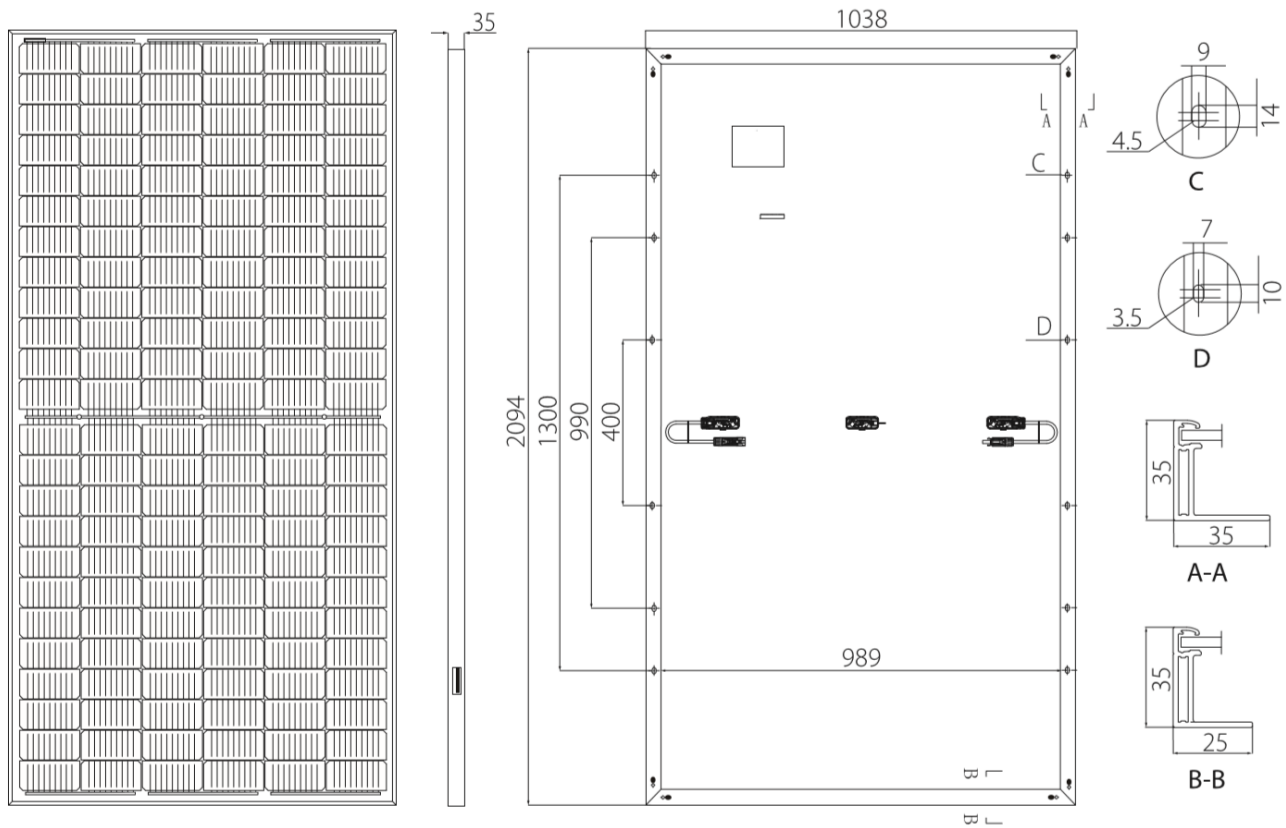
#### Certificates



#### Electrical Characteristics

Model	CNCB435W72H	CNCB440W72H	CNCB445W72H	CNCB450W72H	CNCB455W72H
Maximum Power at STC (Pmax)	435W	440W	445W	450W	455W
Optimum Operating Voltage (Vmp)	40.9V	41.1V	41.3V	41.5V	41.7V
Optimum Operating Current (Imp)	10.64A	10.71A	10.78A	10.85A	10.92A
Open-Circuit Voltage (Voc)	48.7V	48.9V	49.1V	49.3V	49.5V
Short-Circuit Current (Isc)	11.39A	11.46A	11.53A	11.60A	11.66A
Solar Module Efficiency (%)	20.0	20.2	20.5	20.7	20.9
Operating Temperature	-40to85℃				
Maximum System Voltage	DC1000/1500V				
Maximum Series Fuse Rating	20A				
Power Tolerance	+/-3%				
STC:Irradiance 1000W/m <sup>2</sup> ,Modules Temperature 25℃,AM=1.5					

# Engineering Drawings

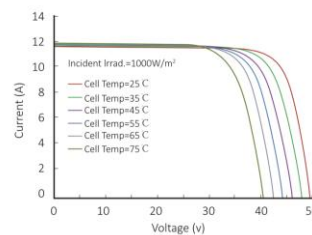


## Mechanical Characteristics

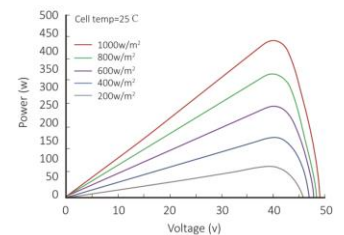
Solar cell	Mono-Crystalline 166*83mm
No. of cells	144 (6x12+6x12)
Dimensions	2094mm*1038mm*35mm
Weight	23.5kg
Front glass	3.2mm tempered glass
Frame	Anodized aluminium alloy
Junction box	PV-*****
Connector	Plug and socket
Output cables	PV 4.0mm <sup>2</sup>
1*20'	300 pcs
1*40'	600 pcs
1*40'HQ	660 pcs

## IV-Curves

Current-Voltage Curve



Power-Voltage Curve



## Temperature Coefficient

Nominal Operating Cell Temperature (NOCT)	45°C ± 2°C
Temperature Coefficient of P <sub>max</sub>	-0.39%/°C
Temperature Coefficient of V <sub>OC</sub>	-0.29%/°C
Temperature Coefficient of I <sub>SC</sub>	+0.049%/°C