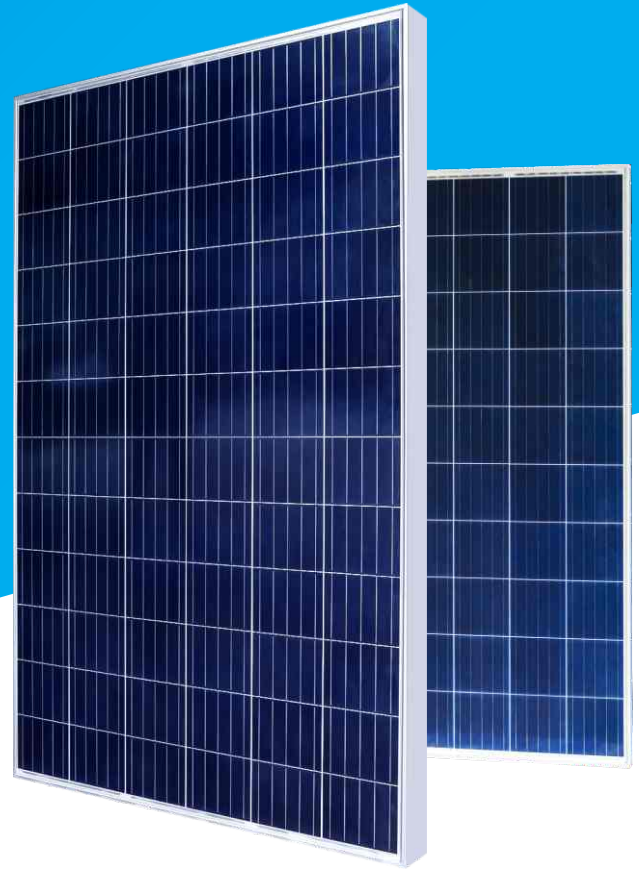


# ESS

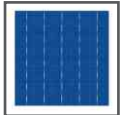


ETEMAD SUN SOLAR PRODUCTION COMPANY

## ESSPC6 X 12P- 5BB 330 Watt



### Key Features



#### 5 Busbar Solar Cell

Stronger current collection ability, Special circuit design with much lower hot spot temperature;



#### PID Resistant

Excellent PID resistance at 96 hours (85°C/85%) test, and also can be improved to meet higher standards for the particularly harsh environment;



#### Anti-Crack

Excellent anti-microcracking performance with more balanced interior stress;



#### Module efficiency up to 17.2%

Half cell structure brings low resistance characteristic, higher lifetime generating capacity, simultaneously lower annual power attenuation;



#### Low-Light Performance

Excellent power generation performance under Low-Light condition due to multi busbar; better shading response benefit from half cell module;

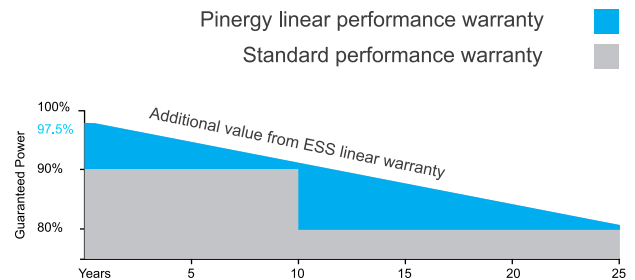


#### Strength and Durability

Certified for 5400Pa snow and 2400Pa Wind loads test;

### Linear Performance Warranty

10 Years Product Warranty · 25 Years Linear Power Warranty



### Certifications

- IEC 61215, IEC 61730, IEC61646, IEC62108, CE
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



## Electrical Specifications

Module Type: ESSPC6x10P-5BB-270W

Module Type	330W
Testing Condition	STC
Max. Power (Pmax/W)	330W
Voltage at Max. Power (Vmp/V)	37.87V
Current at Max. Power (Imp/A)	8.72A
Open circuit voltage (Voc/V)	45.6V
Short circuit current (Isc/A)	9.06 A
Module efficiency (%)	17.3%
Power Tolerance (W)	(STC): Irradiance 1000W/m <sup>2</sup> , Cell Temperature 25°C, AM1.5 3 ~ 5

Standard Test Condition

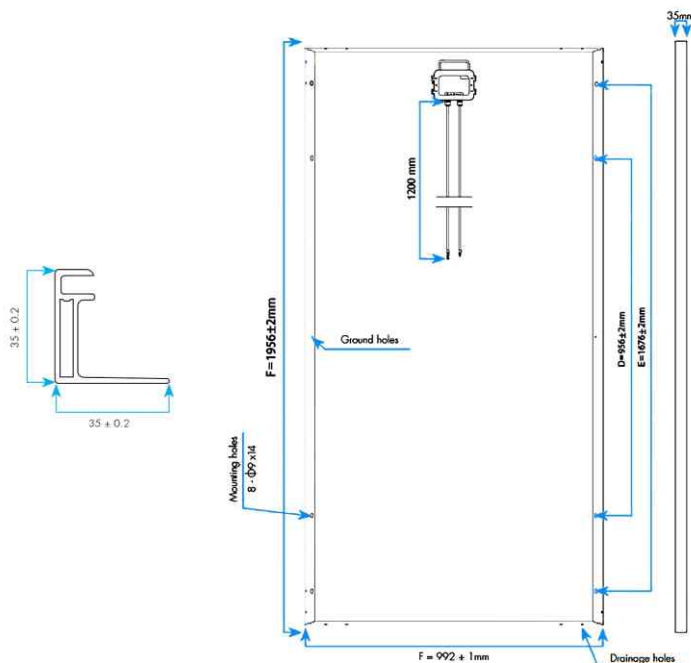
## Mechanical Specifications

Cell Type	5BB-Poly-(157×157)mm
No. of Cells	72 (6×12)
Dimension	1956x992x35mm
Weight	22kg
Glass	3.2mm, Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	Ip67&68, 3 diodes
Output Cables	4mm <sup>2</sup> , Length 1200mm or customized
Connector type	MC4 compatible

## Packaging Configurations

Per Pallet	25 pcs
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## Engineering Drawings



## Temperature Characteristics

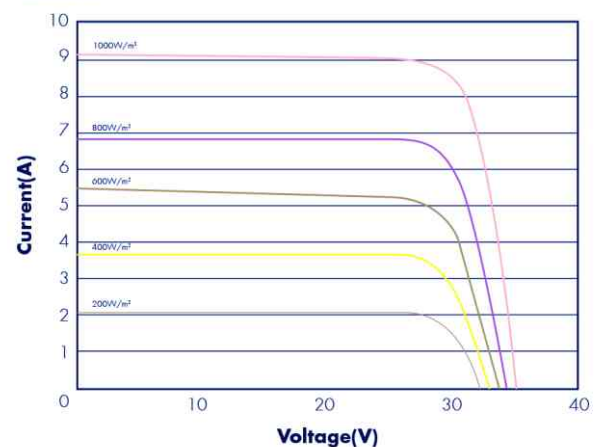
NOCT Temperature	45°C ±2°C
Temperature Coefficient (Pmax)	-0.42%/°C
Temperature Coefficient (Voc)	-0.33%/°C
Temperature Coefficient (Isc)	0.05%/°C

## Maximum Ratings

Maximum system voltage (IEC)	1000V DC
Snow / Wind	5400Pa / 2400Pa
Operating Temperature	-40°C ~ +85°C
Maximum series fuse rating	15A

## Curve & Temperature Dependence

### I-V CURVES



I - V Curves of Etemad Sun Solar Module ESSPC 6x12p - 5BB - 320 W at Different Light Power