

ESSPC6 X 12M- 5BB 410 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 20.7%

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;

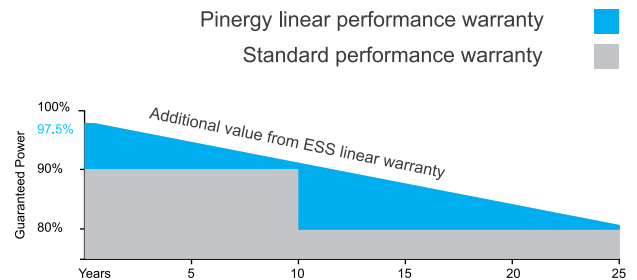


Strength and Durability

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: ESSPC6x12M-5BB-410W

Module Type	410W
Testing Condition	STC
Max. Power (Pmax/W)	410W
Voltage at Max. Power (Vmp/V)	41.84V
Current at Max. Power (Imp/A)	9.79A
Open circuit voltage (Voc/V)	48.2V
Short circuit current (Isc/A)	10.2 A
Module efficiency (%)	20.7%
Power Tolerance (W)	(STC): Irradiance 1000W/m ² , Cell Temperature 25°C, AM1.5 0 ~ 3

Standard Test Condition

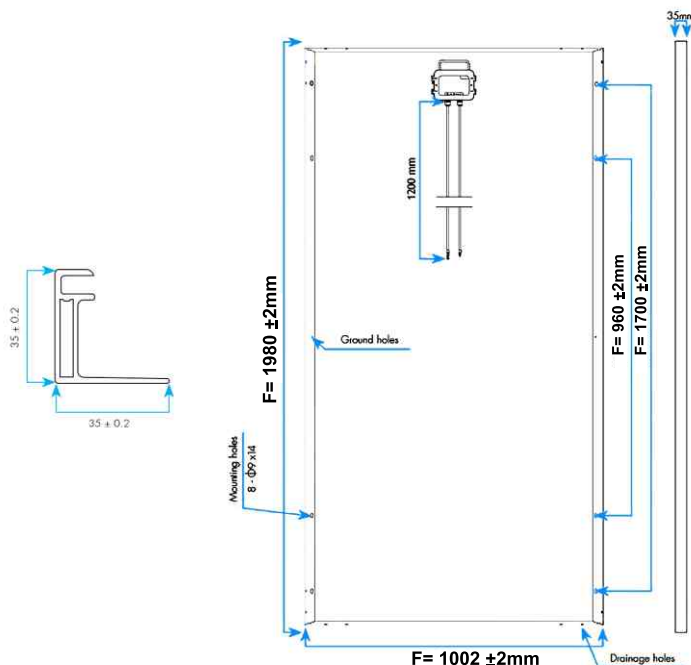
Mechanical Specifications

Cell Type	5BB-Mono-(158.75×158.75)mm
No. of Cells	72 (6×12)
Dimension	1980x1002x35mm(±2)
Weight	22.5kg
Glass	3.2mm, Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	Ip67&68, 3 diodes
Output Cables	4mm ² , Length 1200mm or customized
Connector type	MC4 compatible

Packaging Configurations

Per Pallet	25 pcs
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Engineering Drawings



Temperature Characteristics

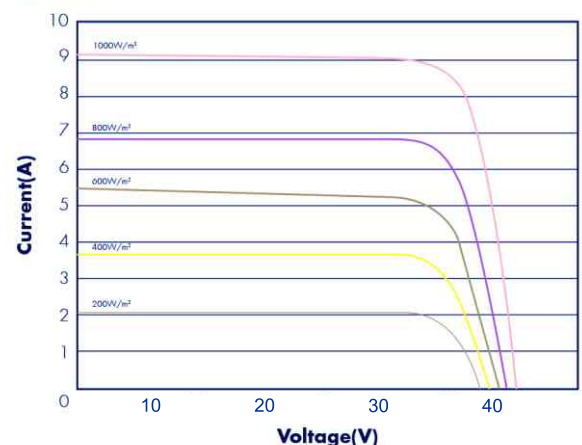
NOCT Temperature	45°C ±2°C
Temperature Coefficient (Pmax)	-0.39%/°C
Temperature Coefficient (Voc)	-0.35%/°C
Temperature Coefficient (Isc)	0.05%/°C

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 6x12M - 5BB - 410 W at Different Light Power