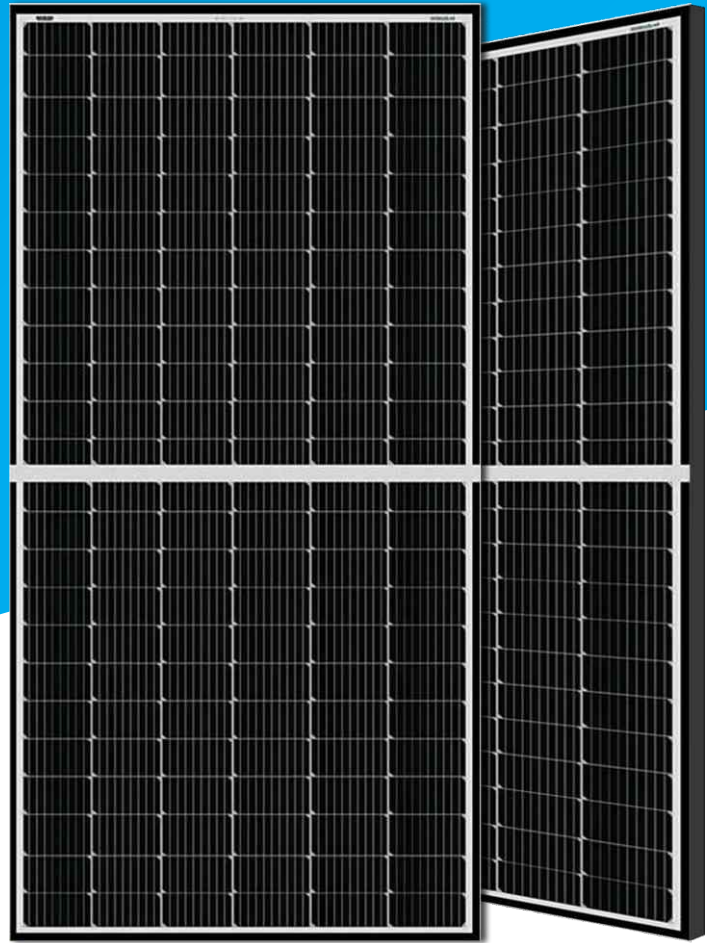


# ESS

ETEMAD SUN SOLAR PRODUCTION COMPANY

## ESSPC-M6M144 (6\*24)- 440W



### Key Features



#### 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 21%

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;

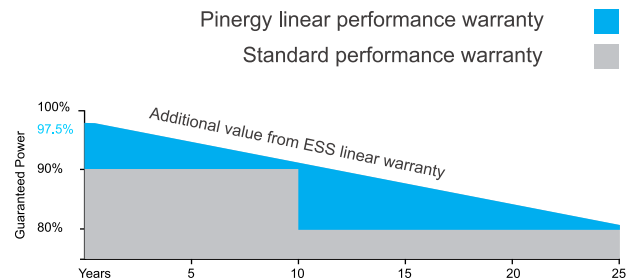


#### Strength and Durability

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: ESSPC-M6M144(6\*24)- 440W

Module Type	440W
Testing Condition	STC
Max. Power (Pmax/W)	440W
Voltage at Max. Power (Vmp/V)	41.09V
Current at Max. Power (Imp/A)	10.71A
Open circuit voltage (Voc/V)	48.90V
Short circuit current (Isc/A)	11.46 A
Module efficiency (%)	21%
Power Tolerance (W)	(STC): Irradiance 1000W/m <sup>2</sup> , Cell Temperature 25°C, AM1.5 0~+3%

Standard Test Condition

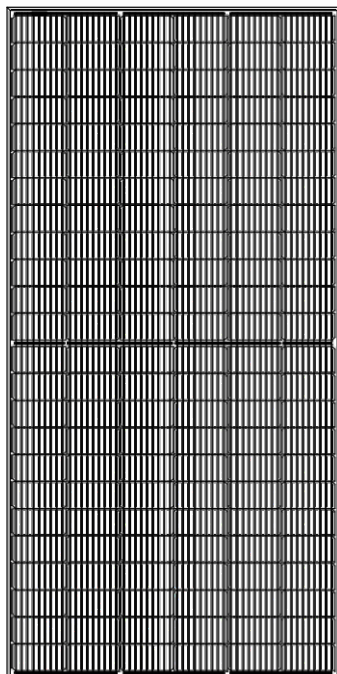
## Mechanical Specifications

Cell Type	Mono Crystalline -(166×83)mm
No. of Cells	144 (6×24)
Dimension	2094x1038x30mm
Weight	23.5kg
Glass	3.2mm, Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	Ip67, 3 diodes
Output Cables	4mm <sup>2</sup>
Connector type	Mc4 compatible

## Packaging Configurations

Per Pallet	25 pcs
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## Engineering Drawings



## Temperature Characteristics

NOCT Temperature	44°C ±2°C
Temperature Coefficient (Pmax)	-0.35%/°C
Temperature Coefficient (Voc)	-0.27%/°C
Temperature Coefficient (Isc)	0.05%/°C

## Maximum Ratings

Maximum system voltage (IEC)	1500V DC
Snow / Wind	5400Pa / 2400Pa
Operating Temperature	-40°C ~ +85°C
Maximum series fuse rating	15A

