

# 18 Series

## MBB Half Cell Mono

### 440-460W



#### Products Features



#### Half-cut & MBB technology

Lower internal current, lower power loss



#### Excellent weak light performance

More power output in weak light condition



#### Lower the risk of hot spot

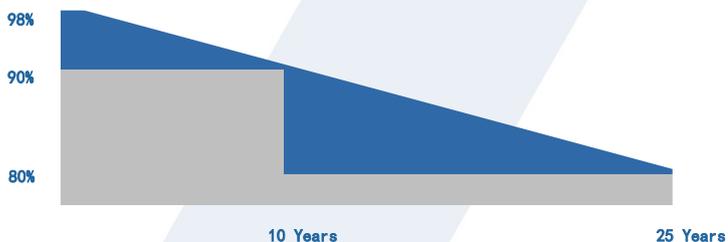
Special design with lower hot spot temperature



#### Lower LCOE

Higher Power Generation, Lower LCOE.

#### Warranty



**15 YEARS** Product quality and process guarantee

**25 YEARS** Linear power guarantee

**2%** First year power degradation

**0.55%** Annual degradation over 25 years

#### System

- IEC 61215, IEC61730
- ISO9001: Quality Management System
- ISO14001: Environment Management System
- ISO45001: Occupational Health and Safety Management System



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## Electrical Characteristics

Maximum Power (P <sub>max</sub> /W)	440	445	450	455	460
Open Circuit Voltage (V <sub>oc</sub> /V)	41.18	41.27	41.46	41.65	41.84
Short Circuit Current (I <sub>sc</sub> /A)	13.37	13.42	13.47	13.54	13.6
Voltage at Maximum Power (V <sub>mpp</sub> /V)	34.31	34.46	34.62	34.78	34.94
Current at Maximum Power (I <sub>mpp</sub> /A)	12.83	12.92	13.01	13.09	13.17
Module Efficiency (η%)	20.4	20.6	20.9	21.1	21.3

## Temperature Ratings

Temperature Coefficient of P<sub>max</sub> -0.35%/°C

Temperature Coefficient of V<sub>oc</sub> -0.27%/°C

Temperature Coefficient of I<sub>sc</sub> +0.05%/°C

Working Temperature -40°C-85°C

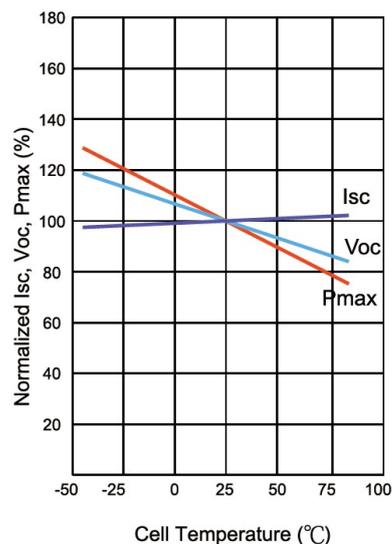
Normal Module Operating Temperature (NMOT) 45±2°C

## Mechanical Characteristics

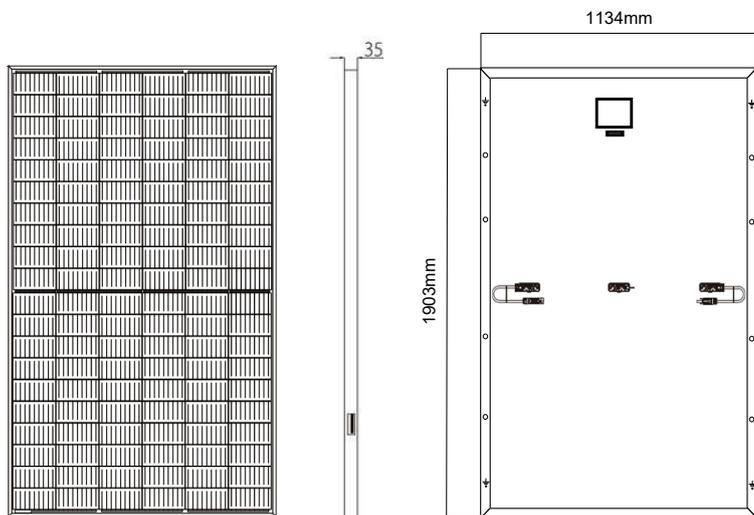
Cell type	Monocrystalline silicon 182mm
Number of cells	120(6*20)
Dimensions	1903*1134*35mm
Weight	24kg
Cables	4mm <sup>2</sup> , 300mm OR customized length
Junction Box	IP68 Rated
Maximum System Voltage	1500VDC
Glass	3.2mm Tempered glass
Frame	Anodized aluminum ally
Connectors	MC4 compatibility
Packing	31pcs/Pallet

## I-V Curve

Temperature Dependence of I<sub>sc</sub>, V<sub>oc</sub>, P<sub>max</sub>



## Design



Current-Voltage & Power-Voltage Curves

