



# AESOLAR

since 2003



## AURORA

**HIGH** ENERGY YIELD  
RELIABILITY  
DURABILITY

**30**  
years  
Performance  
Guarantee

**15**  
years  
Product  
Guarantee

### 485W-505W

### AE MD-132E Series

MONO-CRYSTALLINE PV MODULES  
HALF-CUT CELLS • MONO-FACIAL • BLACK

[www.ae-solar.com](http://www.ae-solar.com)



HALF  
CELLS



CELL  
SIZE



LID  
RESISTANT



PID  
RESISTANT



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT

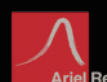


HIGHLY STABLE  
AND TOUGH



IEC 61215  
IEC 61730  
Regular Production Surveillance  
Type Tested and Monitored

IEC 62716 (Ammonia corrosion)  
IEC 61701 (Salt mist corrosion)  
IEC 60068 (Sand and dust)  
IEC 62804 (PID resistance)



# AE MD-132E Series 485W-505W



MONO-CRYSTALLINE PV MODULES  
HALF-CUT CELLS • MONO-FACIAL • BLACK

## Mechanical and design specification

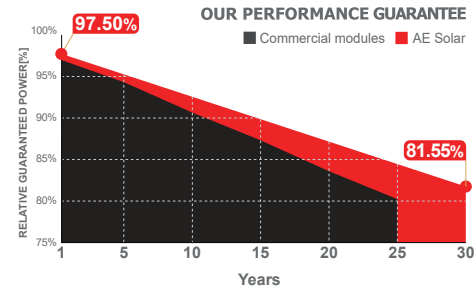
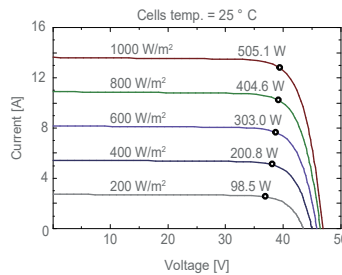
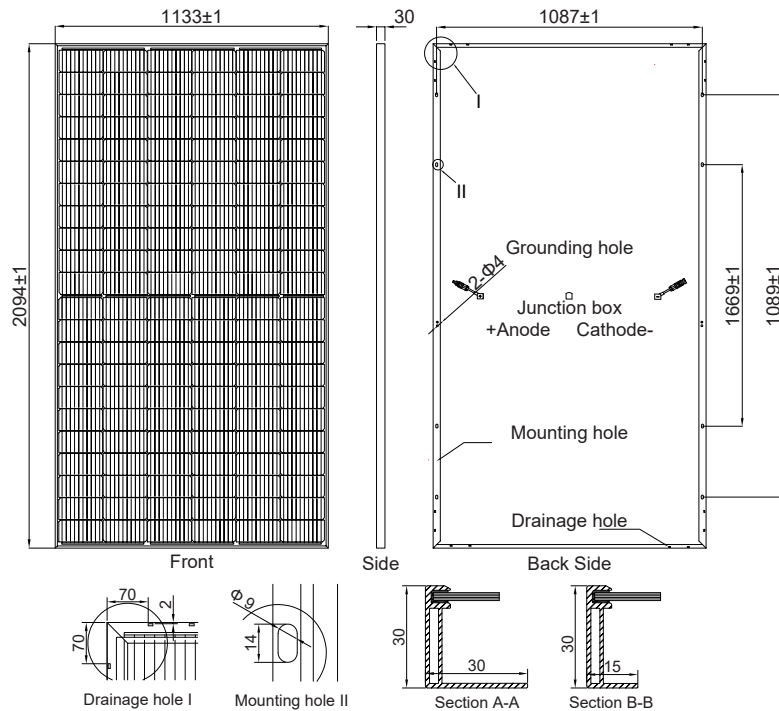
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	132
Glass	3.2 mm, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	EVA-side Black, Rear-side White Backsheet
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm <sup>2</sup> , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2094 mm x 1133 mm x 30 mm
Weight	24.5 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa/ 244 kg/ m <sup>2</sup>
Mechanical load	5400 Pa/ 550 kg/ m <sup>2</sup>

## Packaging information

Packaging configuration	72 pcs / double pallets
Loading capacity	792 pcs / 40 HQ
Size / Pallet	2125 mm x 1140 mm x 2490 mm
Weight	1842 kg / double pallets

## Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp. coefficient of P <sub>max</sub>	(%/°C)	-0.35
Temp. coefficient of V <sub>oc</sub>	(%/°C)	-0.275
Temp. coefficient of I <sub>sc</sub>	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



## Electrical specifications (STC\*): AE485MD-132E AE490MD-132E AE495MD-132E AE500MD-132E AE505MD-132E

Parameter	Symbol	AE485MD-132E	AE490MD-132E	AE495MD-132E	AE500MD-132E	AE505MD-132E
Nominal Max. Power	P <sub>max</sub> (Wp)	485	490	495	500	505
Maximum operating voltage	V <sub>MPP</sub> (V)	38.31	38.55	38.79	39.03	39.27
Maximum operating current	I <sub>MPP</sub> (A)	12.66	12.71	12.76	12.81	12.86
Open-circuit voltage	V <sub>oc</sub> (V)	45.75	46.05	46.34	46.64	46.93
Short-circuit current	I <sub>sc</sub> (A)	13.42	13.47	13.52	13.57	13.62
Module efficiency	η (%)	20.44	20.65	20.86	21.07	21.29
Power tolerance	(W)			0~+5		
Maximum system Voltage	(V)			1500		
Maximum series fuse rating	(A)			25		

\*STC: Standard test conditions (Irradiance 1000 W/m<sup>2</sup>, Cell temperature 25°C and air mass of AM1.5)

## Electrical specifications (NMOT\*): AE485MD-132E AE490MD-132E AE495MD-132E AE500MD-132E AE505MD-132E

Parameter	Symbol	AE485MD-132E	AE490MD-132E	AE495MD-132E	AE500MD-132E	AE505MD-132E
Nominal Max. Power	P <sub>max</sub> (Wp)	363	366	370	373	377
Maximum operating voltage	V <sub>MPP</sub> (V)	35.80	36.00	36.20	36.40	36.60
Maximum operating current	I <sub>MPP</sub> (A)	10.13	10.17	10.21	10.25	10.29
Open-circuit voltage	V <sub>oc</sub> (V)	43.00	43.20	43.40	43.60	43.80
Short-circuit current	I <sub>sc</sub> (A)	10.74	10.78	10.82	10.86	10.90

\*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m<sup>2</sup>, Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

The specifications and characteristics contained in this datasheet may deviate slightly from our actual products due to the product developments and uncertainty of measurement devices. The specifications included in the datasheet are subject to change without prior notice.

