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485W-505W AEMD-132E Series

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

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Ver. 24.1.1



HALF CELLS



CELL SIZE





RESISTANT





SALT CORROSION RESISTANT



SAND RESISTANT



AMMONIA



HIGHLY STABLE AND TOUGH













AE MD-132E Series 485W-505W





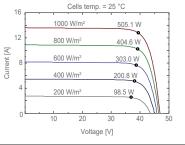
Mechanical	and design specification
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	132
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	EVA-side Black, Rear-side White Backsheet
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2094 mm x 1133 m x 30 mm
Weight	24.5 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa or 244 kg/m²
Snow load	5400 Pa or 550 kg/m²

	1133±1	30	1086±1
2094±1	1133±1	30	Grounding hole Junction box +Anode Cathod Mounting hole
		a a	Drainage hole -
<u>. </u>	Front	Side	Back Side
	70 0		

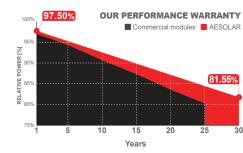
Mounting hole II

Packaging information					
Packaging configuration	36 pcs / pallet				
Loading capacity	792 pcs / 40 HQ				
Size / Pallet	2125 mm x 1140 mm x 1245 mm				
Weight	921 kg / pallet				

Temperature ratings					
Operating temperature	(°C)	-40 to +85			
Temp.coefficient of P _{max}	(%/°C)	-0.35			
Temp.coefficient of Voc	(%/°C)	-0.275			
Temp.coefficient of I _{sc}	(%/°C)	0.045			
Nom. operating temp. NOCT	(°C)	45 ± 2			



Drainage hole I



30

Section A-A

Cathode-

Section B-B

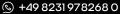
Electrical specifications (STC*):		AE485MD-132E	AE490MD-132E	AE495MD-132E	AE500MD-132E	AE505MD-132E
Nominal Max. Power	P _{max} (Wp)	485	490	495	500	505
Maximum operating voltage	$V_{MPP}(V)$	38.31	38.55	38.79	39.03	39.27
Maximum operating current	I _{MPP} (A)	12.66	12.71	12.76	12.81	12.86
Open-circuit voltage	V _{oc} (V)	45.75	46.05	46.34	46.64	46.93
Short-circuit current	I _{sc} (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/m², Cell temperature 25°C and air mass of AM1.5), measurement tolerance Pmax: ±3%

Electrical specifications (NMOT*):		AE485MD-132E	AE490MD-132E	AE495MD-132E	AE500MD-132E	AE505MD-132E
Nominal Max. Power	P _{max} (Wp)	363	366	370	373	377
Maximum operating voltage	V _{MPP} (V)	35.80	36.00	36.20	36.40	36.60
Maximum operating current	I _{MPP} (A)	10.13	10.17	10.21	10.25	10.29
Open-circuit voltage	V _{oc} (V)	43.00	43.20	43.40	43.60	43.80
Short-circuit current	I _{sc} (A)	10.74	10.78	10.82	10.86	10.90

^{*}NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², 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



sales@ae-solar.com

