

Deutsche
Qualität
Garantiert



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD RELIABILITY DURABILITY

30
years
Performance
Warranty

15
years
Product
Warranty

395W-415W

AE MD-108 Series

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

www.ae-solar.com

Ver. 24.1.1

108

HALF
CELLS

**182
mm**

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

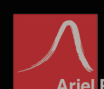


HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111251295

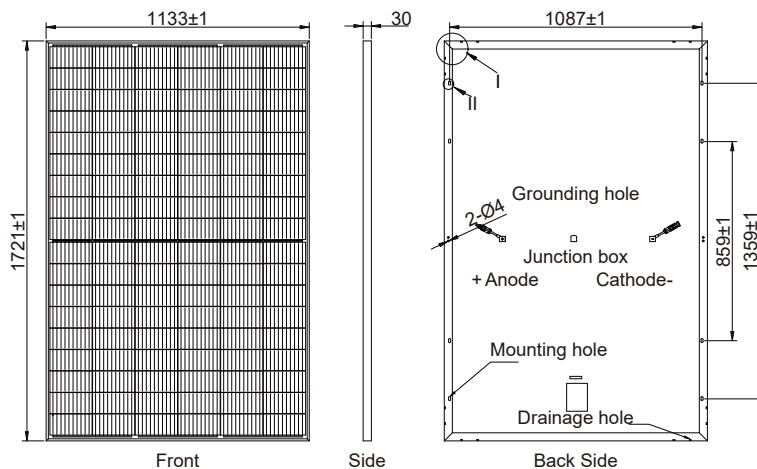
IEC 62716 (Ammonia corrosion)
IEC 61701 (Salt mist corrosion)
IEC 60068 (Sand and dust)
IEC 62804 (PID resistance)



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

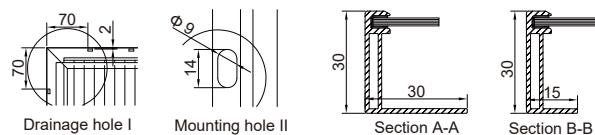
Mechanical and design specification

Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	108
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	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	1721 mm x 1133 mm x 30 mm
Weight	20.3 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa or 244 kg/m ²
Snow load	5400 Pa or 550 kg/m ²



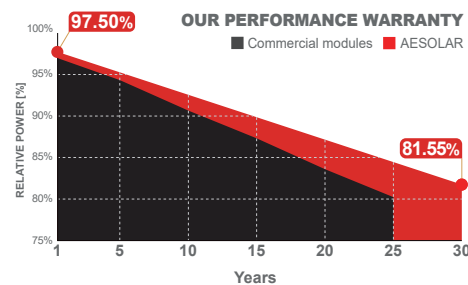
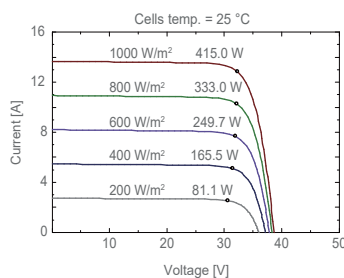
Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	936 pcs / 40 HQ
Size / Pallet	1755 mm x 1140 mm x 1245 mm
Weight	764 kg / pallet



Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp. coefficient of P_{max}	(%/°C)	-0.35
Temp. coefficient of V_{oc}	(%/°C)	-0.275
Temp. coefficient of I_{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):		AE395MD-108	AE400MD-108	AE405MD-108	AE410MD-108	AE415MD-108
Nominal Max. Power	P_{max} (Wp)	395	400	405	410	415
Maximum operating voltage	V_{MPP} (V)	31.08	31.35	31.62	31.88	32.12
Maximum operating current	I_{MPP} (A)	12.71	12.76	12.81	12.86	12.92
Open-circuit voltage	V_{oc} (V)	37.36	37.69	38.02	38.35	38.67
Short-circuit current	I_{sc} (A)	13.47	13.52	13.57	13.62	13.67
Module efficiency	η (%)	20.26	20.51	20.77	21.03	21.28
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 P_{max} : ±3%

Electrical specifications (NMOT*):		AE395MD-108	AE400MD-108	AE405MD-108	AE410MD-108	AE415MD-108
Nominal Max. Power	P_{max} (Wp)	298	301	304	308	311
Maximum operating voltage	V_{MPP} (V)	29.30	29.50	29.70	29.90	30.10
Maximum operating current	I_{MPP} (A)	10.17	10.21	10.25	10.29	10.34
Open-circuit voltage	V_{oc} (V)	35.20	35.40	35.60	35.80	36.00
Short-circuit current	I_{sc} (A)	10.78	10.82	10.86	10.90	10.94

*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.