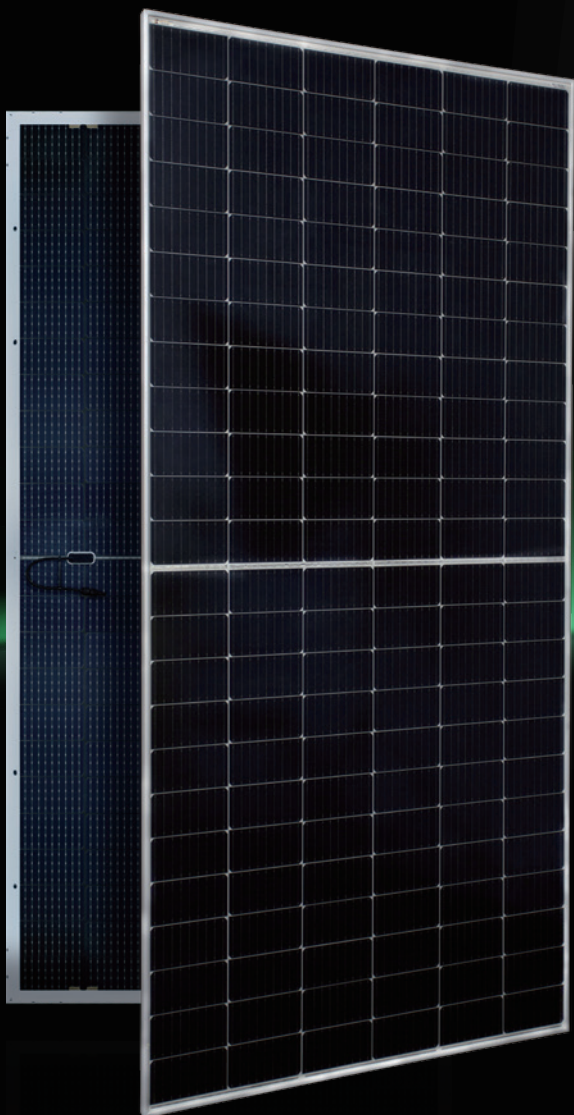




AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years
Performance
Guarantee

15
years
Product
Guarantee

530W-550W

AE MD-144BS Series

MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • BIFACIAL • SINGLE-GLASS

www.ae-solar.com

144

HALF
CELLS

**182
mm**

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

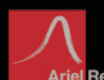


HIGHLY STABLE
AND TOUGH



IEC 61215
IEC 61730
Regular Production Surveillance
Type Tested and Monitored

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



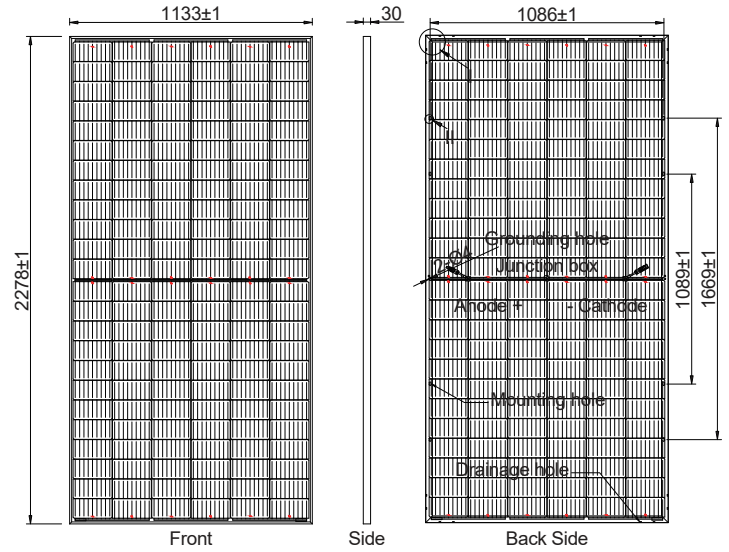
AE MD-144BS Series 530W-550W



MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • BIFACIAL • SINGLE-GLASS

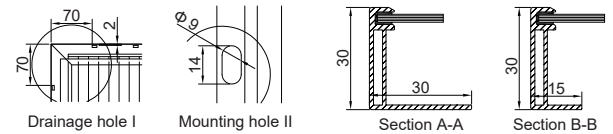
Mechanical and design specification

Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	144
Bifaciality	70±5%
Glass	3.2 mm, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	Transparent 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	2278 mm x 1133 mm x 30 mm
Weight	26.5 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa/ 244 kg/ m ²
Mechanical load	5400 Pa/ 550 kg/ m ²



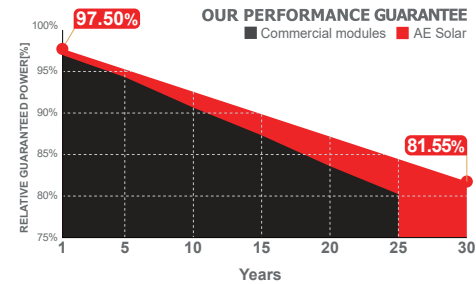
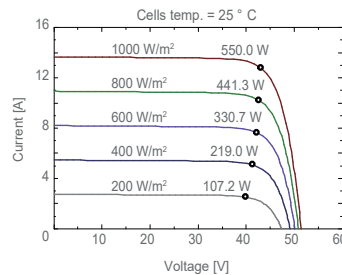
Packaging information

Packaging configuration	72 pcs / double pallets
Loading capacity	720 pcs / 40 HQ
Size / Pallet	2310 mm x 1140 mm x 2490 mm
Weight	1996 kg / double pallets



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*): AE530MD-144BS AE535MD-144BS AE540MD-144BS AE545MD-144BS AE550MD-144BS

		AE530MD-144BS	AE535MD-144BS	AE540MD-144BS	AE545MD-144BS	AE550MD-144BS
Nominal Max. Power	P _{max} (Wp)	530	535	540	545	550
Maximum operating voltage	V _{MPP} (V)	41.70	41.93	42.15	42.38	42.57
Maximum operating current	I _{MPP} (A)	12.71	12.76	12.81	12.86	12.92
Open-circuit voltage	V _{oc} (V)	49.65	49.78	49.90	50.01	51.44
Short-circuit current	I _{sc} (A)	13.47	13.52	13.57	13.62	13.67
Module efficiency	η (%)	20.53	20.73	20.92	21.12	21.31
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)

Electrical specifications (NMOT*): AE530MD-144BS AE535MD-144BS AE540MD-144BS AE545MD-144BS AE550MD-144BS

		AE530MD-144BS	AE535MD-144BS	AE540MD-144BS	AE545MD-144BS	AE550MD-144BS
Nominal Max. Power	P _{max} (Wp)	400	403	407	410	414
Maximum operating voltage	V _{MPP} (V)	39.30	39.50	39.70	39.90	40.10
Maximum operating current	I _{MPP} (A)	10.17	10.21	10.25	10.29	10.34
Open-circuit voltage	V _{oc} (V)	47.00	47.20	47.40	47.60	47.80
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.

