



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

580W-600W

AE ME-120BD Series

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

www.ae-solar.com

Ver. 24.1.1



HALF
CELLS



CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

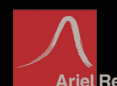


HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111257249

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



AE ME-120BD Series 580W-600W



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

Mechanical and design specification

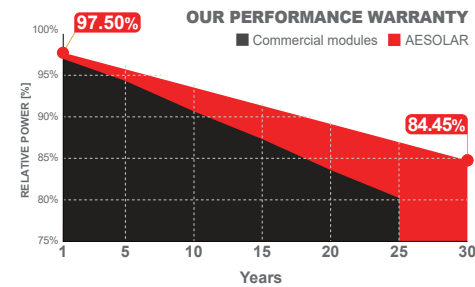
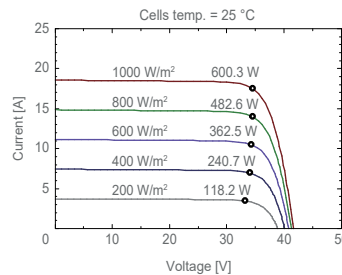
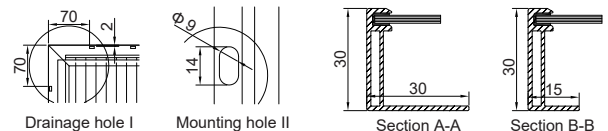
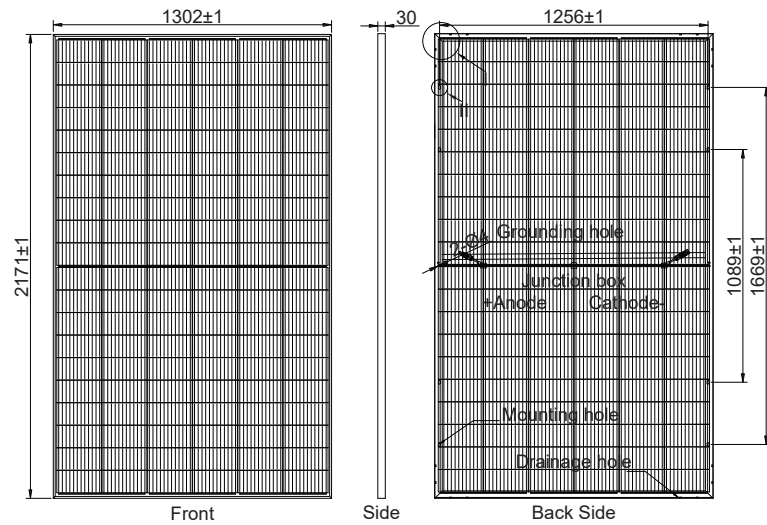
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 210 mm
No. of cells	120
Bifaciality	70 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm, high transmission solar glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2171 mm x 1302 mm x 30 mm
Weight	35 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	612 pcs / 40 HQ
Size / Pallet	1350 mm x 1145 mm x 2310 mm (Upright)
Weight	1296 kg / pallet

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.34
Temp.coefficient of V_{oc}	(%/°C)	-0.25
Temp.coefficient of I_{sc}	(%/°C)	0.040
Nom. operating temp. NOCT	(°C)	43 ± 2



Electrical specifications (STC*):		AE580ME-120BD	AE585ME-120BD	AE590ME-120BD	AE595ME-120BD	AE600ME-120BD
Nominal Max. Power	P _{max} (Wp)	580	585	590	595	600
Maximum operating voltage	V _{MPP} (V)	33.60	33.80	34.00	34.20	34.40
Maximum operating current	I _{MPP} (A)	17.26	17.31	17.35	17.40	17.44
Open-circuit voltage	V _{oc} (V)	40.70	40.90	41.10	41.30	41.50
Short-circuit current	I _{sc} (A)	17.81	18.37	18.42	18.47	18.52
Module efficiency	η (%)	20.52	20.70	20.87	21.05	21.23
Power tolerance	(W)	0~+5				
Maximum system Voltage	(V)	1500				
Maximum series fuse rating	(A)	35				

*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*): AE580ME-120BD AE585ME-120BD AE590ME-120BD AE595ME-120BD AE600ME-120BD						
Nominal Max. Power	P _{max} (Wp)	436	440	444	448	452
Maximum operating voltage	V _{MPP} (V)	31.60	31.80	32.00	32.20	32.40
Maximum operating current	I _{MPP} (A)	13.81	13.85	13.88	13.92	13.95
Open-circuit voltage	V _{oc} (V)	37.90	38.10	38.30	38.50	38.70
Short-circuit current	I _{sc} (A)	14.25	14.70	14.74	14.78	14.82

*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.