


 Deutsche
 Qualität
 Garantiert



120

HALF
CELLS

166
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



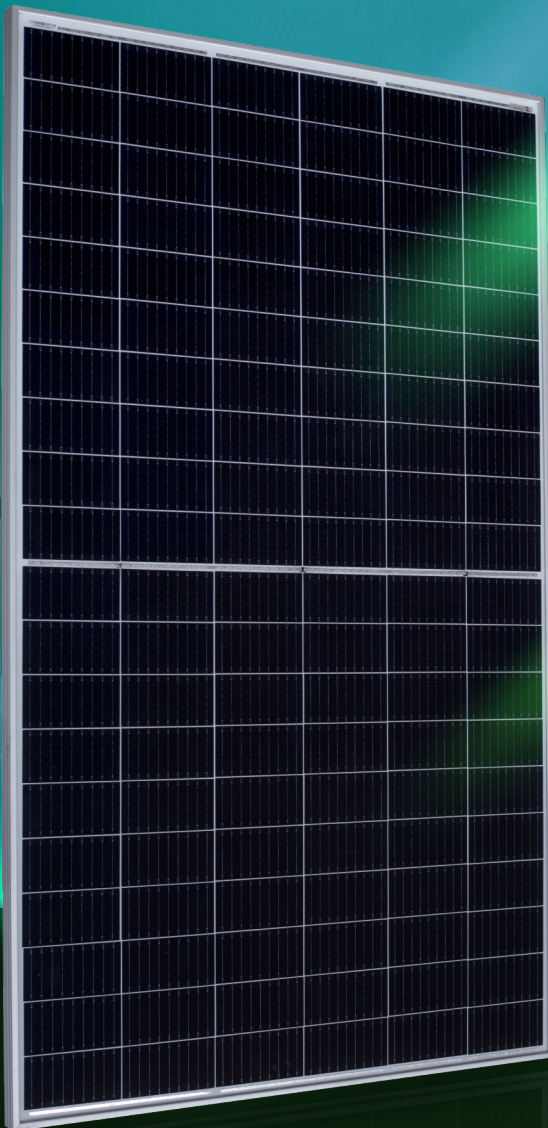
SAND
RESISTANT



AMMONIA
RESISTANT



HIGHLY STABLE
AND TOUGH



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30

years
Performance
Guarantee

15

years
Product
Warranty

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

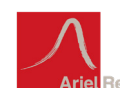
370W-380W

AE MC-120BD Series



IEC 61215
IEC 61730
Regular Production Surveillance
Type Tested and Monitored

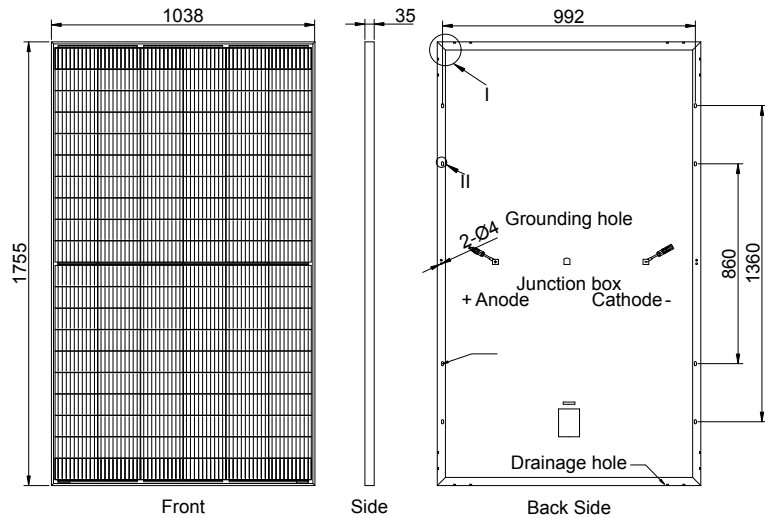
IEC 62716 (Ammonia corrosion)
IEC 61701 (Salt mist corrosion)
IEC 60068 (Sand and dust)
IEC 62804 (PID resistance)



www.ae-solar.com

Mechanical and design specification

| | |
|-----------------|--|
| Cell type | Gallium-doped Mono c-Si PERC, Half-cut cells, 166 mm |
| No. of cells | 120 |
| Bifaciality | 70±5% |
| Glass | 2.0 mm, high transmission, AR coated, tempered |
| Encapsulation | POE |
| Back cover | 2.0 mm, high transmission solar glass, tempered |
| Junction box | IP 68 rated |
| Frame | 35 mm anodized Aluminium alloy |
| Cable | 1 x 4 mm ² , 350 mm length or customized |
| Connectors | MC 4 / MC 4 compatible |
| Dimension | 1755 mm x 1038 mm x 35 mm |
| Weight | 23 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 |

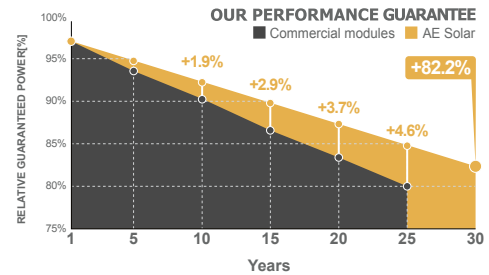
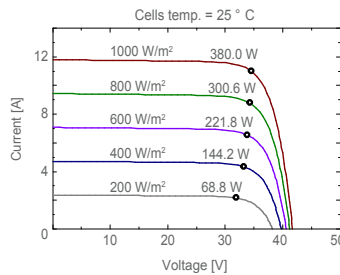
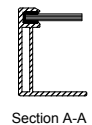
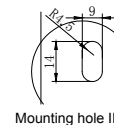
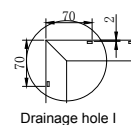


Packaging information

| | |
|-------------------------|-----------------------------|
| Packaging configuration | 64 pcs / double pallet |
| Loading capacity | 832 pcs / 40 HQ |
| Size / Pallet | 1790 mm x 1140 mm x 2415 mm |
| Weight | 1532 kg / double pallets |

Temperature ratings

| | | |
|---------------------------------------|--------|------------|
| Operating temperature | (°C) | -40 to +85 |
| Temp. coefficient of P _{max} | (%/°C) | -0.37 |
| Temp. coefficient of V _{oc} | (%/°C) | -0.286 |
| Temp. coefficient of I _{sc} | (%/°C) | 0.057 |
| Nom. operating temp. NOCT | (°C) | 45 ± 2 |



| Electrical specifications (STC*): | | AE370MC-120BD | AE375MC-120BD | AE380MC-120BD |
|-----------------------------------|-----------------------|---------------|---------------|---------------|
| Nominal Max. Power | P _{max} (Wp) | 370 | 375 | 380 |
| Maximum operating voltage | V _{MPP} (V) | 34.4 | 34.6 | 34.8 |
| Maximum operating current | I _{MPP} (A) | 10.76 | 10.84 | 10.92 |
| Open-circuit voltage | V _{oc} (V) | 41.3 | 41.5 | 41.7 |
| Short-circuit current | I _{sc} (A) | 11.60 | 11.70 | 11.80 |
| Module efficiency | η (%) | 20.31 | 20.59 | 20.86 |
| Power tolerance | (W) | | 0~+5 | |
| Maximum system Voltage | (V) | | 1500 | |
| Maximum series fuse rating | (A) | | 20 | |

*STC: Standard test conditions (Irradiance 1000 W/m², Cell temperature 25°C and air mass of AM1.5)

| Electrical specifications (NMOT*): | | AE370MC-120BD | AE375MC-120BD | AE380MC-120BD |
|------------------------------------|-----------------------|---------------|---------------|---------------|
| Nominal Max. Power | P _{max} (Wp) | 279 | 283 | 287 |
| Maximum operating voltage | V _{MPP} (V) | 32.40 | 32.60 | 32.80 |
| Maximum operating current | I _{MPP} (A) | 8.60 | 8.67 | 8.74 |
| Open-circuit voltage | V _{oc} (V) | 38.90 | 39.10 | 39.30 |
| Short-circuit current | I _{sc} (A) | 9.28 | 9.36 | 9.44 |

*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.