



# AESOLAR

since 2003



## AURORA

**HIGH** ENERGY YIELD  
RELIABILITY  
DURABILITY

**30**  
years

Performance  
Guarantee

**15**  
years

Product  
Guarantee

## 360W-380W

### AE MC-120BD Series

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

[www.ae-solar.com](http://www.ae-solar.com)

**120**

HALF  
CELLS

**166**  
mm

CELL  
SIZE



LID  
RESISTANT



PID  
RESISTANT



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH

# AE MC-120BD Series 360W-380W

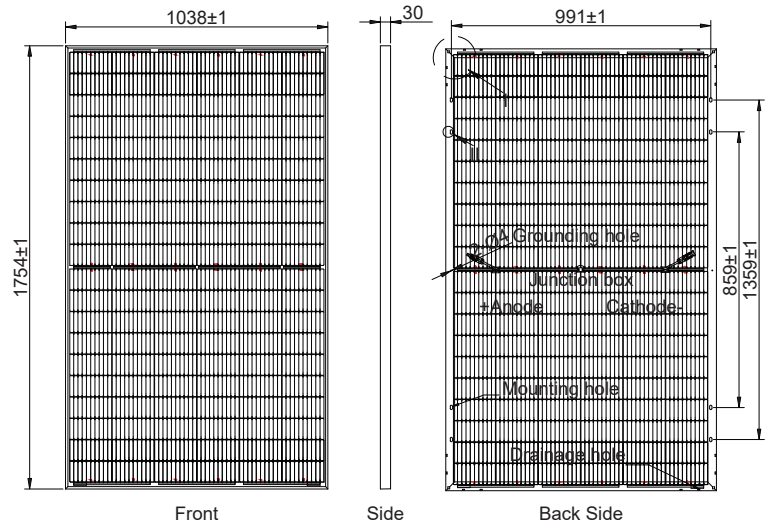


MONO-CRYSTALLINE PV MODULES

HALF-CUT CELLS • BIFACIAL • DOUBLE-GLASS

## Mechanical and design specification

|                 |                                                      |
|-----------------|------------------------------------------------------|
| Cell type       | Gallium-doped Mono c-Si PERC, Half-cut cells, 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    | IP68 rated, 3 Bypass Diodes                          |
| Frame           | 30 mm anodized Aluminium alloy                       |
| Cable           | 1 x 4 mm <sup>2</sup> , 350 mm length or customized  |
| Connectors      | MC 4 / MC 4 compatible                               |
| Dimension       | 1754 mm x 1038 mm x 30 mm                            |
| Weight          | 22 kg                                                |
| Hail resistance | Max. Ø 25 mm at 23 m/s                               |
| Wind load       | 2400 Pa/ 244 kg/ m <sup>2</sup>                      |
| Mechanical load | 5400 Pa/ 550 kg/ m <sup>2</sup>                      |

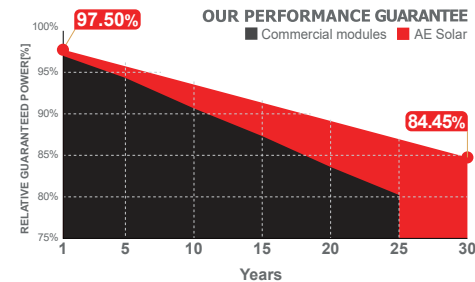
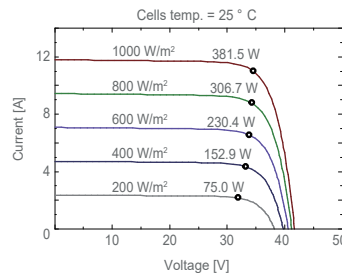
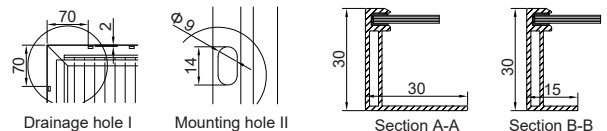


## Packaging information

|                         |                             |
|-------------------------|-----------------------------|
| Packaging configuration | 72 pcs / double pallets     |
| Loading capacity        | 936 pcs / 40 HQ             |
| Size / Pallet           | 1790 mm x 1140 mm x 2415 mm |
| Weight                  | 1653 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) | -0.286     |
| Temp.coefficient of $I_{sc}$  | (%/°C) | 0.057      |
| Nom. operating temp. NOCT     | (°C)   | 45 ± 2     |



## Electrical specifications (STC\*): AE360MC-120BD AE365MC-120BD AE370MC-120BD AE375MC-120BD AE380MC-120BD

|                            |                |       |       |       |       |       |
|----------------------------|----------------|-------|-------|-------|-------|-------|
| Nominal Max. Power         | $P_{max}$ (Wp) | 360   | 365   | 370   | 375   | 380   |
| Maximum operating voltage  | $V_{MPP}$ (V)  | 34.0  | 34.2  | 34.4  | 34.6  | 34.8  |
| Maximum operating current  | $I_{MPP}$ (A)  | 10.59 | 10.67 | 10.76 | 10.84 | 10.92 |
| Open-circuit voltage       | $V_{oc}$ (V)   | 40.9  | 41.1  | 41.3  | 41.5  | 41.7  |
| Short-circuit current      | $I_{sc}$ (A)   | 11.4  | 11.5  | 11.6  | 11.7  | 11.8  |
| Module efficiency          | $\eta$ (%)     | 19.77 | 20.05 | 20.32 | 20.60 | 20.87 |
| Power tolerance            | (W)            | 0~+5  |       |       |       |       |
| Maximum system Voltage     | (V)            | 1500  |       |       |       |       |
| Maximum series fuse rating | (A)            | 20    |       |       |       |       |

\*STC: Standard test conditions (Irradiance 1000 W/m<sup>2</sup>, Cell temperature 25°C and air mass of AM1.5)

## Electrical specifications (NMOT\*): AE360MC-120BD AE365MC-120BD AE370MC-120BD AE375MC-120BD AE380MC-120BD

|                           |                |       |      |       |      |      |
|---------------------------|----------------|-------|------|-------|------|------|
| Nominal Max. Power        | $P_{max}$ (Wp) | 271   | 275  | 279   | 283  | 287  |
| Maximum operating voltage | $V_{MPP}$ (V)  | 32.0  | 32.2 | 32.4  | 32.6 | 32.8 |
| Maximum operating current | $I_{MPP}$ (A)  | 8.47  | 8.54 | 8.60  | 8.67 | 8.74 |
| Open-circuit voltage      | $V_{oc}$ (V)   | 38.50 | 38.7 | 38.90 | 39.1 | 39.3 |
| Short-circuit current     | $I_{sc}$ (A)   | 9.12  | 9.2  | 9.28  | 9.36 | 9.44 |

\*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m<sup>2</sup>, 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.

