



Deutsche  
Qualität  
Garantiert

**AURORA**  
P-TYPE PERC TECHNOLOGY

# MC-120BD 360W-380W

High in energy yield, reliability and durability

**20.87%**  
MAXIMUM EFFICIENCY

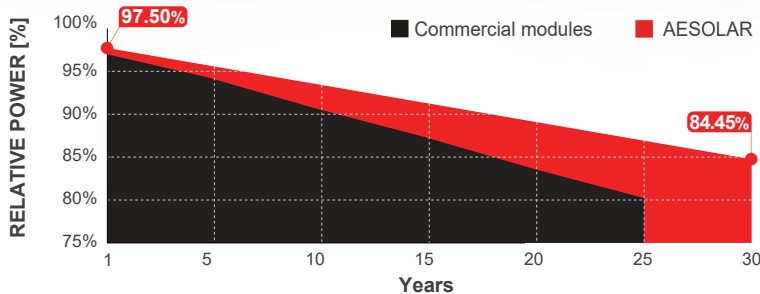
**120**  
HALF CELLS

**30 YEARS** Performance Warranty      up to **30 YEARS\*** Product Warranty

\*The regular product warranty is 15 years, please refer to the latest version of AESOLAR Limited Warranty for the duration of the product warranty under special conditions. For extensions, please contact AESOLAR staff.



## OUR PERFORMANCE WARRANTY



## SYSTEM AND PRODUCT CERTIFICATIONS

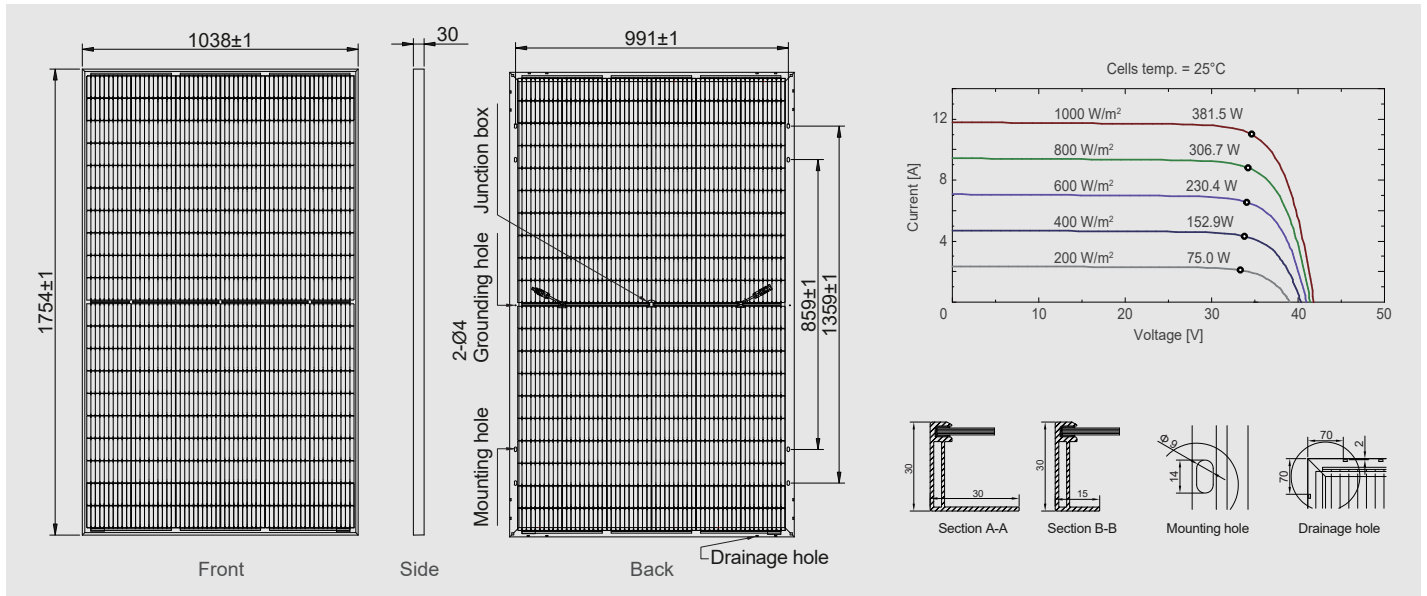


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# AE MC-120BD 360W-380W

P-TYPE PERC TECHNOLOGY PV MODULE

BIFACIAL • DOUBLE-GLASS



## Electrical specifications (STC\*):

| Parameter                  | Symbol         | 360   | 365   | 370   | 375   | 380   |
|----------------------------|----------------|-------|-------|-------|-------|-------|
| Nominal max. power         | $P_{max}$ (Wp) | 360   | 365   | 370   | 375   | 380   |
| Maximum operating voltage  | $V_{MPP}$ (V)  | 34.00 | 34.20 | 34.40 | 34.60 | 34.80 |
| Maximum operating current  | $I_{MPP}$ (A)  | 10.59 | 10.67 | 10.76 | 10.84 | 10.92 |
| Open-circuit voltage       | $V_{oc}$ (V)   | 40.90 | 41.10 | 41.30 | 41.50 | 41.70 |
| Short-circuit current      | $I_{sc}$ (A)   | 11.40 | 11.50 | 11.60 | 11.70 | 11.80 |
| 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), measurement tolerance Pmax: ±3%

## Electrical specifications (NMOT\*):

| Parameter                 | Symbol         | 271   | 275   | 279   | 283   | 287   |
|---------------------------|----------------|-------|-------|-------|-------|-------|
| Nominal max. power        | $P_{max}$ (Wp) | 271   | 275   | 279   | 283   | 287   |
| Maximum operating voltage | $V_{MPP}$ (V)  | 32.00 | 32.20 | 32.40 | 32.60 | 32.80 |
| Maximum operating current | $I_{MPP}$ (A)  | 8.47  | 8.54  | 8.60  | 8.67  | 8.74  |
| Open-circuit voltage      | $V_{oc}$ (V)   | 38.50 | 38.70 | 38.90 | 39.10 | 39.30 |
| Short-circuit current     | $I_{sc}$ (A)   | 9.12  | 9.20  | 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)

## Bifacial electrical specifications

| Max. power front-side  | 360   |       | 365   |       | 370   |       | 375   |       | 380   |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| $P_{max front}$ (Wp)   |       |       |       |       |       |       |       |       |       |       |
| Backside power gain    | 5%    | 10%   | 5%    | 10%   | 5%    | 10%   | 5%    | 10%   | 5%    | 10%   |
| Total equivalent power | 378   |       | 396   |       | 383   |       | 401   |       | 389   |       |
| $P_{max equ}$ (Wp)     |       |       |       |       |       |       |       |       |       |       |
| Module efficiency      | 20.77 | 21.75 | 21.05 | 22.05 | 21.35 | 22.36 | 21.63 | 22.66 | 21.92 | 22.96 |
| $\eta$ (%)             |       |       |       |       |       |       |       |       |       |       |

\*Bifacial Gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on the mounting (structure, height, tilt angle, etc.) and albedo of the ground.

## Mechanical and design specification

|                             |  |
|-----------------------------|--|
| Cell type                   | Gallium-doped mono c-Si PERC, half-cut cells         |
| 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 (Including Connector) | 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 or 244 kg/m <sup>2</sup>                     |
| Snow load                   | 5400 Pa or 550 kg/m <sup>2</sup>                     |

## Temperature ratings

|                                |              |
|--------------------------------|--------------|
| Operating temperature          | -40 to +85°C |
| Temp. coefficient of $P_{max}$ | -0.35 %/°C   |
| Temp. coefficient of $V_{oc}$  | -0.286 %/°C  |
| Temp. coefficient of $I_{sc}$  | 0.057 %/°C   |
| Nom. operating cell temp. NOCT | 45 ± 2°C     |

## Packaging information

|                         |                             |
|-------------------------|-----------------------------|
| Packaging configuration | 36 pcs / pallet             |
| Loading capacity        | 936 pcs / 40 HQ             |
| Size / Pallet           | 1790 mm x 1140 mm x 1208 mm |
| Weight                  | 826.5 kg / pallet           |

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.