# AURORA

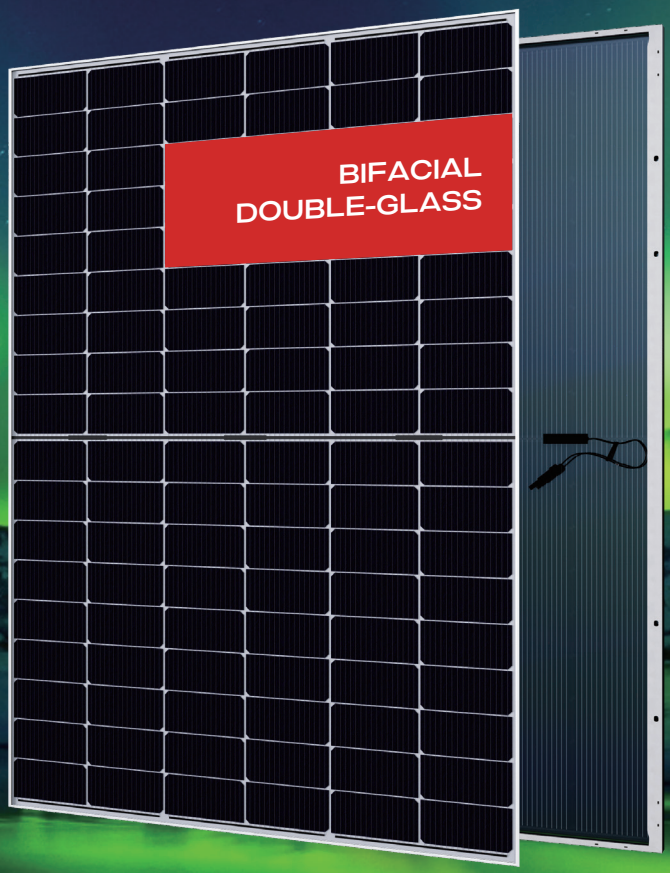
P-TYPE PERC TECHNOLOGY

Wood Mackenzie Grade A | TIER 1 BloombergNEF | SMM TIER 1

Deutsche Qualität Garantiert

# 395W-415W

## MD-108BD




**21.28%**
MAXIMUM EFFICIENCY

**108**
HALF CELLS

- Established durability and yield data
- High flexibility with BOM

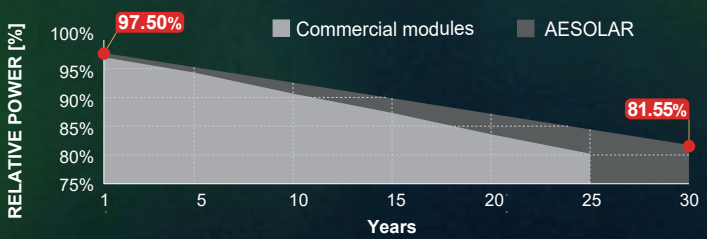
Ver. 26.10.1

**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



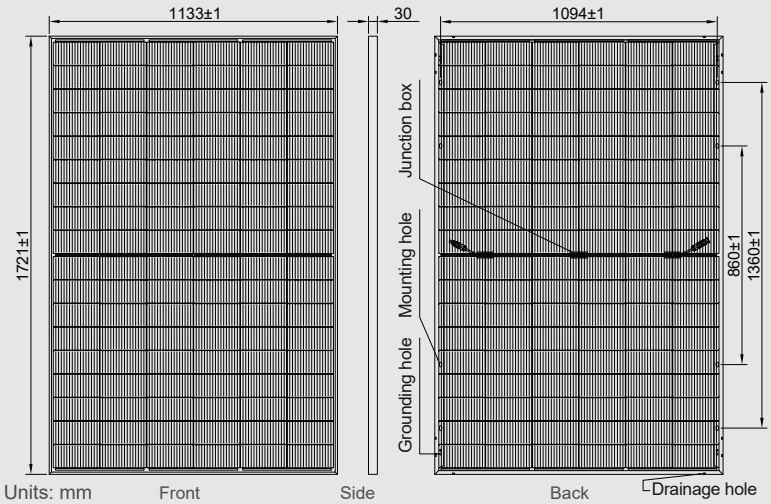

AESOLAR
Since 2003

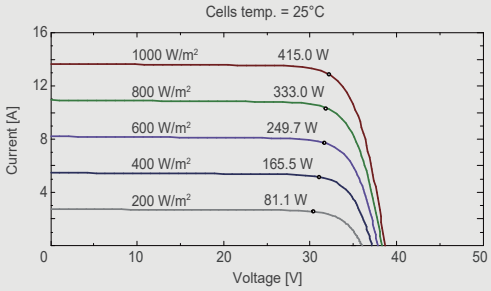
LID RESISTANT | PID RESISTANT | SALT CORROSION RESISTANT | SAND RESISTANT | AMMONIA RESISTANT | HIGHLY STABLE AND TOUGH

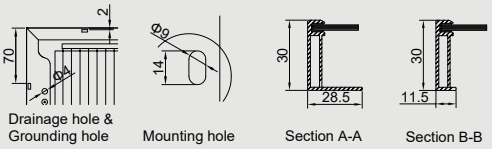
# AE MD-108BD 395W-415W

P-TYPE PERC TECHNOLOGY

**BIFACIAL • DOUBLE-GLASS**




## Electrical specifications (STC*):

| | | | | | | |
|---|---|---|---|---|---|---|
| Nominal max. power | $P_{max}$ (Wp) | 395 | 400 | 405 | 410 | 415 |
| Maximum operating voltage | $V_{MPP}$ (V) | 31.08 | 31.35 | 31.62 | 31.88 | 32.12 |
| Maximum operating current | $I_{MPP}$ (A) | 12.71 | 12.76 | 12.81 | 12.86 | 12.92 |
| Open-circuit voltage | $V_{oc}$ (V) | 37.36 | 37.69 | 38.02 | 38.35 | 38.67 |
| Short-circuit current | $I_{sc}$ (A) | 13.47 | 13.52 | 13.57 | 13.62 | 13.67 |
| Module efficiency | η (%) | 20.26 | 20.51 | 20.77 | 21.03 | 21.28 |
| 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), measurement tolerance Pmax: ±3%

## Electrical specifications (NMOT*):

| | | | | | | |
|---|---|---|---|---|---|---|
| Nominal max. power | $P_{max}$ (Wp) | 298 | 301 | 304 | 308 | 311 |
| Maximum operating voltage | $V_{MPP}$ (V) | 29.30 | 29.50 | 29.70 | 29.90 | 30.10 |
| Maximum operating current | $I_{MPP}$ (A) | 10.17 | 10.21 | 10.25 | 10.29 | 10.34 |
| Open-circuit voltage | $V_{oc}$ (V) | 35.20 | 35.40 | 35.60 | 35.80 | 36.00 |
| 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)

## Bifacial electrical specifications

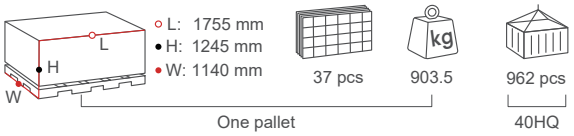
| Max.power front-side $P_{max\ front}$ (Wp) | 395 | | 400 | | 405 | | 410 | | 415 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Backside Power Gain | 5% | 10% | 5% | 10% | 5% | 10% | 5% | 10% | 5% | 10% |
| Total equivalent power $P_{max\ equ}$ (Wp) | 415 | 435 | 420 | 440 | 425 | 446 | 430 | 451 | 436 | 456 |
| Module efficiency η (%) | 21.27 | 22.28 | 21.54 | 22.57 | 21.81 | 22.85 | 22.08 | 23.13 | 22.35 | 23.41 |

*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 | 108 |
| 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 mm², 300 mm length or customized |
| Connectors | MC 4 / MC 4 compatible |
| Dimension | 1721 mm x 1133 mm x 30 mm |
| Weight | 23.5 kg |
| Hail resistance | Max. Ø 25 mm at 23 m/s |
| Wind load | 2400 Pa or 244 kg/m² |
| Snow load | 5400 Pa or 550 kg/m² |

## Packaging information




## Temperature ratings

| | |
|---|---|
| Operating temperature | -40 to +85°C |
| Temp. coefficient of $P_{max}$ | -0.35 %/°C |
| Temp. coefficient of $V_{oc}$ | -0.275 %/°C |
| Temp. coefficient of $I_{sc}$ | 0.045 %/°C |
| Nom. operating cell temp. NOCT | 45 ± 2°C |

## SYSTEM AND PRODUCT CERTIFICATIONS

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

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

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.

AESOLAR Since 2003

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