



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years
Performance
Warranty

15
years
Product
Warranty

530W-550W

AE ME-110BS Series

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

www.ae-solar.com

Ver. 24.1.1



110

HALF
CELLS



210
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

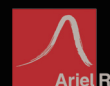


HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111251295

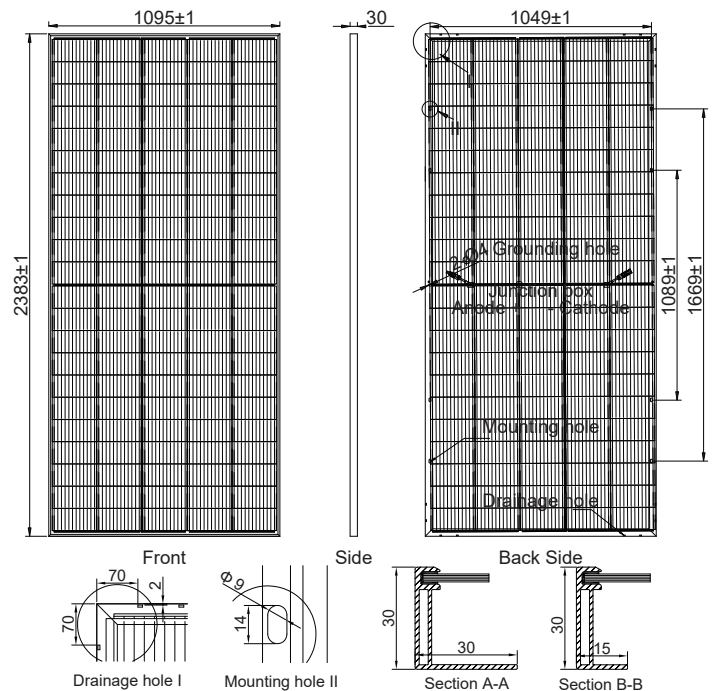
IEC 62716 (Ammonia corrosion)
IEC 61701 (Salt mist corrosion)
IEC 60068 (Sand and dust)
IEC 62804 (PID resistance)



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

Mechanical and design specification

| | |
|-----------------|--|
| Cell type | Gallium-doped Mono c-Si PERC, Half-cut cells, 210 mm |
| No. of cells | 110 |
| Bifaciality | 70 ± 5% |
| Front cover | 3.2 mm glass, high transmission, AR coated, tempered |
| Encapsulation | EVA |
| Back cover | Transparent Backsheet |
| 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 | 2383 mm x 1095 mm x 30 mm |
| Weight | 27 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 |

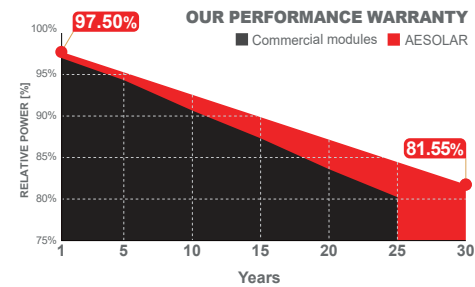
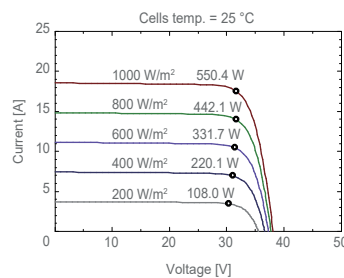


Packaging information

| | |
|-------------------------|---------------------------------------|
| Packaging configuration | 36 pcs / pallet |
| Loading capacity | 720 pcs / 40 HQ |
| Size / Pallet | 1130 mm x 1140 mm x 2500 mm (upright) |
| Weight | 1009 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*): AE530ME-110BS AE535ME-110BS AE540ME-110BS AE545ME-110BS AE550ME-110BS

| | | AE530ME-110BS | AE535ME-110BS | AE540ME-110BS | AE545ME-110BS | AE550ME-110BS |
|----------------------------|-----------------------|---------------|---------------|---------------|---------------|---------------|
| Nominal Max. Power | P _{max} (Wp) | 530 | 535 | 540 | 545 | 550 |
| Maximum operating voltage | V _{MPP} (V) | 30.80 | 31.00 | 31.20 | 31.40 | 31.60 |
| Maximum operating current | I _{MPP} (A) | 17.21 | 17.28 | 17.33 | 17.37 | 17.40 |
| Open-circuit voltage | V _{oc} (V) | 37.10 | 37.30 | 37.50 | 37.70 | 37.90 |
| Short-circuit current | I _{sc} (A) | 18.31 | 18.36 | 18.41 | 18.47 | 18.52 |
| Module efficiency | η (%) | 20.31 | 20.50 | 20.69 | 20.89 | 21.08 |
| 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*): AE530ME-110BS AE535ME-110BS AE540ME-110BS AE545ME-110BS AE550ME-110BS

| | | AE530ME-110BS | AE535ME-110BS | AE540ME-110BS | AE545ME-110BS | AE550ME-110BS |
|---------------------------|-----------------------|---------------|---------------|---------------|---------------|---------------|
| Nominal Max. Power | P _{max} (Wp) | 401 | 405 | 409 | 413 | 417 |
| Maximum operating voltage | V _{MPP} (V) | 28.60 | 28.80 | 29.00 | 29.20 | 29.30 |
| Maximum operating current | I _{MPP} (A) | 14.02 | 14.06 | 14.10 | 14.15 | 14.19 |
| Open-circuit voltage | V _{oc} (V) | 34.90 | 35.10 | 35.30 | 35.50 | 35.70 |
| Short-circuit current | I _{sc} (A) | 14.73 | 14.8 | 14.84 | 14.88 | 14.92 |

*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.