

**AE MD-144BS Series 530W-550W**

**Mechanical and design specification**

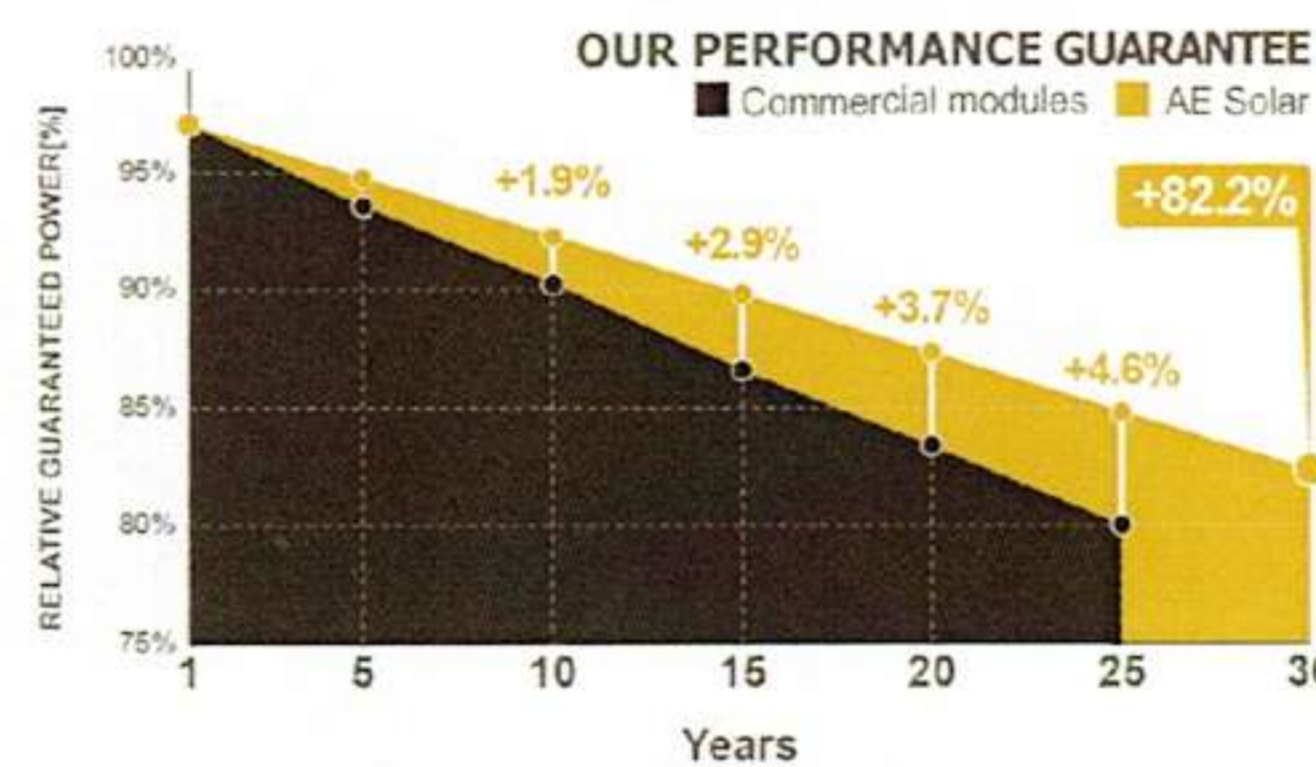
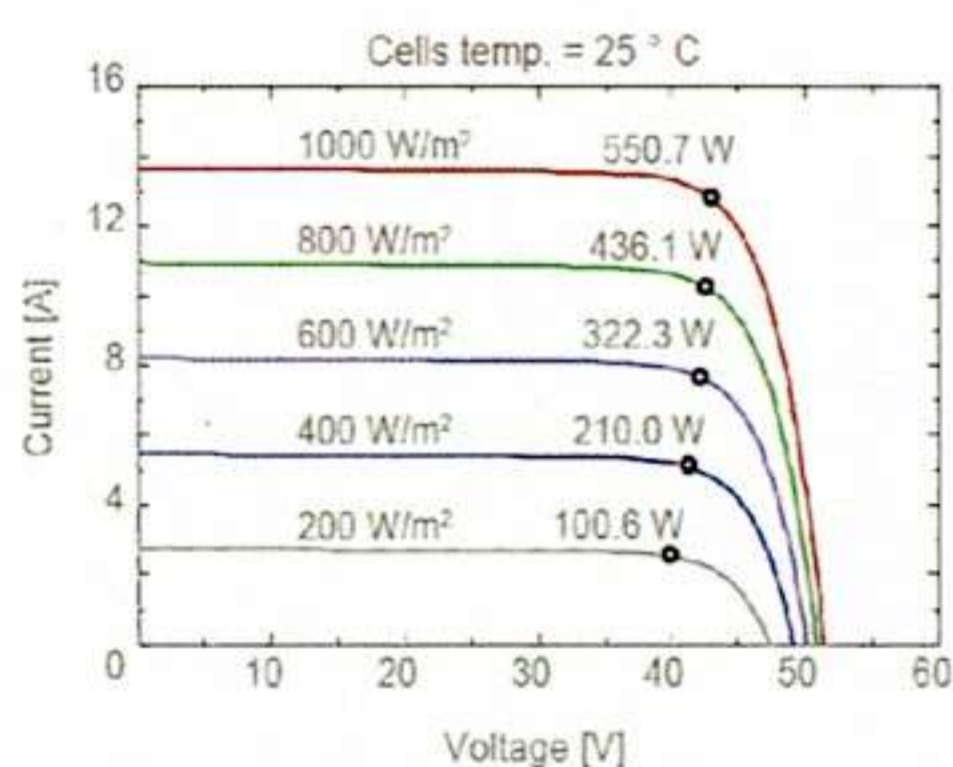
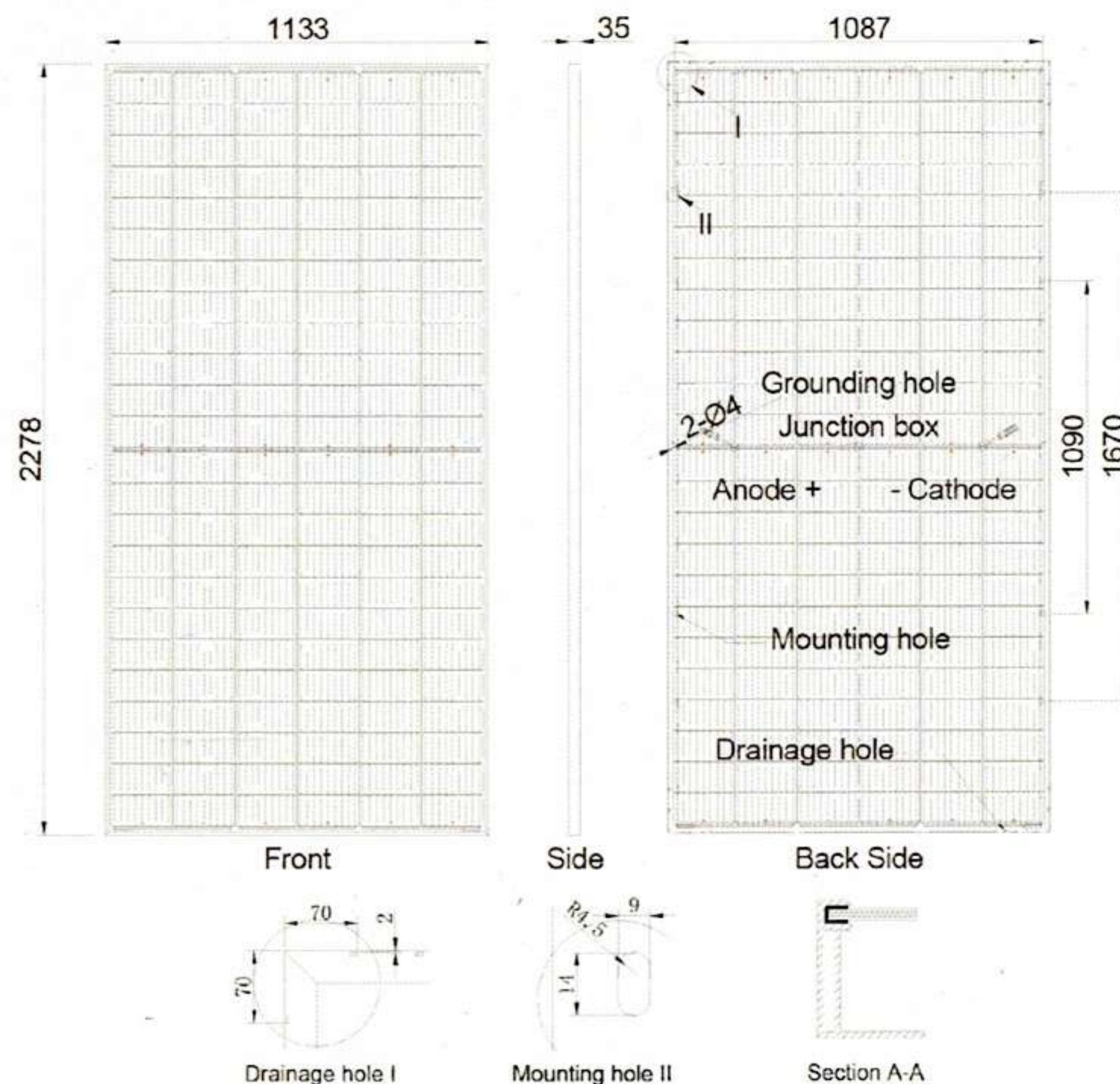
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	144
Bifaciality	70±5%
Glass	3.2 mm, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	Transparent Backsheet
Junction box	IP 68 rated
Frame	35 mm anodized Aluminium alloy
Cable	1 x 4 mm <sup>2</sup> , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2278 mm x 1133 mm x 35 mm
Weight	27 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	62 pcs / double pallet
Loading capacity	620 pcs / 40 HQ
Size / Pallet	2310 mm x 1140 mm x 2490 mm
Weight	1804 kg / double pallets

**Temperature ratings**

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P <sub>max</sub>	(%/°C)	-0.35
Temp.coefficient of V <sub>oc</sub>	(%/°C)	-0.275
Temp.coefficient of I <sub>sc</sub>	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



**Electrical specifications (STC\*): AE530MD-144BS AE535MD-144BS AE540MD-144BS AE545MD-144BS AE550MD-144BS**

Nominal Max. Power	P <sub>max</sub> (Wp)	530	535	540	545	550
Maximum operating voltage	V <sub>MPP</sub> (V)	41.70	41.93	42.15	42.38	42.57
Maximum operating current	I <sub>MPP</sub> (A)	12.71	12.76	12.81	12.86	12.92
Open-circuit voltage	V <sub>oc</sub> (V)	49.65	49.78	49.90	50.01	51.44
Short-circuit current	I <sub>sc</sub> (A)	13.47	13.52	13.57	13.62	13.67
Module efficiency	η (%)	20.53	20.73	20.92	21.12	21.31
Power tolerance	(W)	0~+5				
Maximum system Voltage	(V)	1500				
Maximum series fuse rating	(A)	25				

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

**Electrical specifications (NMOT\*): AE530MD-144BS AE535MD-144BS AE540MD-144BS AE545MD-144BS AE550MD-144BS**

Nominal Max. Power	P <sub>max</sub> (Wp)	400	403	407	410	414
Maximum operating voltage	V <sub>MPP</sub> (V)	39.30	39.50	39.70	39.90	40.10
Maximum operating current	I <sub>MPP</sub> (A)	10.17	10.21	10.25	10.29	10.34
Open-circuit voltage	V <sub>oc</sub> (V)	47.00	47.20	47.40	47.60	47.80
Short-circuit current	I <sub>sc</sub> (A)	10.78	10.82	10.86	10.90	10.94

\*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.