



AESOLAR

since 2003



METEOR

More power, less degradation

30
years
Performance
Warranty

15
years
Product
Warranty

565W-585W

AE CMD-144 Series

N-TYPE TOPCON TECHNOLOGY PV MODULES
HALF-CUT CELLS • MONO-FACIAL

www.ae-solar.com

Ver. 24.1.1

144

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



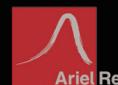
AMMONIA
RESISTANT



HIGHLY STABLE
AND TOUGH

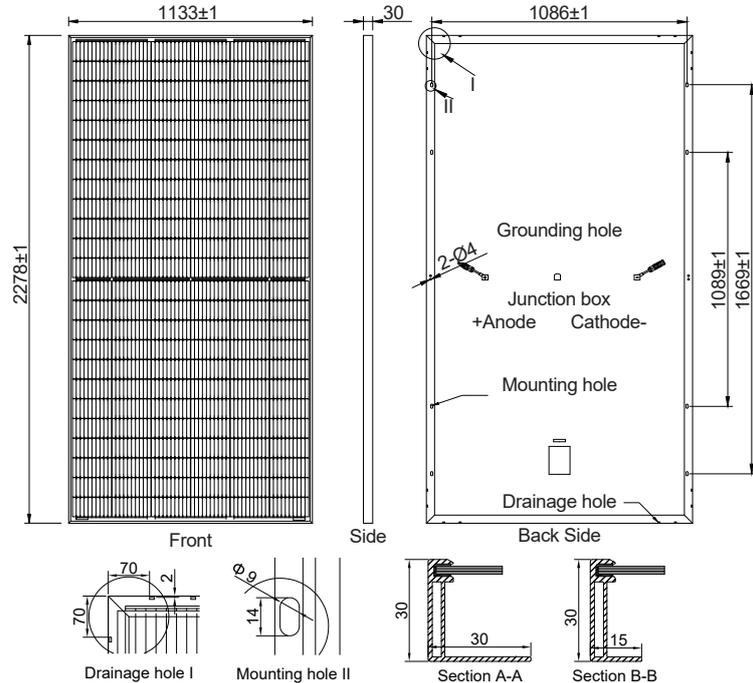


IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111251295



Mechanical and design specification

Cell type	n-Type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	144
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	White 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	2278 mm x 1133 mm x 30 mm
Weight	26.5 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

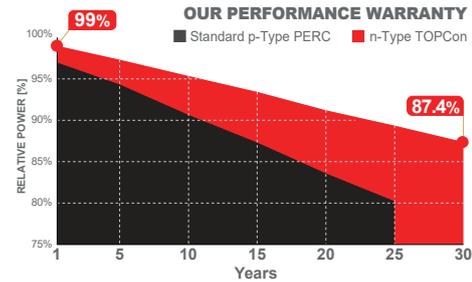
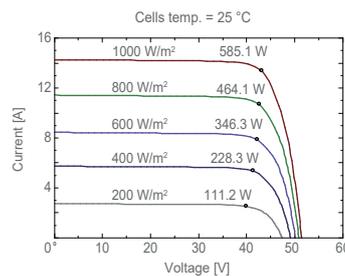


Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	720 pcs / 40 HQ
Size / Pallet	2310 mm x 1140 mm x 1245 mm
Weight	998 kg / pallet

Temperature ratings

Operating temperature (°C)	-40 to +85
Temp.coefficient of P _{max} (%/°C)	-0.30
Temp.coefficient of V _{oc} (%/°C)	-0.25
Temp.coefficient of I _{sc} (%/°C)	0.046
Nom. operating temp. NOCT (°C)	42 ± 2



Electrical specifications (STC*):		AE565CMD-144	AE570CMD-144	AE575CMD-144	AE580CMD-144	AE585CMD-144
Nominal Max. Power	P _{max} (Wp)	565	570	575	580	585
Maximum operating voltage	V _{MPP} (V)	42.56	42.72	42.88	43.04	43.14
Maximum operating current	I _{MPP} (A)	13.28	13.34	13.41	13.49	13.56
Open-circuit voltage	V _{oc} (V)	50.39	50.55	50.68	50.86	51.83
Short-circuit current	I _{sc} (A)	14.20	14.26	14.33	14.40	14.47
Module efficiency	η (%)	21.89	22.08	22.28	22.47	22.67
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 P_{max}: ±3%

Electrical specifications (NMOT*):		AE565CMD-144	AE570CMD-144	AE575CMD-144	AE580CMD-144	AE585CMD-144
Nominal Max. Power	P _{max} (Wp)	430.1	434.0	437.4	440	445.0
Maximum operating voltage	V _{MPP} (V)	39.50	39.70	39.80	39.90	40.13
Maximum operating current	I _{MPP} (A)	10.89	10.94	10.99	11.04	11.09
Open-circuit voltage	V _{oc} (V)	47.70	47.80	48.00	48.20	48.40
Short-circuit current	I _{sc} (A)	11.45	11.50	11.55	11.60	11.65

*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.