



AESOLAR

since 2003



mete^r

power more, degrade less

30
years

Performance
Guarantee

15
years

Product
Guarantee

420W-440W

AE CMD-108 Series

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

www.ae-solar.com

108

HALF
CELLS

182
mm

CELL
SIZE



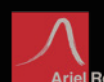
LID
RESISTANT



HIGHLY STABLE
AND TOUGH



IEC 61215
IEC 61730
Regular Production Surveillance
Type Tested and Monitored



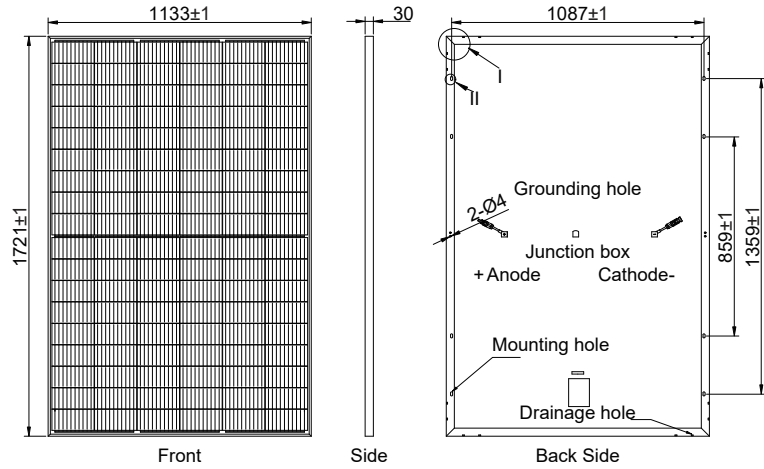
AE CMD-108 Series 420W-440W



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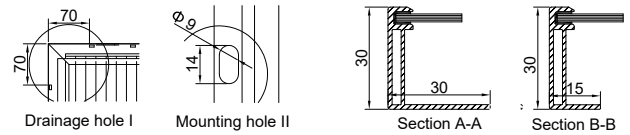
Mechanical and design specification

Cell type	N-type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	108
Glass	3.2 mm, 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	1721 mm x 1133 mm x 30 mm
Weight	20.3 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa/ 244 kg/ m ²
Mechanical load	5400 Pa/ 550 kg/ m ²



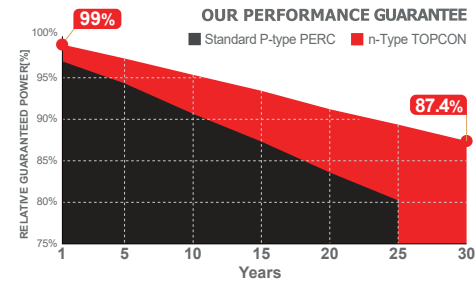
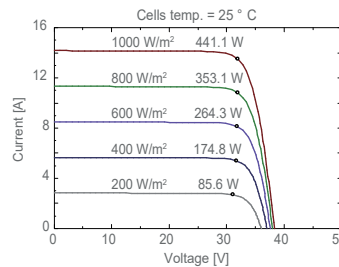
Packaging information

Packaging configuration	72 pcs / double pallets
Loading capacity	936 pcs / 40 HQ
Size / Double pallets	1755 mm x 1140 mm x 2490 mm
Weight	1528 kg / double pallets



Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P _{max}	(%/°C)	-0.3
Temp.coefficient of V _{oc}	(%/°C)	-0.25
Temp.coefficient of I _{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	42 ± 2



Electrical specifications (STC)*:	AE420CMD-108	AE425CMD-108	AE430CMD-108	AE435CMD-108	AE440CMD-108	
Nominal Max. Power	P _{max} (Wp)	420	425	430	435	440
Maximum operating voltage	V _{MPP} (V)	32.04	32.25	32.43	32.64	32.84
Maximum operating current	I _{MPP} (A)	13.11	13.18	13.26	13.33	13.40
Open-circuit voltage	V _{oc} (V)	37.86	38.08	38.26	38.46	38.66
Short-circuit current	I _{sc} (A)	14.03	14.10	14.17	14.23	14.30
Module efficiency	η (%)	21.54	21.80	22.05	22.31	22.57
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)

Electrical specifications (NMOT)*:	AE420CMD-108	AE425CMD-108	AE430CMD-108	AE435CMD-108	AE440CMD-108	
Nominal Max. Power	P _{max} (Wp)	320.0	323.5	327.1	331.0	335.3
Maximum operating voltage	V _{MPP} (V)	29.7	29.9	30.1	30.30	30.51
Maximum operating current	I _{MPP} (A)	10.76	10.81	10.87	10.93	10.99
Open-circuit voltage	V _{oc} (V)	35.8	36.0	36.2	36.40	36.60
Short-circuit current	I _{sc} (A)	11.31	11.37	11.42	11.48	11.54

*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.

