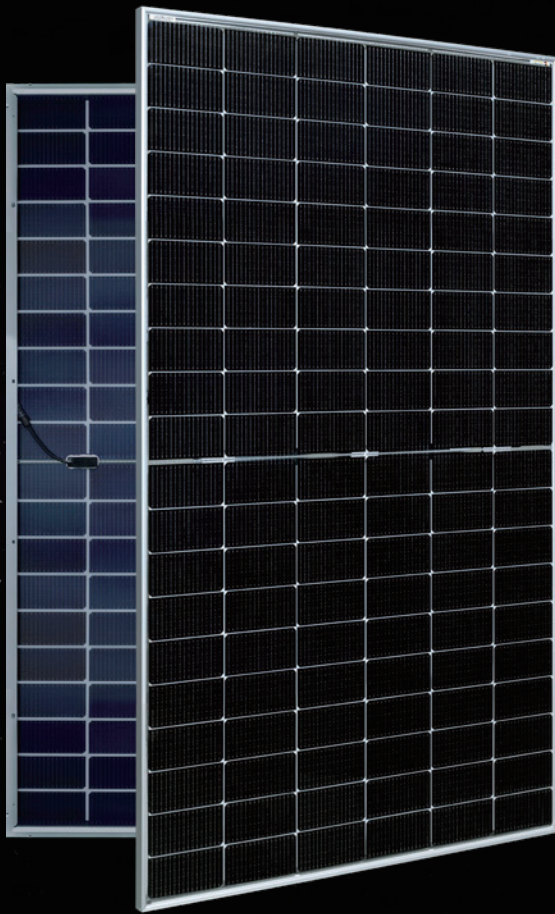




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30
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465W-485W

AE CMD-120BDS Series

N-TYPE TOPCON TECHNOLOGY PV MODULES
HALF-CUT CELLS • BIFACIAL • DOUBLE-GLASS

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Ver. 24.1.1

120

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT



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



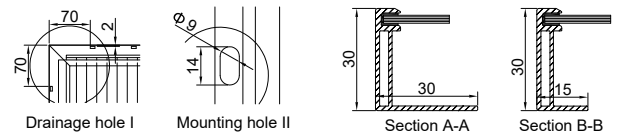
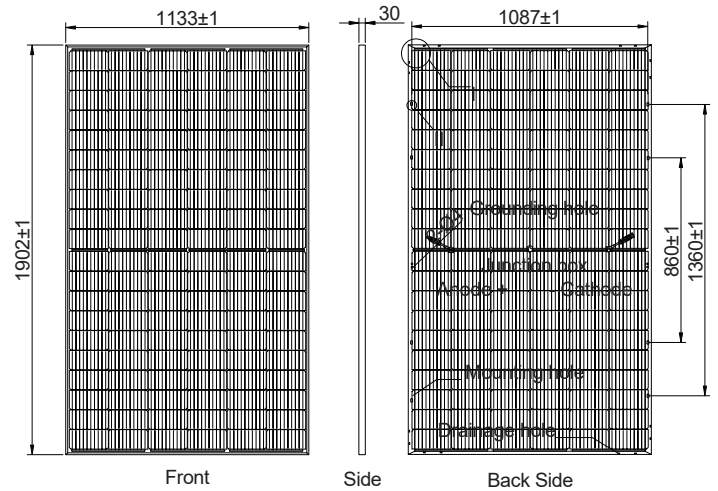
AE CMD-120BDS Series 465W-485W



N-TYPE TOPCON TECHNOLOGY PV MODULES
HALF-CUT CELLS • BIFACIAL • DOUBLE-GLASS

Mechanical and design specification

Cell type	n-Type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	120
Bifaciality	80 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm white glazed glass, tempered
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	1902 mm x 1133 mm x 30 mm
Weight	25.5 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
Fire Rating	Class A (according to UL 790)

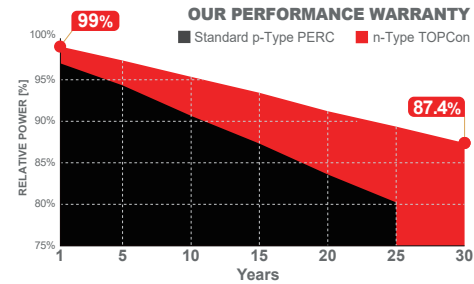
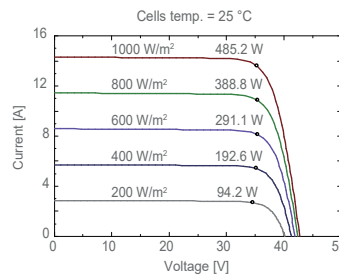


Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	864 pcs / 40 HQ
Size / Pallet	1945 mm x 1140 mm x 1245 mm
Weight	973 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*): AE465CMD-120BDS AE470CMD-120BDS AE475CMD-120BDS AE480CMD-120BDS AE485CMD-120BDS

	P _{max} (Wp)	465	470	475	480	485
Nominal Max. Power	P _{max} (Wp)	465	470	475	480	485
Maximum operating voltage	V _{MPP} (V)	34.89	35.05	35.22	35.38	35.55
Maximum operating current	I _{MPP} (A)	13.33	13.41	13.49	13.57	13.65
Open-circuit voltage	V _{oc} (V)	42.22	42.38	42.54	42.71	42.87
Short-circuit current	I _{sc} (A)	14.07	14.15	14.23	14.31	14.38
Module efficiency	η (%)	21.58	21.81	22.04	22.27	22.51
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*): AE465CMD-120BDS AE470CMD-120BDS AE475CMD-120BDS AE480CMD-120BDS AE485CMD-120BDS

	P _{max} (Wp)	350	353	357	361	365
Nominal Max. Power	P _{max} (Wp)	350	353	357	361	365
Maximum operating voltage	V _{MPP} (V)	32.77	32.94	33.10	33.27	33.44
Maximum operating current	I _{MPP} (A)	10.67	10.73	10.79	10.85	10.92
Open-circuit voltage	V _{oc} (V)	40.10	40.25	40.41	40.57	40.73
Short-circuit current	I _{sc} (A)	11.36	11.42	11.49	11.55	11.62

*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.