



AESOLAR

since 2003



METEOR

More power, less degradation

30
years

Performance
Warranty

15
years

Product
Warranty

415W-435W

AE CMD-108BDE Series

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

www.ae-solar.com

Ver. 24.1.1



HALF
CELLS



CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



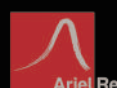
AMMONIA
RESISTANT



HIGHLY STABLE
AND TOUGH



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



AE CMD-108BDE Series 415W-435W



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

Mechanical and design specification

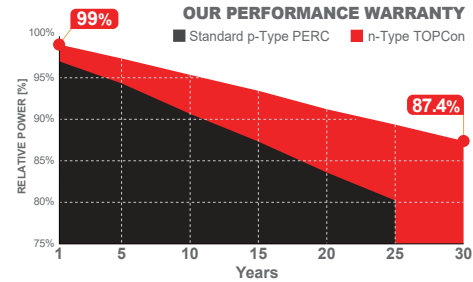
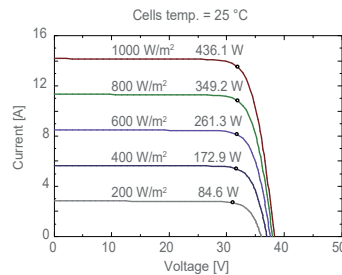
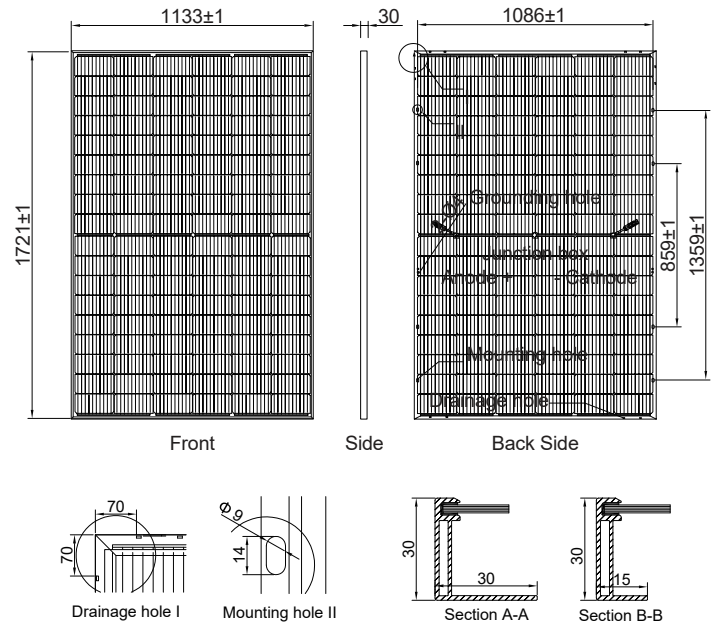
Cell type	n-Type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	108
Bifaciality	80 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm black glazed glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm lenght or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1721 mm x 1133 mm x 30 mm
Weight	23.5 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	936 pcs / 40 HQ
Size / Pallet	1755 mm x 1140 mm x 1245 mm
Weight	880 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*): AE415CMD-108BDE AE420CMD-108BDE AE425CMD-108BDE AE430CMD-108BDE AE435CMD-108BDE

Nominal Max. Power	P_{max} (Wp)	415	420	425	430	435
Maximum operating voltage	V_{MPP} (V)	31.81	32.04	32.25	32.43	32.64
Maximum operating current	I_{MPP} (A)	13.05	13.11	13.18	13.26	13.33
Open-circuit voltage	V_{oc} (V)	37.67	37.86	38.08	38.26	38.46
Short-circuit current	I_{sc} (A)	13.95	14.03	14.10	14.17	14.23
Module efficiency	η (%)	21.28	21.54	21.80	22.05	22.31
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*): AE415CMD-108BDE AE420CMD-108BDE AE425CMD-108BDE AE430CMD-108BDE AE435CMD-108BDE

Nominal Max. Power	P_{max} (Wp)	316.0	320.0	323.5	327.1	331.0
Maximum operating voltage	V_{MPP} (V)	29.50	29.70	29.90	30.10	30.30
Maximum operating current	I_{MPP} (A)	10.70	10.76	10.81	10.87	10.93
Open-circuit voltage	V_{oc} (V)	35.60	35.80	36.00	36.20	36.40
Short-circuit current	I_{sc} (A)	11.25	11.31	11.37	11.42	11.48

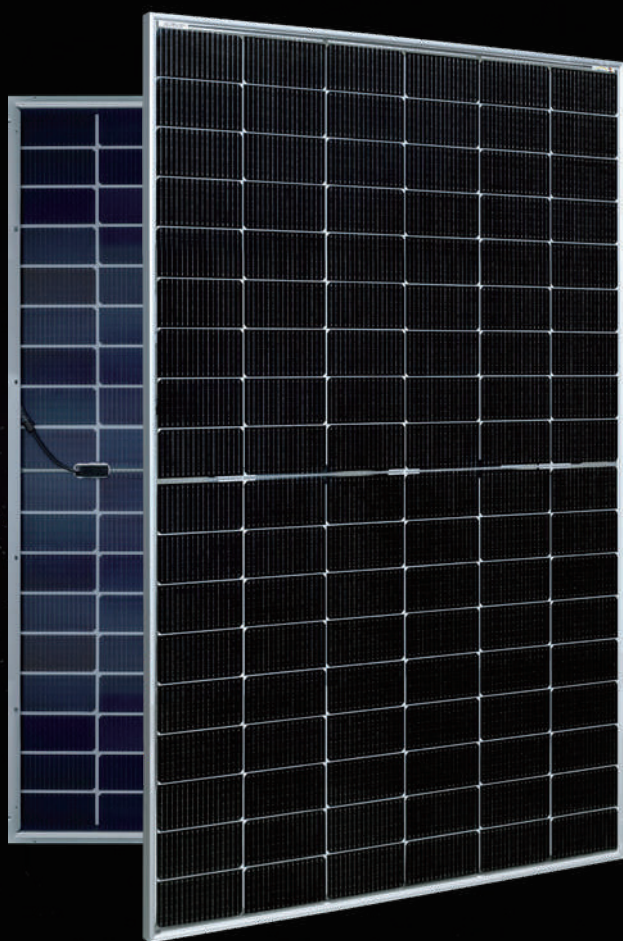
*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

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.



AESOLAR

since 2003



METEOR

More power, less degradation

30
years

Performance
Warranty

15
years

Product
Warranty

420W-440W

AE CMD-108BDS Series

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

www.ae-solar.com

Ver. 24.1.1

108

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

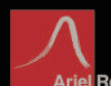


HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111257249

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



AE CMD-108BDS Series 420W-440W



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

Mechanical and design specification

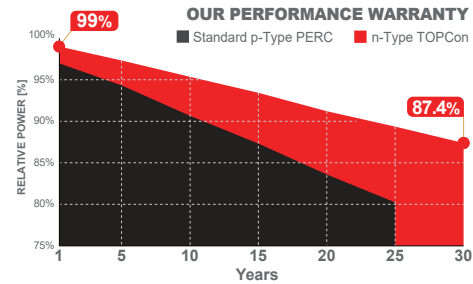
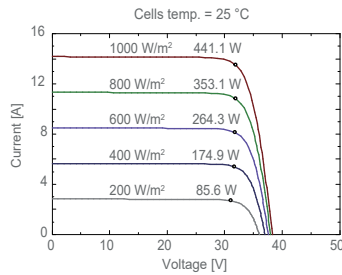
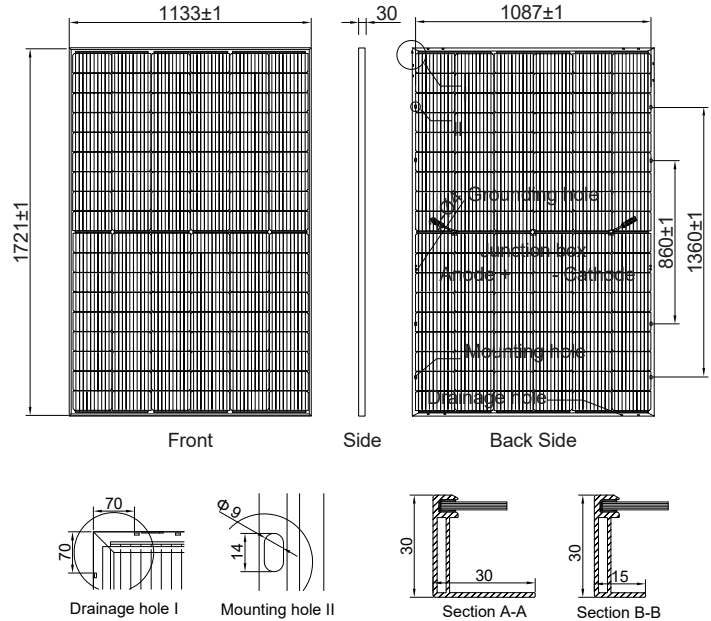
Cell type	n-Type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	108
Bifaciality	80 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm white glazed glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1721 mm x 1133 mm x 30 mm
Weight	23.5 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	936 pcs / 40 HQ
Size / Pallet	1755 mm x 1140 mm x 1245 mm
Weight	880 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*): AE420CMD-108BDS AE425CMD-108BDS AE430CMD-108BDS AE435CMD-108BDS AE440CMD-108BDS

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), measurement tolerance P_{max} : ±3%

Electrical specifications (NMOT*): AE420CMD-108BDS AE425CMD-108BDS AE430CMD-108BDS AE435CMD-108BDS AE440CMD-108BDS

Nominal Max. Power	P_{max} (Wp)	320.0	323.5	327.1	331.0	335.3
Maximum operating voltage	V_{MPP} (V)	29.70	29.90	30.10	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)	35.80	36.00	36.20	36.40	36.60
Short-circuit current	I_{sc} (A)	11.31	11.37	11.42	11.48	11.54

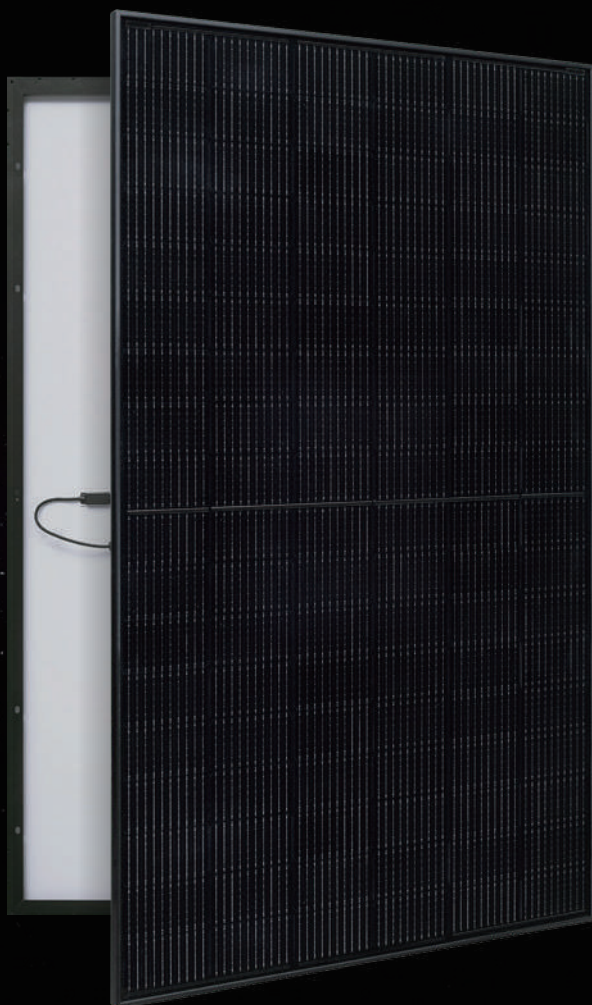
*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

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.



AESOLAR

since 2003



METEOR

More power, less degradation

30
years

Performance
Warranty

15
years

Product
Warranty

415W-435W

AE CMD-108E Series

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

www.ae-solar.com

Ver. 24.1.1

108

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



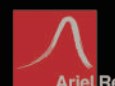
AMMONIA
RESISTANT



HIGHLY STABLE
AND TOUGH



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



AE CMD-108E Series 415W-435W



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

Mechanical and design specification

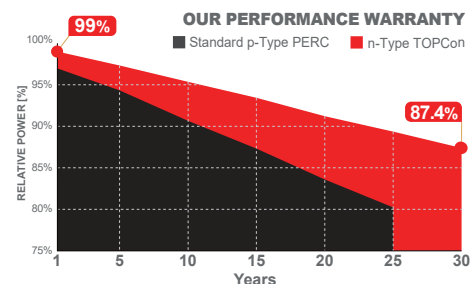
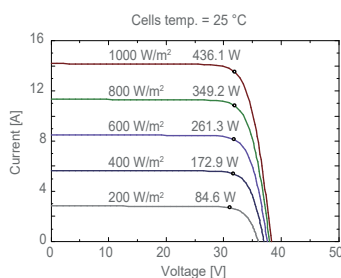
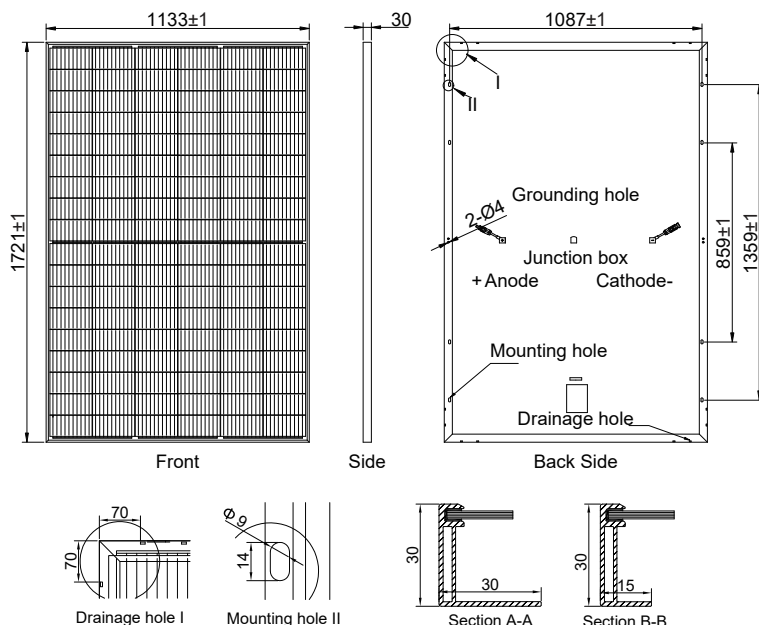
Cell type	n-Type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	108
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	EVA-side Black, Rear-side White Backsheet
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy, black
Cable	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 or 244 kg/m ²
Snow load	5400 Pa or 550 kg/m ²

Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	936 pcs / 40 HQ
Size / Pallet	1755 mm x 1140 mm x 1245 mm
Weight	764 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*):		AE415CMD-108E	AE420CMD-108E	AE425CMD-108E	AE430CMD-108E	AE435CMD-108E
Nominal Max. Power	P_{max} (Wp)	415	420	425	430	435
Maximum operating voltage	V_{MPP} (V)	31.81	32.04	32.25	32.43	32.64
Maximum operating current	I_{MPP} (A)	13.05	13.11	13.18	13.26	13.33
Open-circuit voltage	V_{oc} (V)	37.67	37.86	38.08	38.26	38.46
Short-circuit current	I_{sc} (A)	13.95	14.03	14.10	14.17	14.23
Module efficiency	η (%)	21.28	21.54	21.80	22.05	22.31
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*):		AE415CMD-108E	AE420CMD-108E	AE425CMD-108E	AE430CMD-108E	AE435CMD-108E
Nominal Max. Power	P_{max} (Wp)	316.0	320.0	323.5	327.1	331.0
Maximum operating voltage	V_{MPP} (V)	29.50	29.70	29.90	30.10	30.30
Maximum operating current	I_{MPP} (A)	10.70	10.76	10.81	10.87	10.93
Open-circuit voltage	V_{oc} (V)	35.60	35.80	36.00	36.20	36.40
Short-circuit current	I_{sc} (A)	11.25	11.31	11.37	11.42	11.48

*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.



AESOLAR

since 2003

METEOR

More power, less degradation

30
years

Performance
Warranty

15
years

Product
Warranty

465W-485W

AE CMD-120 Series

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

www.ae-solar.com

Ver. 24.1.1

120

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



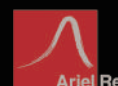
AMMONIA
RESISTANT



HIGHLY STABLE
AND TOUGH



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



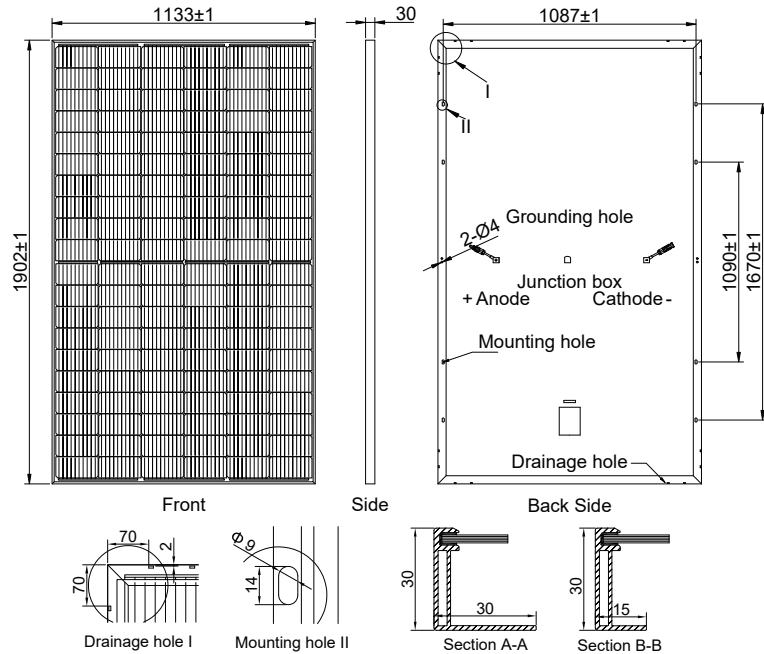
AE CMD-120 Series 465W-485W



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

Mechanical and design specification

Cell type	n-Type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	120
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 lenght or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1902 mm x 1133 mm x 30 mm
Weight	22.5 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

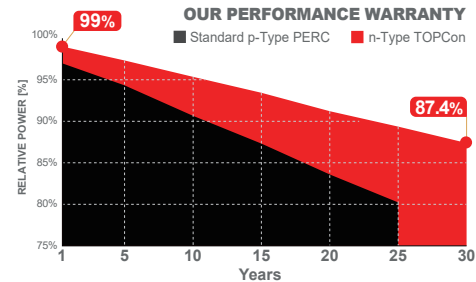
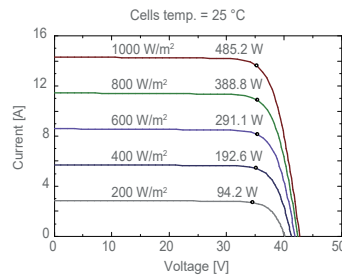


Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	864 pcs / 40 HQ
Size / Pallet	1945 mm x 1140 mm x 1245 mm
Weight	847 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-120	AE470CMD-120	AE475CMD-120	AE480CMD-120	AE485CMD-120
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-120	AE470CMD-120	AE475CMD-120	AE480CMD-120	AE485CMD-120
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

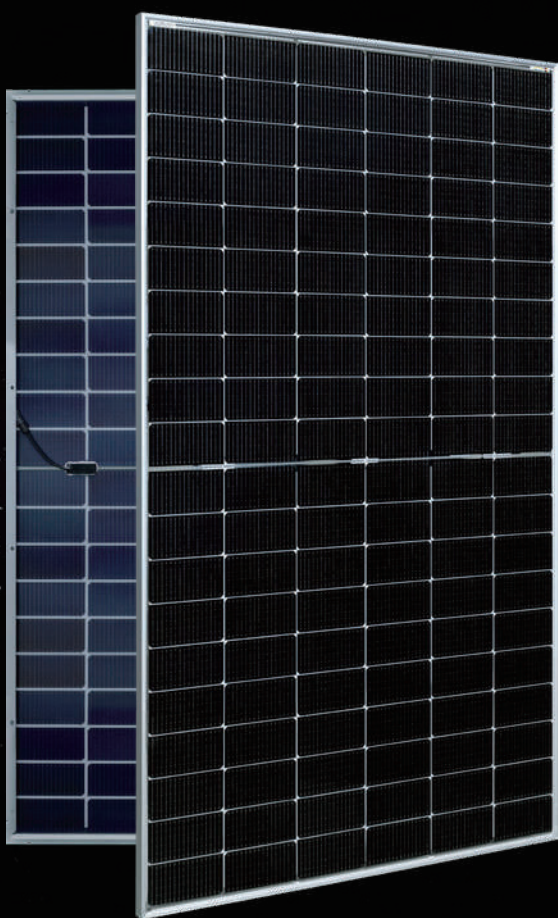
*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

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.



AESOLAR

since 2003



METEOR

More power, less degradation

30
years

Performance
Warranty

15
years

Product
Warranty

465W-485W

AE CMD-120BDS Series

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

www.ae-solar.com

Ver. 24.1.1

120

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

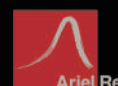


HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111257249

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

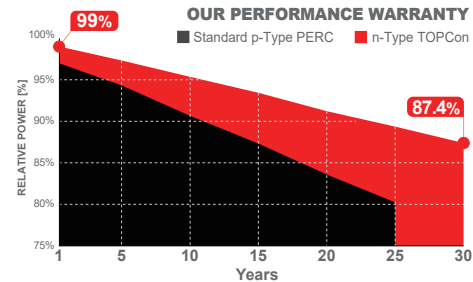
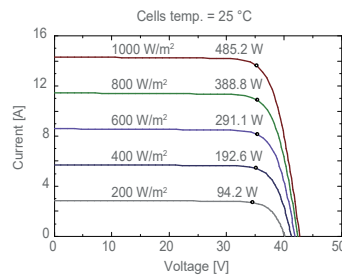
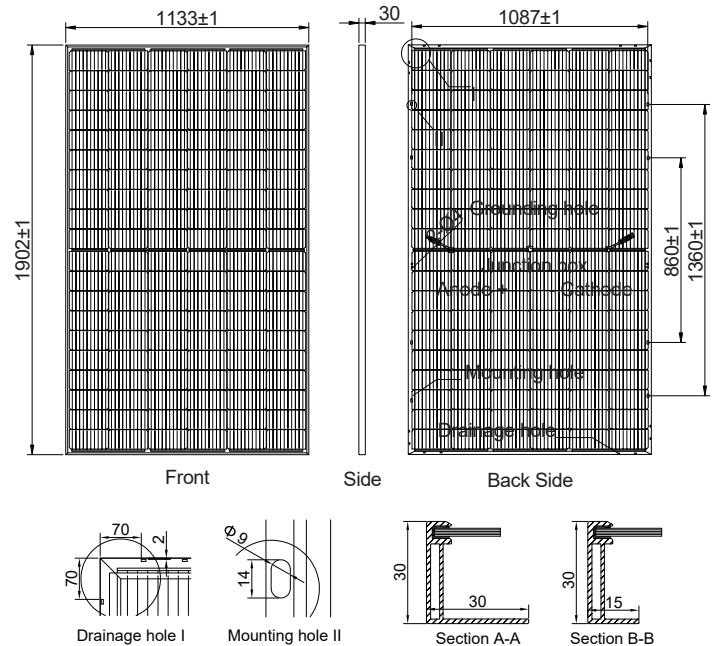
Cell type	n-Type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	120
Bifaciality	80 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm white glazed glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
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

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

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.



AESOLAR

since 2003



METEOR

More power, less degradation

30
years

Performance
Warranty

15
years

Product
Warranty

560W-580W

AE CMD-144 Series

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

www.ae-solar.com

Ver. 24.1.1



HALF
CELLS



CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



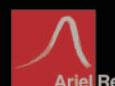
AMMONIA
RESISTANT



HIGHLY STABLE
AND TOUGH



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



AE CMD-144 Series 560W-580W



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

Mechanical and design specification

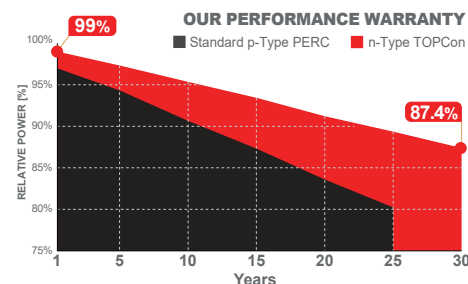
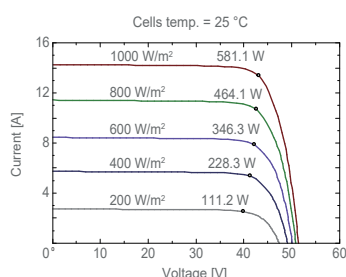
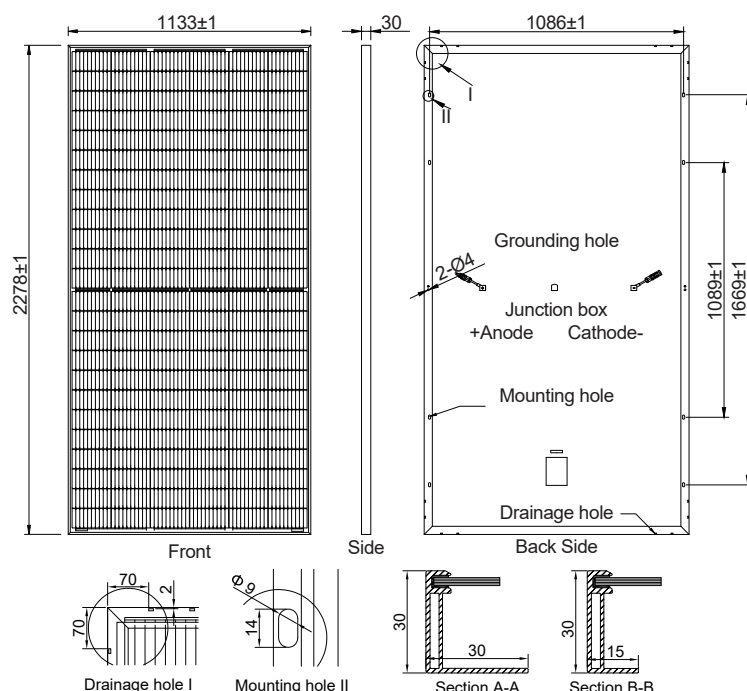
Cell type	n-Type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	144
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	White Backsheet
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
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*):		AE560CMD-144	AE565CMD-144	AE570CMD-144	AE575CMD-144	AE580CMD-144
Nominal Max. Power	P_{max} (Wp)	560	565	570	575	580
Maximum operating voltage	V_{MPP} (V)	42.40	42.56	42.72	42.88	43.04
Maximum operating current	I_{MPP} (A)	13.21	13.28	13.34	13.41	13.49
Open-circuit voltage	V_{oc} (V)	50.23	50.39	50.55	50.68	50.86
Short-circuit current	I_{sc} (A)	14.14	14.20	14.26	14.33	14.40
Module efficiency	η (%)	21.70	21.89	22.08	22.28	22.47
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*):		AE560CMD-144	AE565CMD-144	AE570CMD-144	AE575CMD-144	AE580CMD-144
Nominal Max. Power	P_{max} (Wp)	426.0	430.1	434.0	437.4	440
Maximum operating voltage	V_{MPP} (V)	39.30	39.50	39.70	39.80	39.90
Maximum operating current	I_{MPP} (A)	10.84	10.89	10.94	10.99	11.04
Open-circuit voltage	V_{oc} (V)	47.50	47.70	47.80	48.00	48.20
Short-circuit current	I_{sc} (A)	11.40	11.45	11.50	11.55	11.60

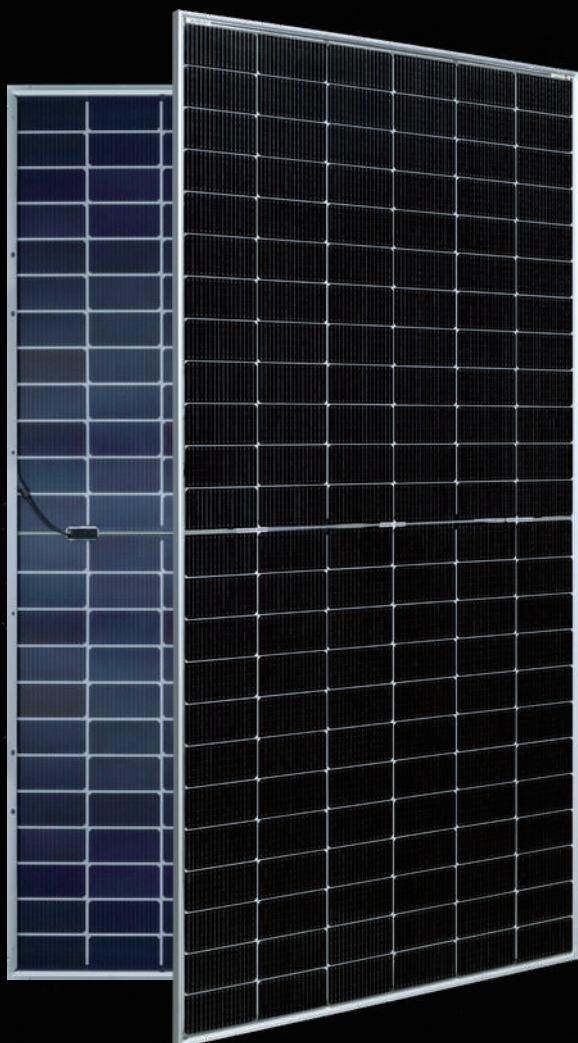
*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

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.



AESOLAR

since 2003



METEOR

More power, less degradation

30
years

Performance
Warranty

15
years

Product
Warranty

560W-580W

AE CMD-144BDS Series

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

www.ae-solar.com

Ver. 24.1.1



HALF
CELLS



CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

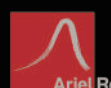


HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111257249

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



AE CMD-144BDS Series 560W-580W



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

Mechanical and design specification

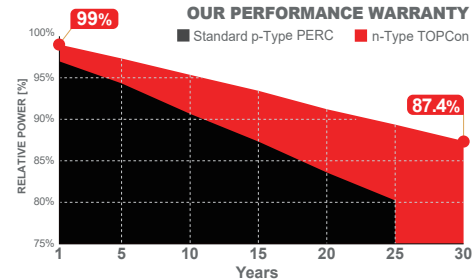
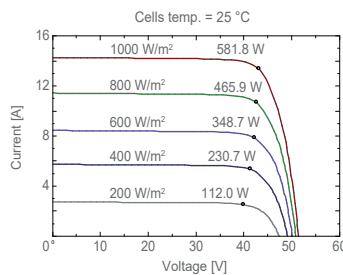
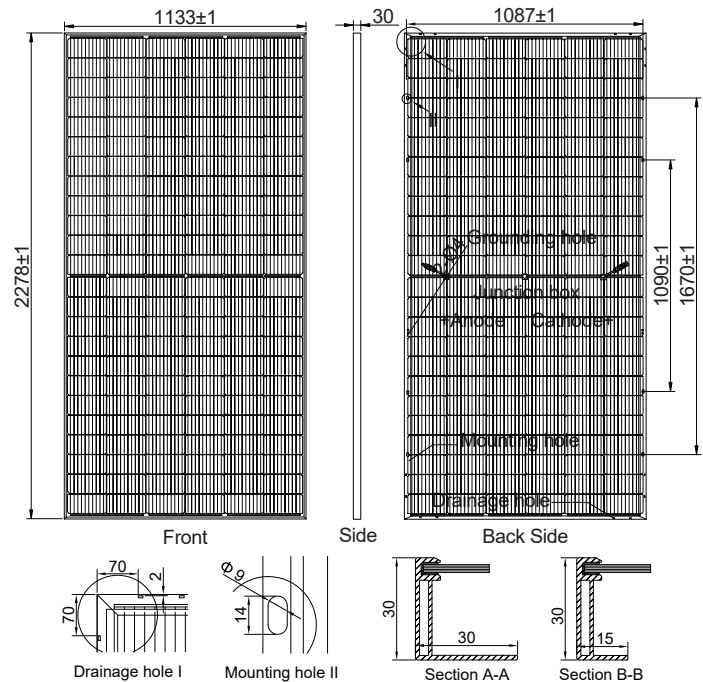
Cell type	n-Type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	144
Bifaciality	80 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm white glazed glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2278 mm x 1133 mm x 30 mm
Weight	31 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	720 pcs / 40 HQ
Size / Pallet	2310 mm x 1140 mm x 1245 mm
Weight	1160 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*): AE560CMD-144BDS AE565CMD-144BDS AE570CMD-144BDS AE575CMD-144BDS AE580CMD-144BDS

Nominal Max. Power	P_{max} (Wp)	560	565	570	575	580
Maximum operating voltage	V_{MPP} (V)	42.40	42.56	42.72	42.88	43.04
Maximum operating current	I_{MPP} (A)	13.21	13.28	13.34	13.41	13.49
Open-circuit voltage	V_{oc} (V)	50.23	50.39	50.55	50.68	50.86
Short-circuit current	I_{sc} (A)	14.14	14.20	14.26	14.33	14.40
Module efficiency	η (%)	21.70	21.89	22.08	22.28	22.47
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*): AE560CMD-144BDS AE565CMD-144BDS AE570CMD-144BDS AE575CMD-144BDS AE580CMD-144BDS

Nominal Max. Power	P_{max} (Wp)	426.0	430.1	434.0	437.4	440.0
Maximum operating voltage	V_{MPP} (V)	39.30	39.50	39.70	39.80	39.90
Maximum operating current	I_{MPP} (A)	10.84	10.89	10.94	10.99	11.04
Open-circuit voltage	V_{oc} (V)	47.50	47.70	47.80	48.00	48.20
Short-circuit current	I_{sc} (A)	11.40	11.45	11.50	11.55	11.60

*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.



AESOLAR

since 2003

TERRA

30
years

Performance
Warranty

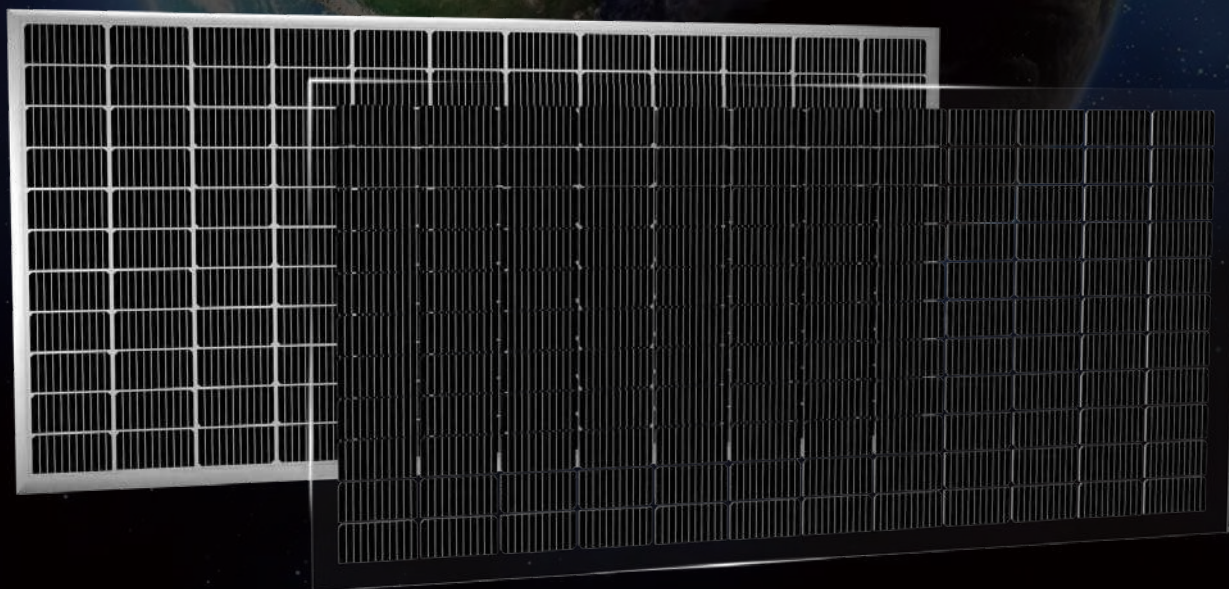
15
years

Product
Warranty

505W-525W

AE CMD-L132BD Series

EXTREME RESISTANCE TO WIND AND SNOW
HIGHEST BIFACIALITY IN REAL CONDITIONS



Ver. 24.1.1

www.ae-solar.com

132

HALF
CELLS

182
mm

CELL
SIZE



SHADING
RESISTANT



NO SELF
SHADING



LID
RESISTANT



EXTREME
RESISTANT
TO WIND



EXTREME
RESISTANT
TO SNOW



HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111237249



AE CMD-L132BD Series 505W-525W



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

Mechanical and design specification

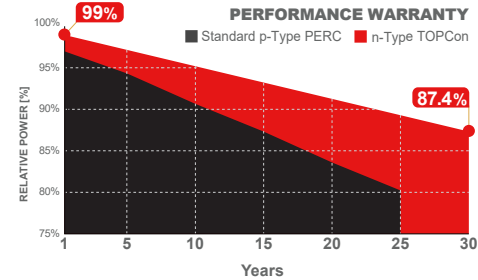
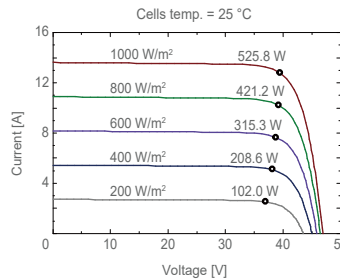
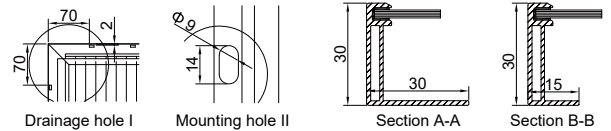
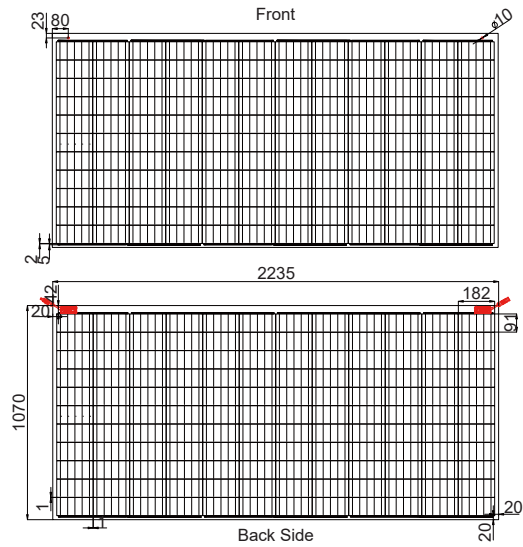
Cell type	n-Type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	132
Bifaciality	80 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm, high transmission solar glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1070 mm x 2235 mm x 30 mm
Weight	30.5 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	792 pcs / 40 HQ
Size / Pallet	2260 mm x 1140 mm x 1190 mm
Weight	1138 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*):		AE505CMD-L132BD	AE510CMD-L132BD	AE515CMD-L132BD	AE520CMD-L132BD	AE525CMD-L132BD
Nominal Max. Power	P _{max} (Wp)	505	510	515	520	525
Maximum operating voltage	V _{MPP} (V)	38.23	38.40	38.61	38.78	38.92
Maximum operating current	I _{MPP} (A)	13.21	13.28	13.34	13.41	13.49
Open-circuit voltage	V _{oc} (V)	45.21	45.46	45.72	45.93	46.15
Short-circuit current	I _{sc} (A)	14.14	14.20	14.26	14.33	14.40
Module efficiency	η (%)	21.12	21.33	21.54	21.74	21.95
Power tolerance	(W)	0~+5				
Maximum system Voltage	(V)	1500				
Maximum series fuse rating	(A)	30				

*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*): AE505CMD-L132BD AE510CMD-L132BD AE515CMD-L132BD AE520CMD-L132BD AE525CMD-L132BD						
Nominal Max. Power	P _{max} (Wp)	384	388	391	395	399
Maximum operating voltage	V _{MPP} (V)	35.42	35.63	35.74	35.94	36.14
Maximum operating current	I _{MPP} (A)	10.84	10.89	10.94	10.99	11.04
Open-circuit voltage	V _{oc} (V)	42.64	42.89	43.04	43.29	43.54
Short-circuit current	I _{sc} (A)	11.40	11.45	11.50	11.55	11.60

*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.



AESOLAR

since 2003

METEOR

More power, less degradation

30
years

Performance
Warranty

15
years

Product
Warranty

680W-700W

AE CME-132 Series

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

www.ae-solar.com

Ver. 24.1.1

132

HALF
CELLS

210
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



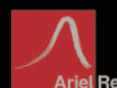
AMMONIA
RESISTANT



HIGHLY STABLE
AND TOUGH



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



AE CME-132 Series 680W-700W



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

Mechanical and design specification

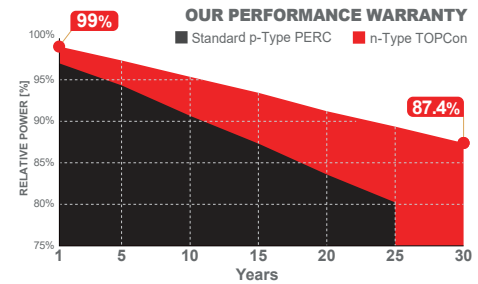
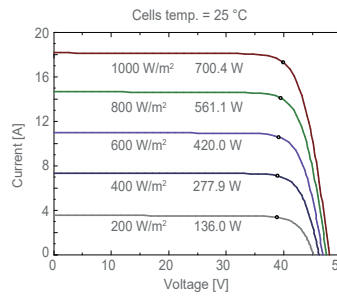
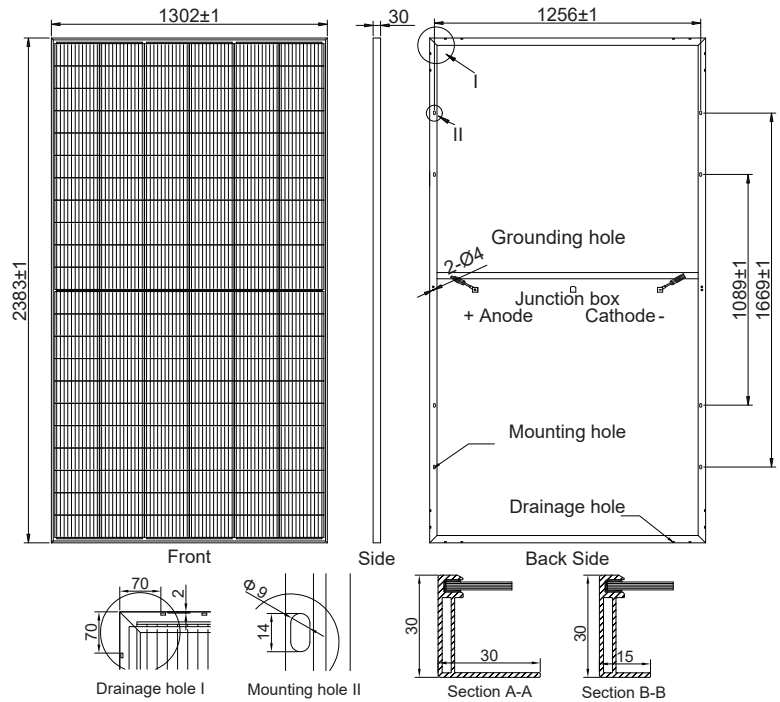
Cell type	n-Type TOPCon Technology, Half-cut cells, 210 mm
No. of cells	132
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	White Backsheet
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm lenght or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2383 mm x 1302 mm x 30 mm
Weight	31.5 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	612 pcs / 40 HQ
Size / Pallet	1350 mm x 1140 mm x 2500 mm (Upright)
Weight	1167 kg / pallet

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.30
Temp.coefficient of V_{oc}	(%/°C)	-0.24
Temp.coefficient of I_{sc}	(%/°C)	0.040
Nom. operating temp. NOCT	(°C)	43 ± 2



Electrical specifications (STC*):		AE680CME-132	AE685CME-132	AE690CME-132	AE695CME-132	AE700CME-132
Nominal Max. Power	P_{max} (Wp)	680	685	690	695	700
Maximum operating voltage	V_{MPP} (V)	39.65	39.85	40.10	40.30	40.52
Maximum operating current	I_{MPP} (A)	17.16	17.19	17.23	17.25	17.28
Open-circuit voltage	V_{oc} (V)	47.40	47.70	47.90	48.10	48.30
Short-circuit current	I_{sc} (A)	18.18	18.21	18.25	18.28	18.31
Module efficiency	η (%)	21.92	22.08	22.24	22.41	22.57
Power tolerance	(W)	0~+5				
Maximum system Voltage	(V)	1500				
Maximum series fuse rating	(A)	30				

*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*):		AE680CME-132	AE685CME-132	AE690CME-132	AE695CME-132	AE700CME-132
Nominal Max. Power	P_{max} (Wp)	517	521	525	529	533
Maximum operating voltage	V_{MPP} (V)	37.20	37.30	37.60	37.85	38.10
Maximum operating current	I_{MPP} (A)	13.91	13.94	13.97	13.98	14.00
Open-circuit voltage	V_{oc} (V)	44.90	45.20	45.40	45.60	45.80
Short-circuit current	I_{sc} (A)	14.65	14.67	14.71	14.75	14.79

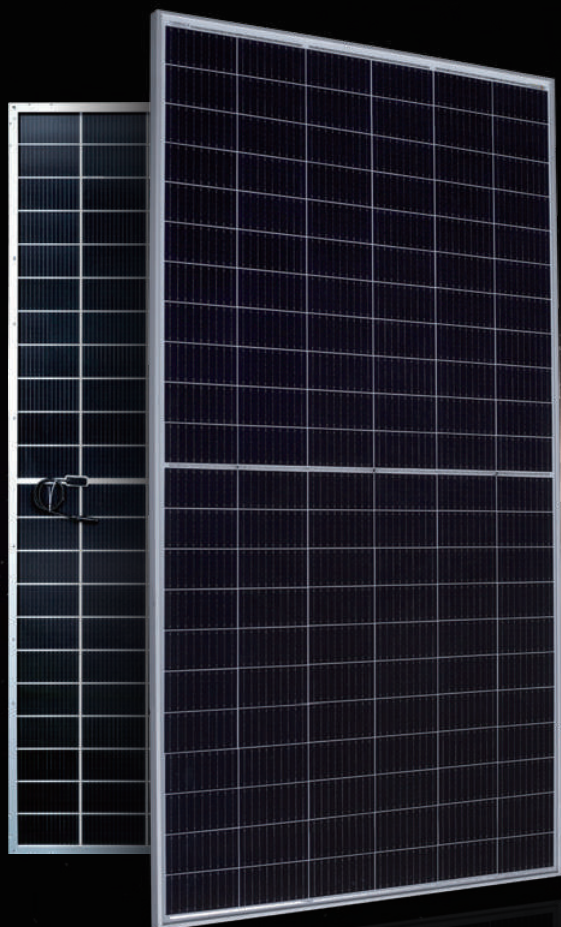
*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

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.



AESOLAR

since 2003



METEOR

More power, less degradation

30
years

Performance
Warranty

15
years

Product
Warranty

680W-700W

AE CME-132BDS Series

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

www.ae-solar.com

Ver. 24.1.1



132
HALF
CELLS



210
mm
CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

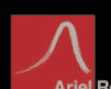


HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111257249

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



AE CME-132BDS Series 680W-700W



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

Mechanical and design specification

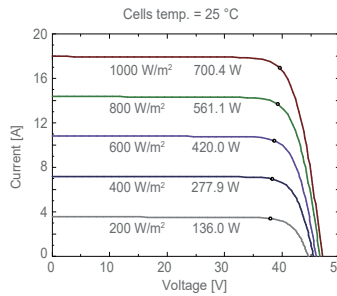
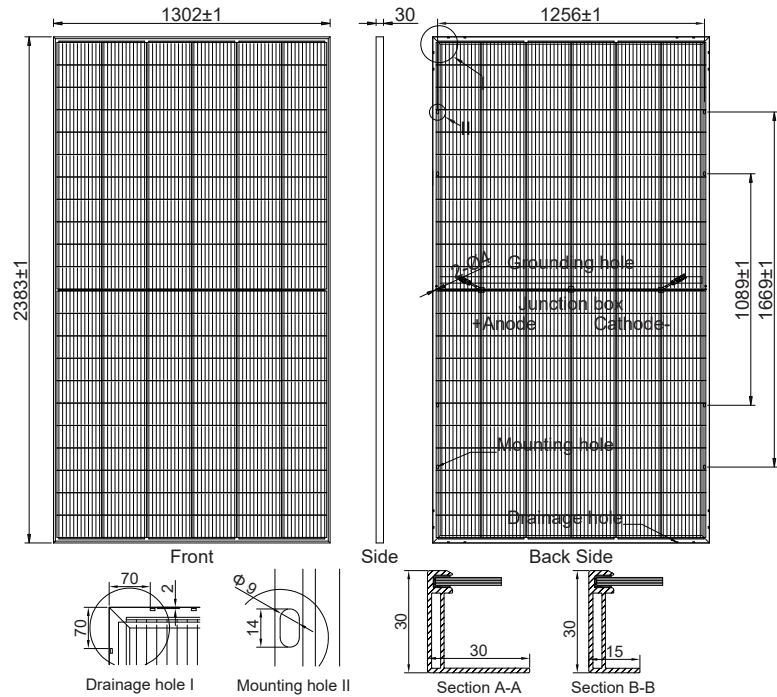
Cell type	n-Type TOPCon Technology, Half-cut cells, 210 mm
No. of cells	132
Bifaciality	80 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm white glazed glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2383 mm x 1302 mm x 30 mm
Weight	37 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	612 pcs / 40 HQ
Size / Pallet	1350 mm x 1140 mm x 2500 mm (Upright)
Weight	1364 kg / pallet

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.30
Temp.coefficient of V_{oc}	(%/°C)	-0.24
Temp.coefficient of I_{sc}	(%/°C)	0.040
Nom. operating temp. NOCT	(°C)	43 ± 2



Electrical specifications (STC*): AE680CME-132BDS AE685CME-132BDS AE690CME-132BDS AE695CME-132BDS AE700CME-132BDS

Nominal Max. Power	P_{max} (Wp)	680	685	690	695	700
Maximum operating voltage	V_{MPP} (V)	39.65	39.85	40.10	40.30	40.52
Maximum operating current	I_{MPP} (A)	17.16	17.19	17.23	17.25	17.28
Open-circuit voltage	V_{oc} (V)	47.40	47.70	47.90	48.10	48.30
Short-circuit current	I_{sc} (A)	18.18	18.21	18.25	18.28	18.31
Module efficiency	η (%)	21.92	22.08	22.24	22.41	22.57
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*): AE680CME-132BDS AE685CME-132BDS AE695CME-132BDS AE695CME-132BDS AE700CME-132BDS

Nominal Max. Power	P_{max} (Wp)	517	521	525	529	533
Maximum operating voltage	V_{MPP} (V)	37.20	37.30	37.60	37.85	38.10
Maximum operating current	I_{MPP} (A)	13.91	13.94	13.97	13.98	14.00
Open-circuit voltage	V_{oc} (V)	44.90	45.20	45.40	45.60	45.80
Short-circuit current	I_{sc} (A)	14.65	14.67	14.71	14.75	14.79

*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.

Deutsche
Qualität
Garantiert



TIER 1
BloombergNEF



AESOLAR

since 2003



AURORA

HIGH

ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

395W-415W

AE MD-108 Series

MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL

www.ae-solar.com

Ver. 24.1.1

108

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

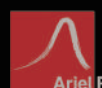


HIGHLY STABLE
AND TOUGH



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

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



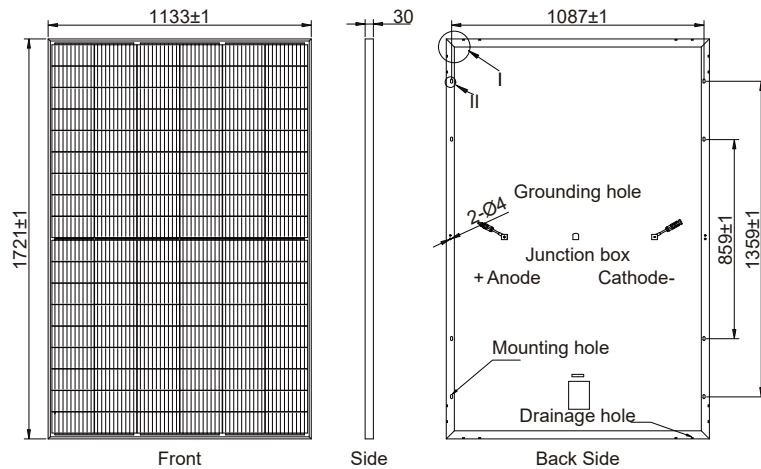
AE MD-108 Series 395W-415W



MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL

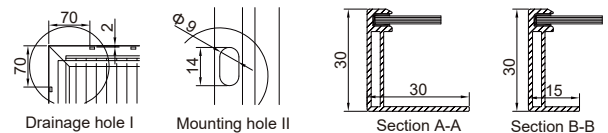
Mechanical and design specification

Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	108
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	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 or 244 kg/m ²
Snow load	5400 Pa or 550 kg/m ²



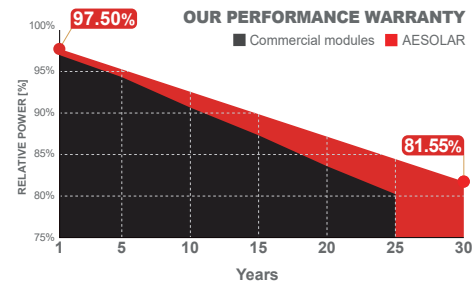
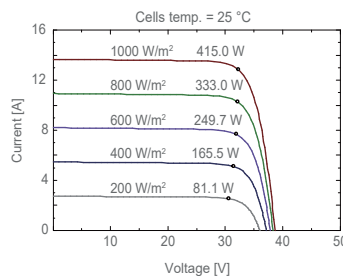
Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	936 pcs / 40 HQ
Size / Pallet	1755 mm x 1140 mm x 1245 mm
Weight	764 kg / pallet



Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.35
Temp.coefficient of V_{oc}	(%/°C)	-0.275
Temp.coefficient of I_{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):		AE395MD-108	AE400MD-108	AE405MD-108	AE410MD-108	AE415MD-108
Nominal Max. Power	P_{max} (Wp)	395	400	405	410	415
Maximum operating voltage	V_{MPP} (V)	31.08	31.35	31.62	31.88	32.12
Maximum operating current	I_{MPP} (A)	12.71	12.76	12.81	12.86	12.92
Open-circuit voltage	V_{oc} (V)	37.36	37.69	38.02	38.35	38.67
Short-circuit current	I_{sc} (A)	13.47	13.52	13.57	13.62	13.67
Module efficiency	η (%)	20.26	20.51	20.77	21.03	21.28
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*):		AE395MD-108	AE400MD-108	AE405MD-108	AE410MD-108	AE415MD-108
Nominal Max. Power	P_{max} (Wp)	298	301	304	308	311
Maximum operating voltage	V_{MPP} (V)	29.30	29.50	29.70	29.90	30.10
Maximum operating current	I_{MPP} (A)	10.17	10.21	10.25	10.29	10.34
Open-circuit voltage	V_{oc} (V)	35.20	35.40	35.60	35.80	36.00
Short-circuit current	I_{sc} (A)	10.78	10.82	10.86	10.90	10.94

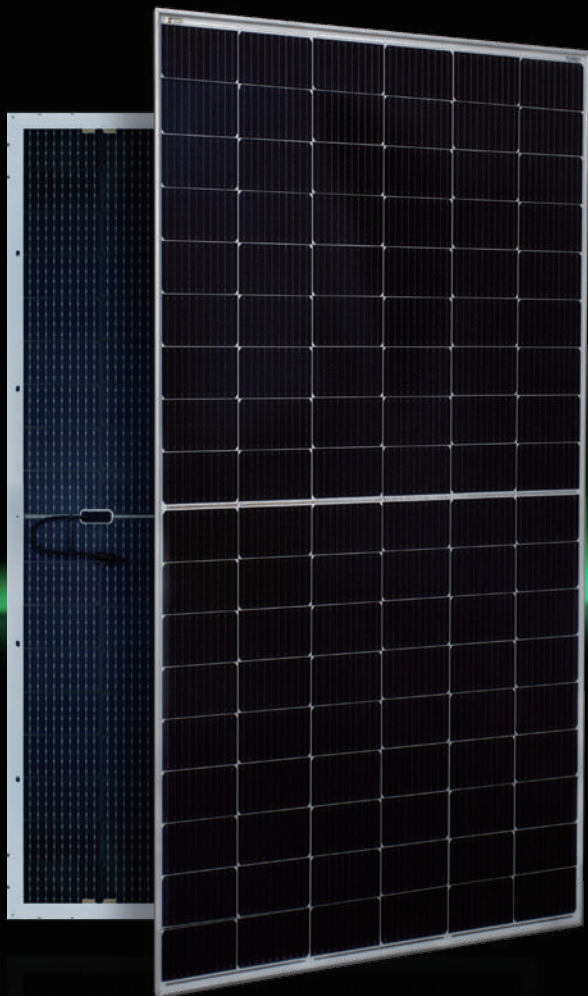
*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

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.



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

395W-415W

AE MD-108BD Series

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

www.ae-solar.com

Ver. 24.1.1

108

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

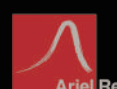


HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111257249

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



AE MD-108BD Series 395W-415W



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

Mechanical and design specification

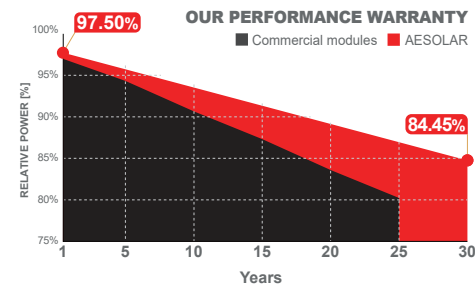
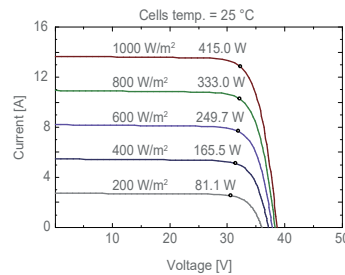
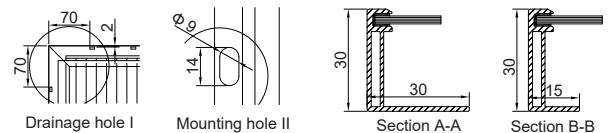
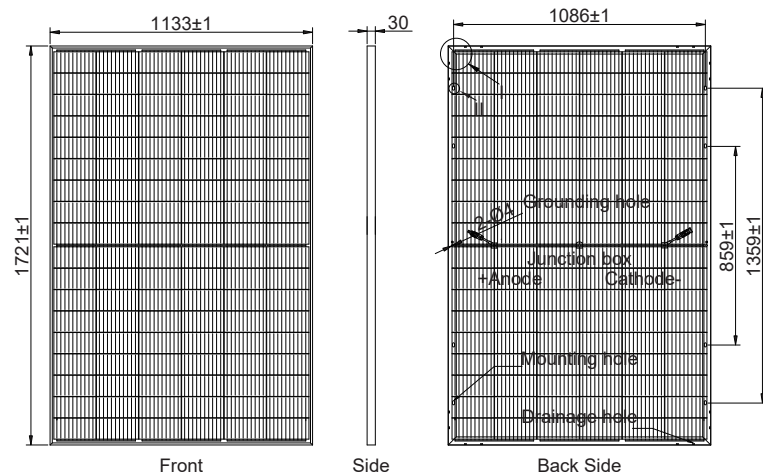
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	108
Bifaciality	70 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm, high transmission solar glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1721 mm x 1133 mm x 30 mm
Weight	23.5 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	936 pcs / 40 HQ
Size / Pallet	1755 mm x 1140 mm x 1245 mm
Weight	880 kg / pallet

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.35
Temp.coefficient of V_{oc}	(%/°C)	-0.275
Temp.coefficient of I_{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):		AE395MD-108BD	AE400MD-108BD	AE405MD-108BD	AE410MD-108BD	AE415MD-108BD
Nominal Max. Power	P _{max} (Wp)	395	400	405	410	415
Maximum operating voltage	V _{MPP} (V)	31.08	31.35	31.62	31.88	32.12
Maximum operating current	I _{MPP} (A)	12.71	12.76	12.81	12.86	12.92
Open-circuit voltage	V _{oc} (V)	37.36	37.69	38.02	38.35	38.67
Short-circuit current	I _{sc} (A)	13.47	13.52	13.57	13.62	13.67
Module efficiency	η (%)	20.26	20.51	20.77	21.03	21.28
Power tolerance	(W)	0~+5				
Maximum system Voltage	(V)	1500				
Maximum series fuse rating	(A)	30				

*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*): AE395MD-108BD AE400MD-108BD AE405MD-108BD AE410MD-108BD AE415MD-108BD						
Nominal Max. Power	P _{max} (Wp)	298	301	304	308	311
Maximum operating voltage	V _{MPP} (V)	29.30	29.50	29.70	29.90	30.10
Maximum operating current	I _{MPP} (A)	10.17	10.21	10.25	10.29	10.34
Open-circuit voltage	V _{oc} (V)	35.20	35.40	35.60	35.80	36.00
Short-circuit current	I _{sc} (A)	10.78	10.82	10.86	10.90	10.94

*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.



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

395W-415W

AE MD-108E Series

MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL • BLACK

www.ae-solar.com

Ver. 24.1.1



108

HALF
CELLS



182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



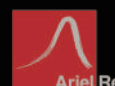
AMMONIA
RESISTANT



HIGHLY STABLE
AND TOUGH



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



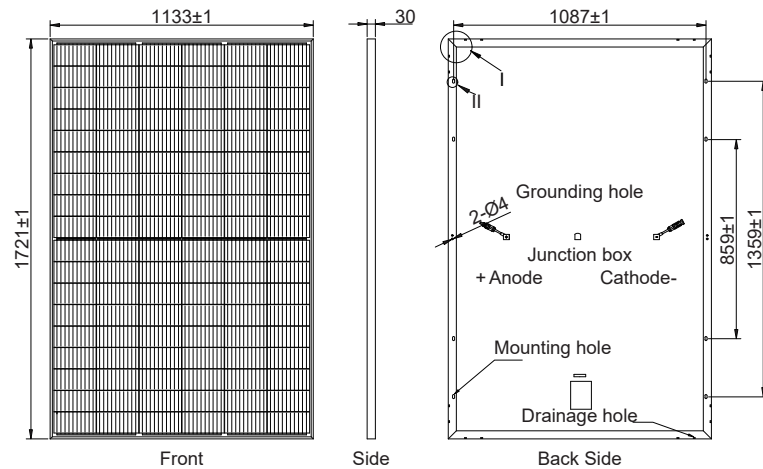
AE MD-108E Series 395W-415W



MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL • BLACK

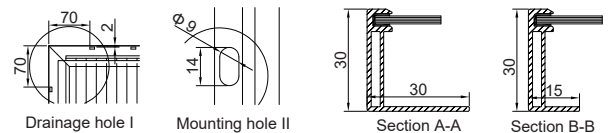
Mechanical and design specification

Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	108
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	EVA-side Black, Rear-side 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 or 244 kg/m ²
Snow load	5400 Pa or 550 kg/m ²



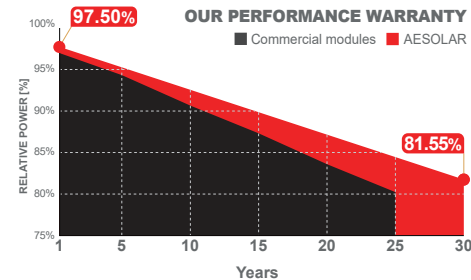
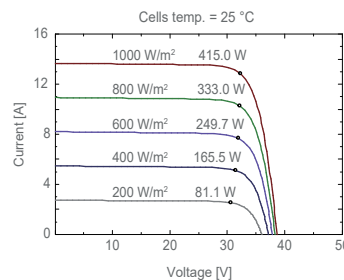
Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	936 pcs / 40 HQ
Size / Pallet	1755 mm x 1140 mm x 1245 mm
Weight	764 kg / pallet



Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.35
Temp.coefficient of V_{oc}	(%/°C)	-0.275
Temp.coefficient of I_{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):		AE395MD-108E	AE400MD-108E	AE405MD-108E	AE410MD-108E	AE415MD-108E
Nominal Max. Power	P_{max} (Wp)	395	400	405	410	415
Maximum operating voltage	V_{MPP} (V)	31.08	31.35	31.62	31.88	32.12
Maximum operating current	I_{MPP} (A)	12.71	12.76	12.81	12.86	12.92
Open-circuit voltage	V_{oc} (V)	37.36	37.69	38.02	38.35	38.67
Short-circuit current	I_{sc} (A)	13.47	13.52	13.57	13.62	13.67
Module efficiency	η (%)	20.26	20.51	20.77	21.03	21.28
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*):		AE395MD-108E	AE400MD-108E	AE405MD-108E	AE410MD-108E	AE415MD-108E
Nominal Max. Power	P_{max} (Wp)	298	301	304	308	311
Maximum operating voltage	V_{MPP} (V)	29.30	29.50	29.70	29.90	30.10
Maximum operating current	I_{MPP} (A)	10.17	10.21	10.25	10.29	10.34
Open-circuit voltage	V_{oc} (V)	35.20	35.40	35.60	35.80	36.00
Short-circuit current	I_{sc} (A)	10.78	10.82	10.86	10.90	10.94

*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.



AESOLAR

since 2003



AURORA

HIGH

ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

440W-460W

AE MD-120 Series

MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL

www.ae-solar.com

Ver. 24.1.1

120

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

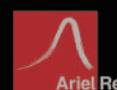


HIGHLY STABLE
AND TOUGH



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

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



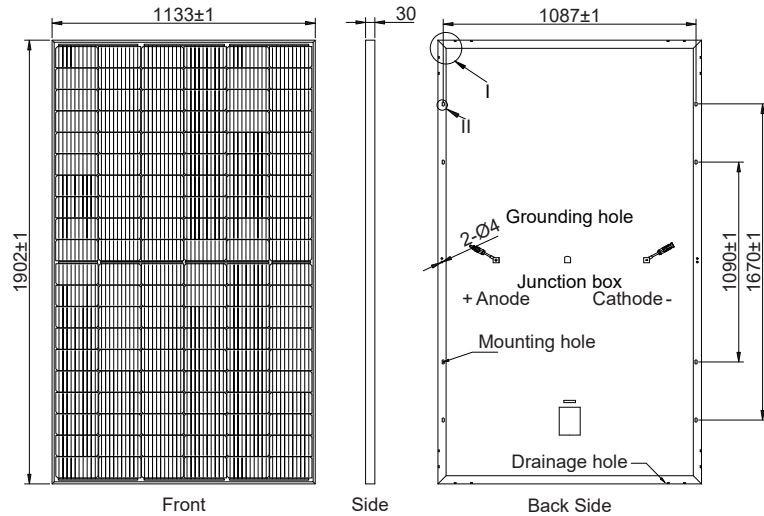
AE MD-120 Series 440W-460W



MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL

Mechanical and design specification

Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	120
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	1902 mm x 1133 mm x 30 mm
Weight	22.5 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

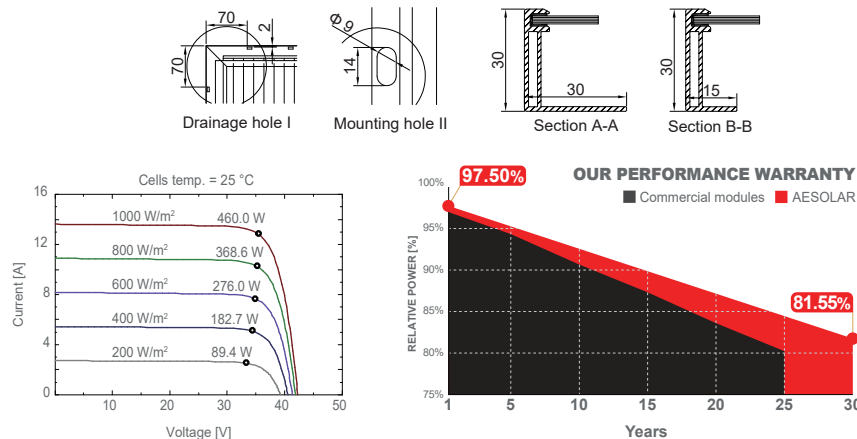


Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	864 pcs / 40 HQ
Size / Pallet	1945 mm x 1140 mm x 1245 mm
Weight	847 kg / pallet

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.35
Temp.coefficient of V_{oc}	(%/°C)	-0.275
Temp.coefficient of I_{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):		AE440MD-120	AE445MD-120	AE450MD-120	AE455MD-120	AE460MD-120
Nominal Max. Power	P_{max} (Wp)	440	445	450	455	460
Maximum operating voltage	V_{MPP} (V)	34.62	34.87	35.13	35.38	35.60
Maximum operating current	I_{MPP} (A)	12.71	12.76	12.81	12.86	12.92
Open-circuit voltage	V_{oc} (V)	41.35	41.66	41.98	42.29	42.60
Short-circuit current	I_{sc} (A)	13.47	13.52	13.57	13.62	13.67
Module efficiency	η (%)	20.42	20.65	20.88	21.11	21.35
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*):		AE440MD-120	AE445MD-120	AE450MD-120	AE455MD-120	AE460MD-120
Nominal Max. Power	P_{max} (Wp)	331	335	338	342	345
Maximum operating voltage	V_{MPP} (V)	32.60	32.80	33.00	33.20	33.40
Maximum operating current	I_{MPP} (A)	10.17	10.21	10.25	10.29	10.34
Open-circuit voltage	V_{oc} (V)	38.80	39.00	39.20	39.40	39.60
Short-circuit current	I_{sc} (A)	10.78	10.82	10.86	10.90	10.94

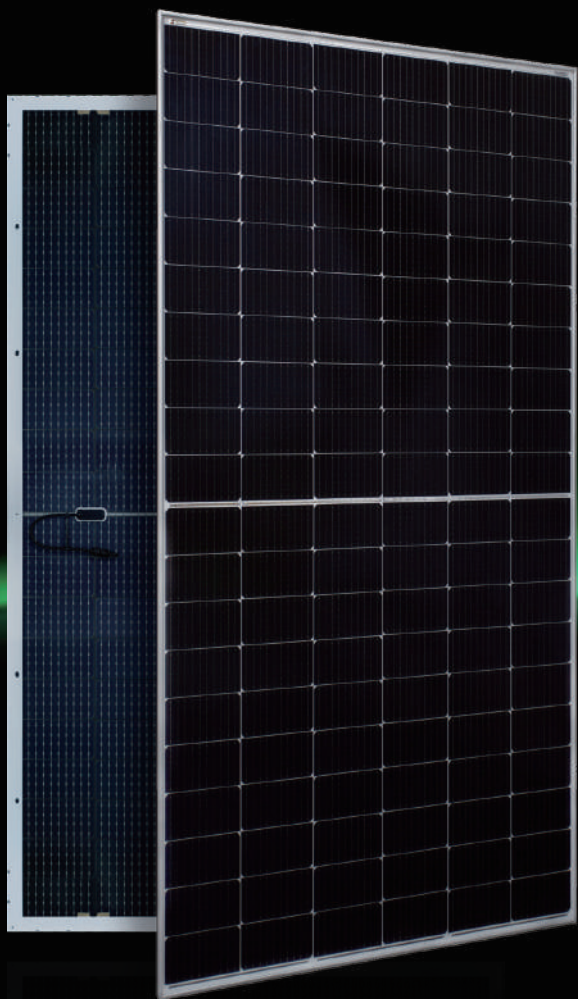
*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

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.



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

440W-460W

AE MD-120BD Series

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

www.ae-solar.com

Ver. 24.1.1



HALF
CELLS



CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

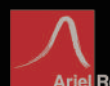


HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111257249

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



AE MD-120BD Series 440W-460W



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

Mechanical and design specification

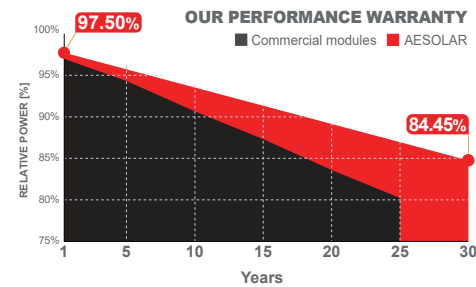
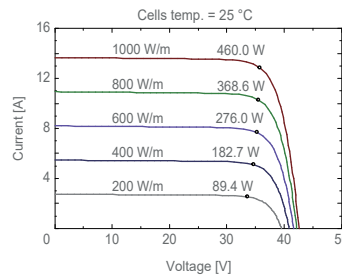
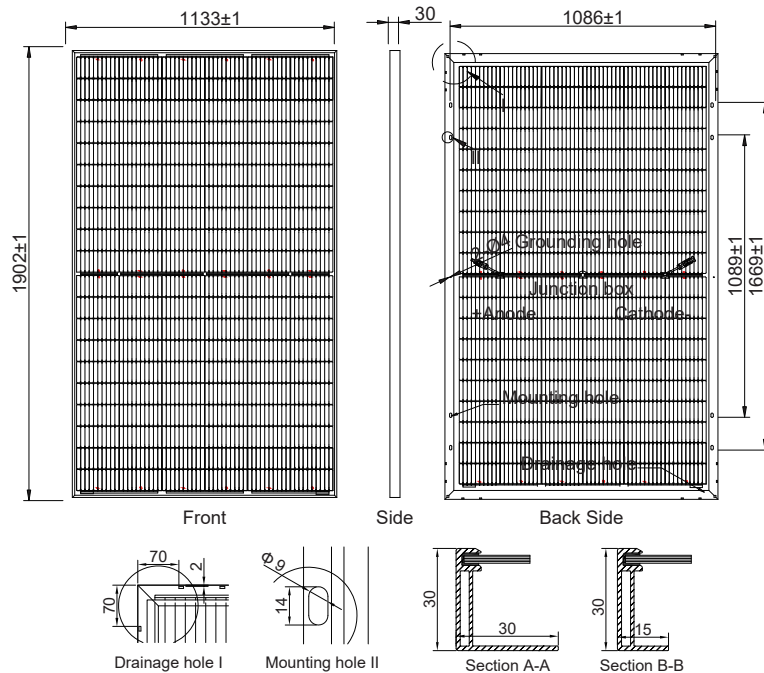
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	120
Bifaciality	70 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm, high transmission solar glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized 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

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)	-0.35
Temp.coefficient of V_{oc}	(%/°C)	-0.275
Temp.coefficient of I_{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):		AE440MD-120BD	AE445MD-120BD	AE450MD-120BD	AE455MD-120BD	AE460MD-120BD
Nominal Max. Power	P_{max} (Wp)	440	445	450	455	460
Maximum operating voltage	V_{MPP} (V)	34.62	34.87	35.13	35.38	35.60
Maximum operating current	I_{MPP} (A)	12.71	12.76	12.81	12.86	12.92
Open-circuit voltage	V_{oc} (V)	41.35	41.66	41.98	42.29	42.60
Short-circuit current	I_{sc} (A)	13.47	13.52	13.57	13.62	13.67
Module efficiency	η (%)	20.42	20.65	20.88	21.11	21.35
Power tolerance	(W)	0~+5				
Maximum system Voltage	(V)	1500				
Maximum series fuse rating	(A)	30				

*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*):		AE440MD-120BD	AE445MD-120BD	AE450MD-120BD	AE455MD-120BD	AE460MD-120BD
Nominal Max. Power	P_{max} (Wp)	331	335	338	342	345
Maximum operating voltage	V_{MPP} (V)	32.60	32.80	33.00	33.20	33.40
Maximum operating current	I_{MPP} (A)	10.17	10.21	10.25	10.29	10.34
Open-circuit voltage	V_{oc} (V)	38.80	39.00	39.20	39.40	39.60
Short-circuit current	I_{sc} (A)	10.78	10.82	10.86	10.90	10.94

*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.



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

440W-460W

AE MD-120E Series

MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL • BLACK

www.ae-solar.com

Ver. 24.1.1

120

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



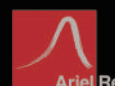
AMMONIA
RESISTANT



HIGHLY STABLE
AND TOUGH



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



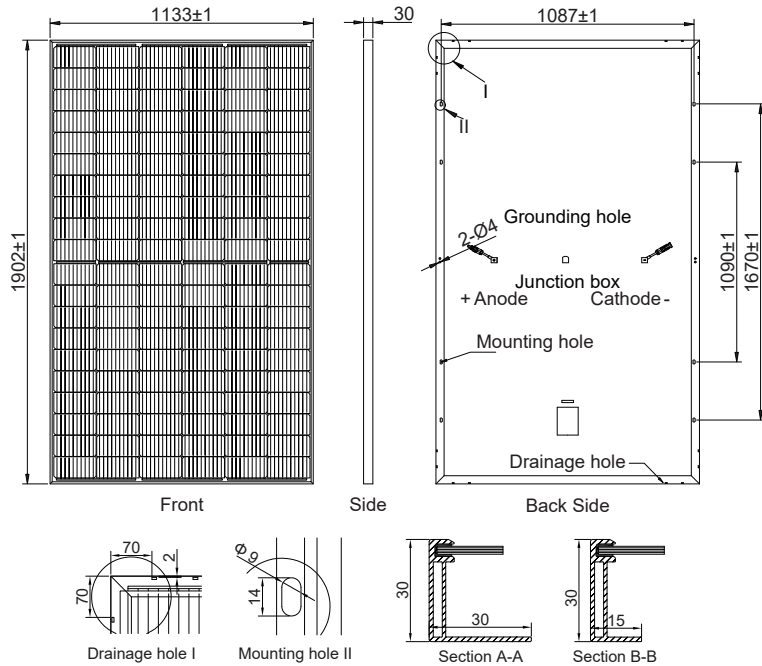
AE MD-120E Series 440W-460W



MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL • BLACK

Mechanical and design specification

Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	120
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	EVA-side Black, Rear-side 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	1902 mm x 1133 mm x 30 mm
Weight	22.5 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

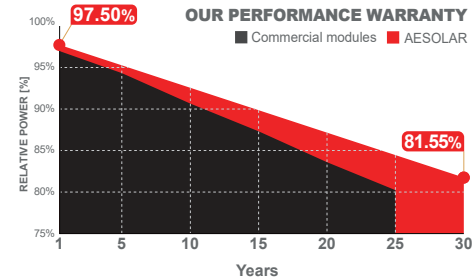
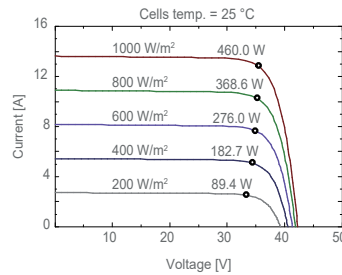


Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	864 pcs / 40 HQ
Size / Pallet	1945 mm x 1140 mm x 1245 mm
Weight	847 kg / pallet

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.35
Temp.coefficient of V_{oc}	(%/°C)	-0.275
Temp.coefficient of I_{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):		AE440MD-120E	AE445MD-120E	AE450MD-120E	AE455MD-120E	AE460MD-120E
Nominal Max. Power	P_{max} (Wp)	440	445	450	455	460
Maximum operating voltage	V_{MPP} (V)	34.62	34.87	35.13	35.38	35.60
Maximum operating current	I_{MPP} (A)	12.71	12.76	12.81	12.86	12.92
Open-circuit voltage	V_{oc} (V)	41.35	41.66	41.98	42.29	42.60
Short-circuit current	I_{sc} (A)	13.47	13.52	13.57	13.62	13.67
Module efficiency	η (%)	20.42	20.65	20.88	21.11	21.35
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*):		AE440MD-120E	AE445MD-120E	AE450MD-120E	AE455MD-120E	AE460MD-120E
Nominal Max. Power	P_{max} (Wp)	331	335	338	342	345
Maximum operating voltage	V_{MPP} (V)	32.60	32.80	33.00	33.20	33.40
Maximum operating current	I_{MPP} (A)	10.17	10.21	10.25	10.29	10.34
Open-circuit voltage	V_{oc} (V)	38.80	39.00	39.20	39.40	39.60
Short-circuit current	I_{sc} (A)	10.78	10.82	10.86	10.90	10.94

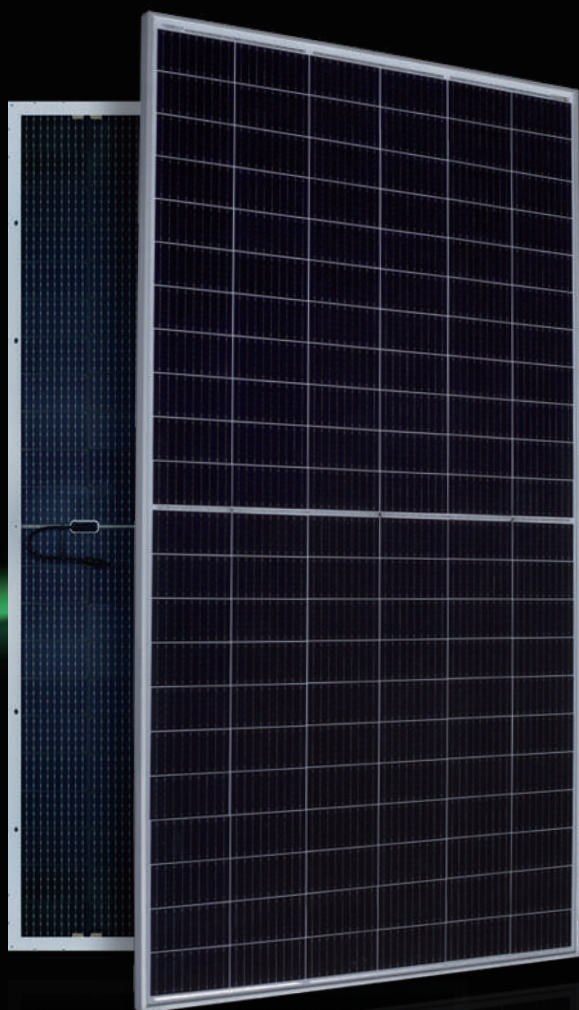
*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

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.



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

485W-505W

AE MD-132BD Series

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

www.ae-solar.com

Ver. 24.1.1

132

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

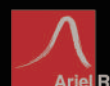


HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111257249

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



AE MD-132BD Series 485W-505W



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

Mechanical and design specification

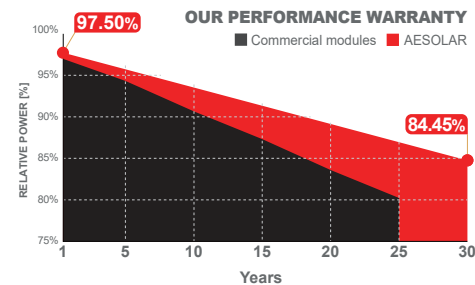
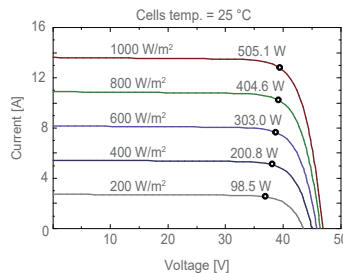
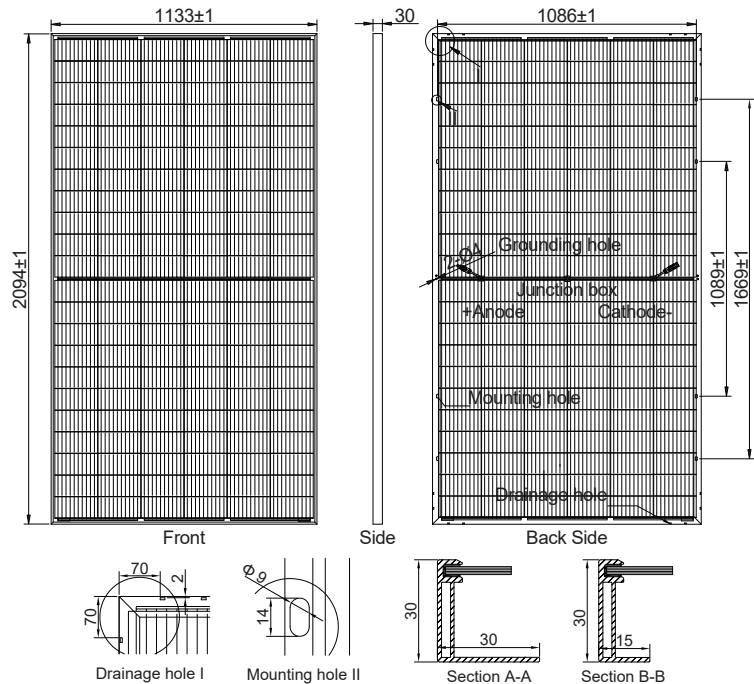
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	132
Bifaciality	70 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm, high transmission solar glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2094 mm x 1133 mm x 30 mm
Weight	28 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	792 pcs / 40 HQ
Size / Pallet	2125 mm x 1140 mm x 1245 mm
Weight	1048 kg / pallet

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.35
Temp.coefficient of V_{oc}	(%/°C)	-0.275
Temp.coefficient of I_{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):		AE485MD-132BD	AE490MD-132BD	AE495MD-132BD	AE500MD-132BD	AE505MD-132BD
Nominal Max. Power	P_{max} (Wp)	485	490	495	500	505
Maximum operating voltage	V_{MPP} (V)	38.31	38.55	38.79	39.03	39.27
Maximum operating current	I_{MPP} (A)	12.66	12.71	12.76	12.81	12.86
Open-circuit voltage	V_{oc} (V)	45.75	46.05	46.34	46.64	46.93
Short-circuit current	I_{sc} (A)	13.42	13.47	13.52	13.57	13.62
Module efficiency	η (%)	20.44	20.65	20.86	21.07	21.29
Power tolerance	(W)	0~+5				
Maximum system Voltage	(V)	1500				
Maximum series fuse rating	(A)	30				

*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*):		AE485MD-132BD	AE490MD-132BD	AE495MD-132BD	AE500MD-132BD	AE505MD-132BD
Nominal Max. Power	P_{max} (Wp)	363	366	370	373	377
Maximum operating voltage	V_{MPP} (V)	35.80	36.00	36.20	36.40	36.60
Maximum operating current	I_{MPP} (A)	10.13	10.17	10.21	10.25	10.29
Open-circuit voltage	V_{oc} (V)	43.00	43.20	43.40	43.60	43.80
Short-circuit current	I_{sc} (A)	10.74	10.78	10.82	10.86	10.90

*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.



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

485W-505W AE MD-132E Series

MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL • BLACK

www.ae-solar.com

Ver. 24.1.1

132

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



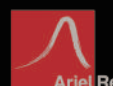
AMMONIA
RESISTANT



HIGHLY STABLE
AND TOUGH



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



AE MD-132E Series 485W-505W



MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL • BLACK

Mechanical and design specification

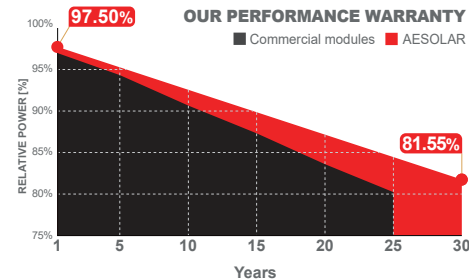
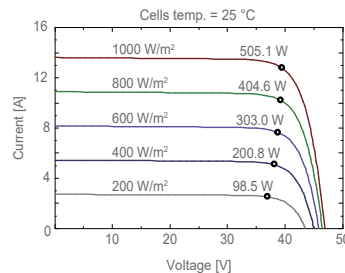
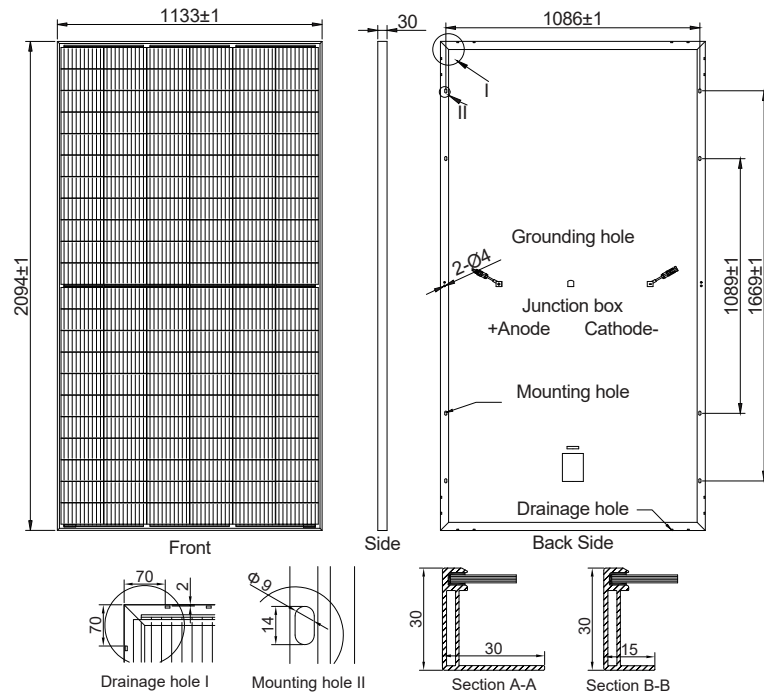
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	132
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	EVA-side Black, Rear-side White Backsheet
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2094 mm x 1133 mm x 30 mm
Weight	24.5 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	792 pcs / 40 HQ
Size / Pallet	2125 mm x 1140 mm x 1245 mm
Weight	921 kg / pallet

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.35
Temp.coefficient of V_{oc}	(%/°C)	-0.275
Temp.coefficient of I_{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



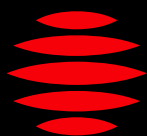
Electrical specifications (STC*):		AE485MD-132E	AE490MD-132E	AE495MD-132E	AE500MD-132E	AE505MD-132E
Nominal Max. Power	P_{max} (Wp)	485	490	495	500	505
Maximum operating voltage	V_{MPP} (V)	38.31	38.55	38.79	39.03	39.27
Maximum operating current	I_{MPP} (A)	12.66	12.71	12.76	12.81	12.86
Open-circuit voltage	V_{oc} (V)	45.75	46.05	46.34	46.64	46.93
Short-circuit current	I_{sc} (A)	13.42	13.47	13.52	13.57	13.62
Module efficiency	η (%)	20.44	20.65	20.86	21.07	21.29
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*):		AE485MD-132E	AE490MD-132E	AE495MD-132E	AE500MD-132E	AE505MD-132E
Nominal Max. Power	P_{max} (Wp)	363	366	370	373	377
Maximum operating voltage	V_{MPP} (V)	35.80	36.00	36.20	36.40	36.60
Maximum operating current	I_{MPP} (A)	10.13	10.17	10.21	10.25	10.29
Open-circuit voltage	V_{oc} (V)	43.00	43.20	43.40	43.60	43.80
Short-circuit current	I_{sc} (A)	10.74	10.78	10.82	10.86	10.90

*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.



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

530W-550W

AE MD-144 Series

MONO-CRYSTALLINE 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

AE MD-144 Series 530W-550W



MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL

Mechanical and design specification

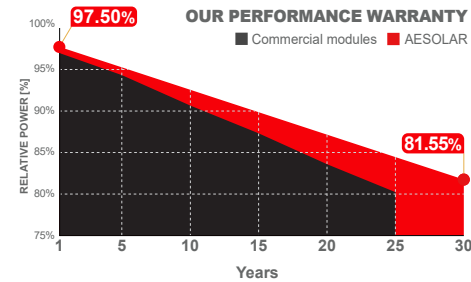
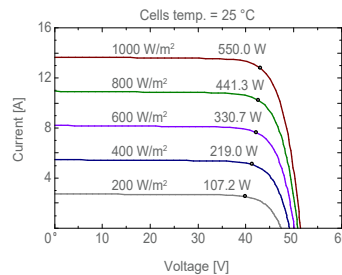
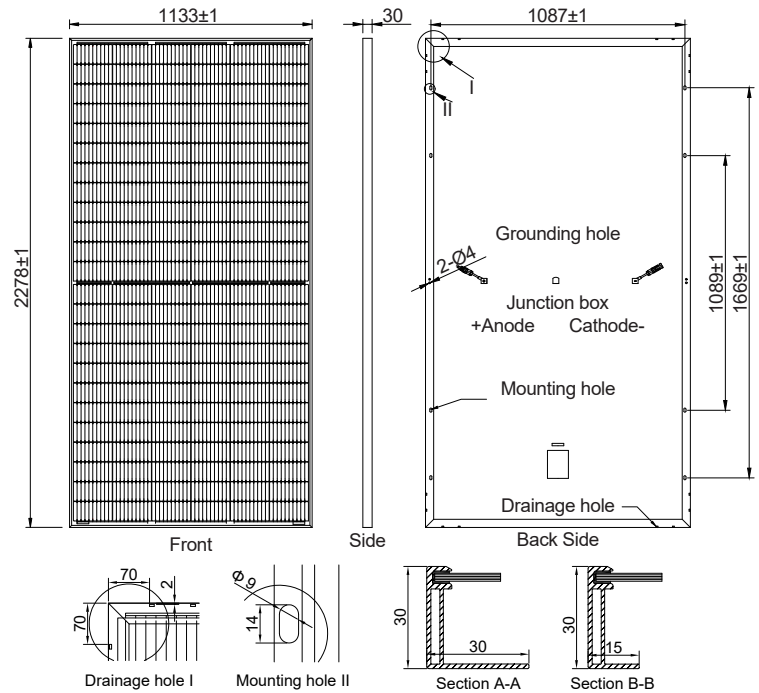
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	144
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	White backsheet
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length 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)	-0.35
Temp.coefficient of V_{oc}	(%/°C)	-0.275
Temp.coefficient of I_{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):		AE530MD-144	AE535MD-144	AE540MD-144	AE545MD-144	AE550MD-144
Nominal Max. Power	P_{max} (Wp)	530	535	540	545	550
Maximum operating voltage	V_{MPP} (V)	41.70	41.93	42.15	42.38	42.57
Maximum operating current	I_{MPP} (A)	12.71	12.76	12.81	12.86	12.92
Open-circuit voltage	V_{oc} (V)	49.65	49.78	49.90	50.01	51.44
Short-circuit current	I_{sc} (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/m², Cell temperature 25°C and air mass of AM1.5), measurement tolerance P_{max} : ±3%

Electrical specifications (NMOT*):		AE530MD-144	AE535MD-144	AE540MD-144	AE545MD-144	AE550MD-144
Nominal Max. Power	P_{max} (Wp)	400	403	407	410	414
Maximum operating voltage	V_{MPP} (V)	39.30	39.50	39.70	39.90	40.10
Maximum operating current	I_{MPP} (A)	10.17	10.21	10.25	10.29	10.34
Open-circuit voltage	V_{oc} (V)	47.00	47.20	47.40	47.60	47.80
Short-circuit current	I_{sc} (A)	10.78	10.82	10.86	10.90	10.94

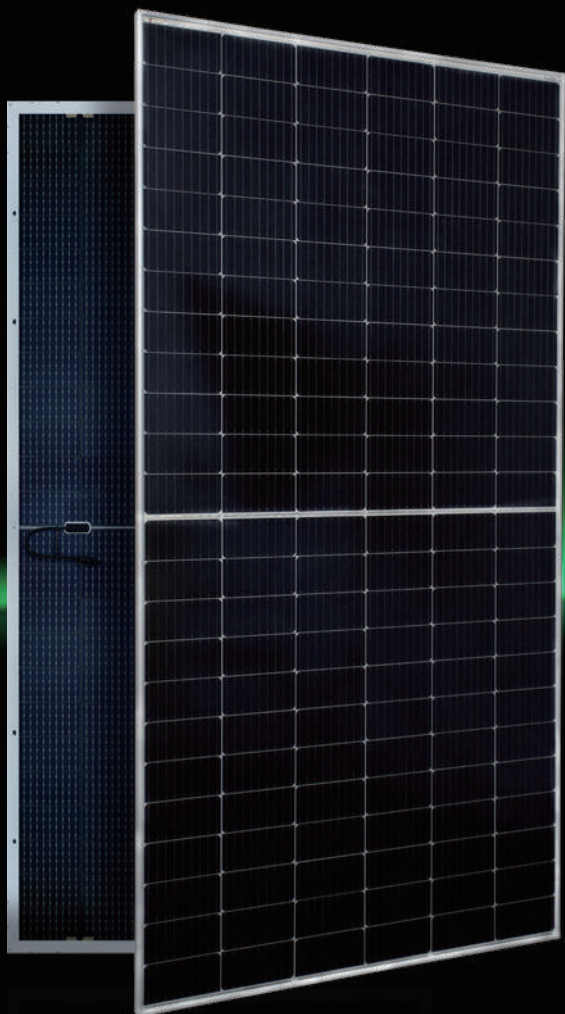
*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

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.



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

530W-550W

AE MD-144BD Series

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

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

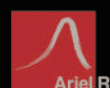


HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111257249

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



AE MD-144BD Series 530W-550W



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

Mechanical and design specification

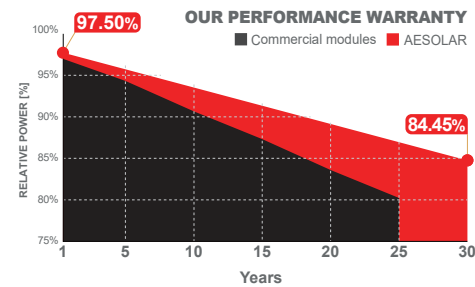
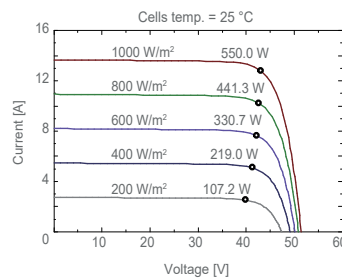
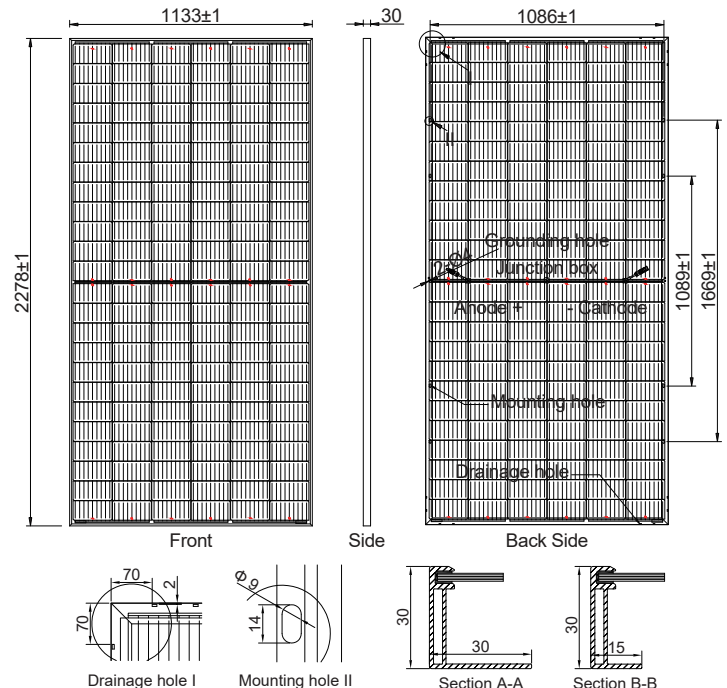
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	144
Bifaciality	70 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm, high transmission solar glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2278 mm x 1133 mm x 30 mm
Weight	31 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	1160 kg / pallet

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.35
Temp.coefficient of V_{oc}	(%/°C)	-0.275
Temp.coefficient of I_{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):		AE530MD-144BD	AE535MD-144BD	AE540MD-144BD	AE545MD-144BD	AE550MD-144BD
Nominal Max. Power	P_{max} (Wp)	530	535	540	545	550
Maximum operating voltage	V_{MPP} (V)	41.70	41.93	42.15	42.38	42.57
Maximum operating current	I_{MPP} (A)	12.71	12.76	12.81	12.86	12.92
Open-circuit voltage	V_{oc} (V)	49.65	49.78	49.90	50.01	51.44
Short-circuit current	I_{sc} (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)	30				

*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*):		AE530MD-144BD	AE535MD-144BD	AE540MD-144BD	AE545MD-144BD	AE550MD-144BD
Nominal Max. Power	P_{max} (Wp)	400	403	407	410	414
Maximum operating voltage	V_{MPP} (V)	39.30	39.50	39.70	39.90	40.10
Maximum operating current	I_{MPP} (A)	10.17	10.21	10.25	10.29	10.34
Open-circuit voltage	V_{oc} (V)	47.00	47.20	47.40	47.60	47.80
Short-circuit current	I_{sc} (A)	10.78	10.82	10.86	10.90	10.94

*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.



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

640W-660W

AE ME-132 Series

MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL

www.ae-solar.com

Ver. 24.1.1

132

HALF
CELLS

210
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

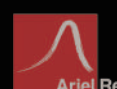


HIGHLY STABLE
AND TOUGH



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)



AE ME-132 Series 640W-660W



MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL

Mechanical and design specification

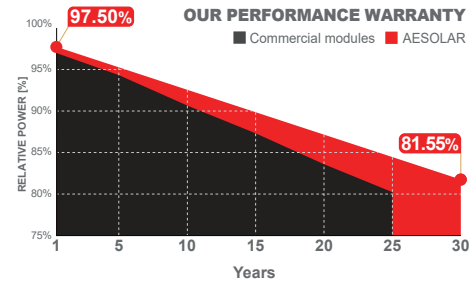
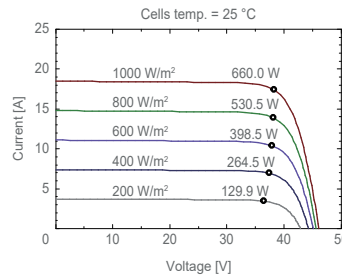
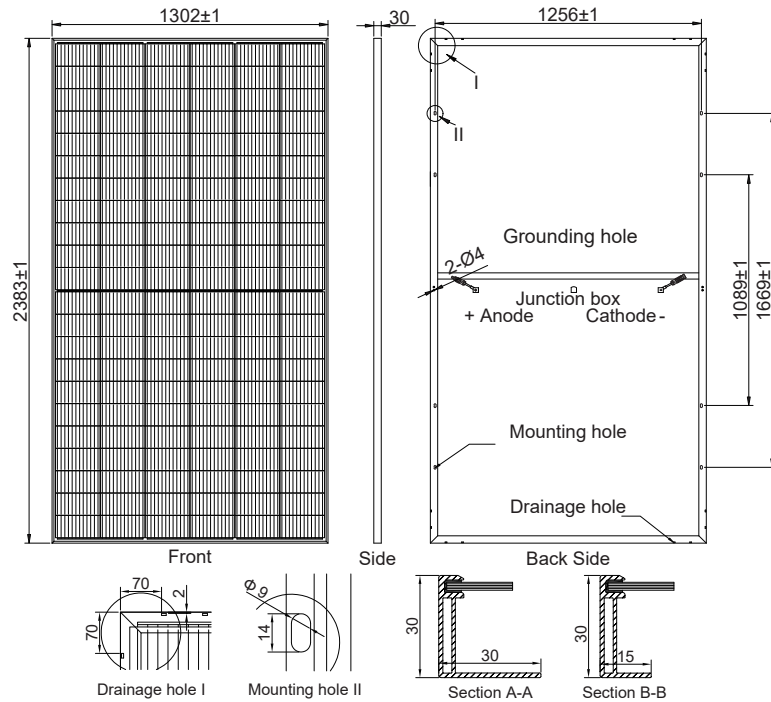
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 210 mm
No. of cells	132
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	White backsheet
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2383 mm x 1302 mm x 30 mm
Weight	31.5 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	612 pcs / 40 HQ
Size / Pallet	1350 mm x 1140 mm x 2500 mm (Upright)
Weight	1167 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*):		AE640ME-132	AE645ME-132	AE650ME-132	AE655ME-132	AE660ME-132
Nominal Max. Power	P_{max} (Wp)	640	645	650	655	660
Maximum operating voltage	V_{MPP} (V)	37.00	37.20	37.40	37.60	37.80
Maximum operating current	I_{MPP} (A)	17.30	17.34	17.38	17.42	17.46
Open-circuit voltage	V_{oc} (V)	45.10	45.30	45.50	45.70	45.90
Short-circuit current	I_{sc} (A)	17.74	18.25	18.32	18.38	18.43
Module efficiency	η (%)	20.63	20.79	20.95	21.11	21.27
Power tolerance	(W)	0~+5				
Maximum system Voltage	(V)	1500				
Maximum series fuse rating	(A)	30				

*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*):		AE640ME-132	AE645ME-132	AE650ME-132	AE655ME-132	AE660ME-132
Nominal Max. Power	P_{max} (Wp)	480	484	488	492	496
Maximum operating voltage	V_{MPP} (V)	34.70	34.90	35.10	35.30	35.50
Maximum operating current	I_{MPP} (A)	13.84	13.87	13.90	13.94	13.97
Open-circuit voltage	V_{oc} (V)	42.00	42.20	42.40	42.60	42.80
Short-circuit current	I_{sc} (A)	14.19	14.60	14.66	14.70	14.74

*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.



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years

Performance
Warranty

15
years

Product
Warranty

640W-660W

AE ME-132BD Series

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

www.ae-solar.com

Ver. 24.1.1



HALF
CELLS



CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

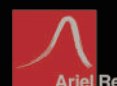


HIGHLY STABLE
AND TOUGH



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111257249

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



AE ME-132BD Series 640W-660W



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

Mechanical and design specification

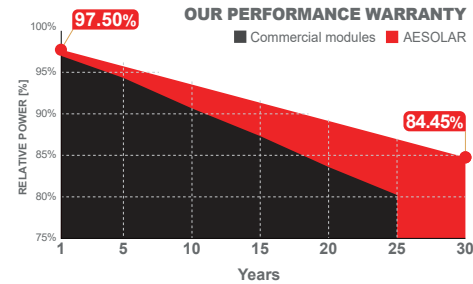
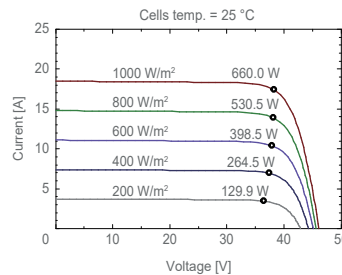
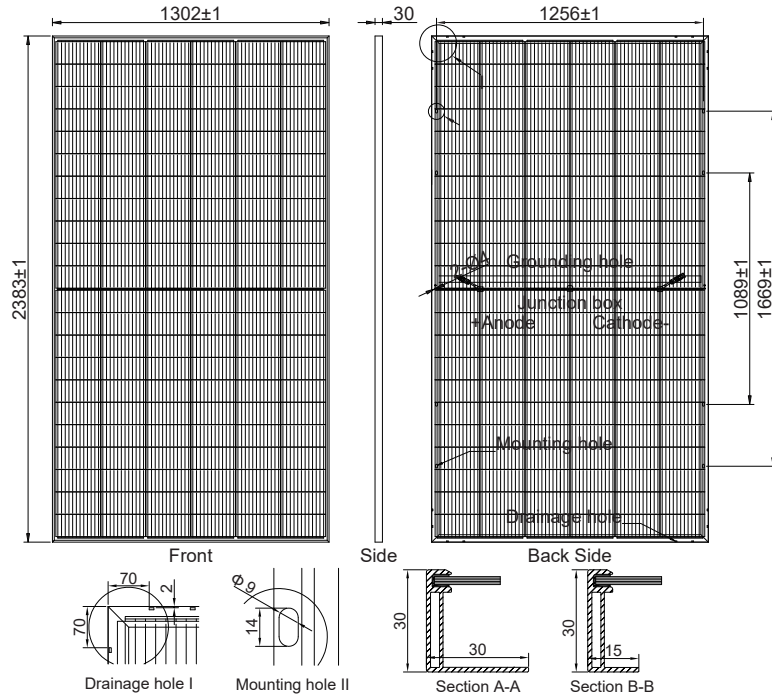
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 210 mm
No. of cells	132
Bifaciality	70 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm, high transmission solar glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2383 mm x 1302 mm x 30 mm
Weight	37 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	612 pcs / 40 HQ
Size / Pallet	1350 mm x 1140 mm x 2500 mm (Upright)
Weight	1364 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*):		AE640ME-132BD	AE645ME-132BD	AE650ME-132BD	AE655ME-132BD	AE660ME-132BD
Nominal Max. Power	P_{max} (Wp)	640	645	650	655	660
Maximum operating voltage	V_{MPP} (V)	37.00	37.20	37.40	37.60	37.80
Maximum operating current	I_{MPP} (A)	17.30	17.34	17.38	17.42	17.46
Open-circuit voltage	V_{oc} (V)	45.10	45.30	45.50	45.70	45.90
Short-circuit current	I_{sc} (A)	17.74	18.25	18.32	18.38	18.43
Module efficiency	η (%)	20.63	20.79	20.95	21.11	21.27
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*):		AE640ME-132BD	AE645ME-132BD	AE650ME-132BD	AE655ME-132BD	AE660ME-132BD
Nominal Max. Power	P_{max} (Wp)	480	484	488	492	496
Maximum operating voltage	V_{MPP} (V)	34.70	34.90	35.10	35.30	35.50
Maximum operating current	I_{MPP} (A)	13.84	13.87	13.90	13.94	13.97
Open-circuit voltage	V_{oc} (V)	42.00	42.20	42.40	42.60	42.80
Short-circuit current	I_{sc} (A)	14.19	14.60	14.66	14.70	14.74

*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.

Deutsche
Qualität
Garantiert



120

HALF
CELLS

166
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT



HIGHLY STABLE
AND TOUGH



PVT collectors provide both
electrical and thermal energy

30

years

Performance
Guarantee

15

years

Product
Warranty

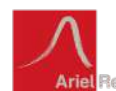
MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL

PV 370W - 380W
Thermal 964W
AE PV - Thermal Series



IEC 61215
IEC 61730
Regular Production Surveillance
Type Tested and Monitored

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



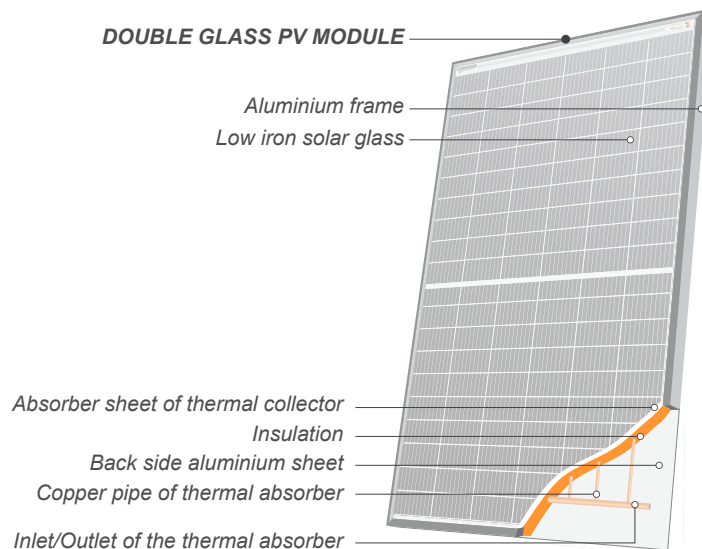
www.ae-solar.com

AE PV-120 Series 370W-380W

Mechanical and design specification

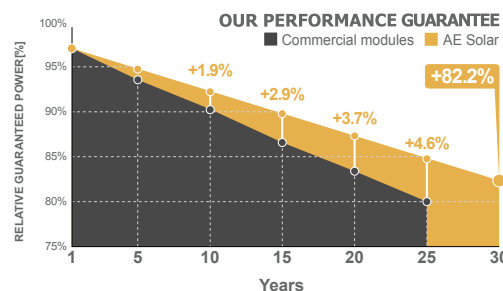
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 166 mm
No. of cells	120
Glass	Low iron %, AR glass 3.2mm
Encapsulation	EVA
Back cover	White backsheet
Junction box	IP 68 rated
Frame	anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1755 mm x 1038 mm x 35 mm
Weight	33 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

DOUBLE GLASS PV MODULE



Thermal specifications

Peak thermal power / m ²	529 Wp
Peak thermal power / collector	964 Wp
In/out connection of thermal absorber	Copper pipe F22 mm
Type of medium	Propylene glycol
Quantity of medium	1.4l
Absorber Sheet	Aluminum
Register	Copper pipe F6mm
Insulation	Stone wool 20 mm



Electrical specifications (STC*):

		AE370PV-120	AE375PV-120	AE380PV-120
Nominal Max. Power	P _{max} (Wp)	370	375	380
Maximum operating voltage	V _{MPP} (V)	34.4	34.6	34.8
Maximum operating current	I _{MPP} (A)	10.76	10.84	10.92
Open-circuit voltage	V _{oc} (V)	41.3	41.5	41.7
Short-circuit current	I _{sc} (A)	11.60	11.70	11.80
Module efficiency	η (%)	20.31	20.59	20.86
Power tolerance	(W)		0~+5	
Maximum system Voltage	(V)		1500	
Maximum series fuse rating	(A)		20	

*STC: Standard test conditions (Irradiance 1000 W/m², Cell temperature 25°C and air mass of AM1.5)

Electrical specifications (NMOT*):

		AE370PV-120	AE375PV-120	AE380PV-120
Nominal Max. Power	P _{max} (Wp)	279	283	287
Maximum operating voltage	V _{MPP} (V)	32.40	32.60	32.80
Maximum operating current	I _{MPP} (A)	8.60	8.67	8.74
Open-circuit voltage	V _{oc} (V)	38.90	39.10	39.30
Short-circuit current	I _{sc} (A)	9.28	9.36	9.44

*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.





AESOLAR

since 2003



HSF

**SMART HOT-SPOT FREE
SHADING RESISTANT TECHNOLOGY**

Maximizing the energy yield

30

years

Performance
Warranty

15

years

Product
Warranty

320W-335W AE SMB-60 Series

MONO-CRYSTALLINE PV MODULES
FULL CELLS • MONO-FACIAL

www.ae-solar.com

Ver. 24.1.1



FULL
CELLS



SHADING
RESISTANT



HOT SPOT
RESISTANT



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



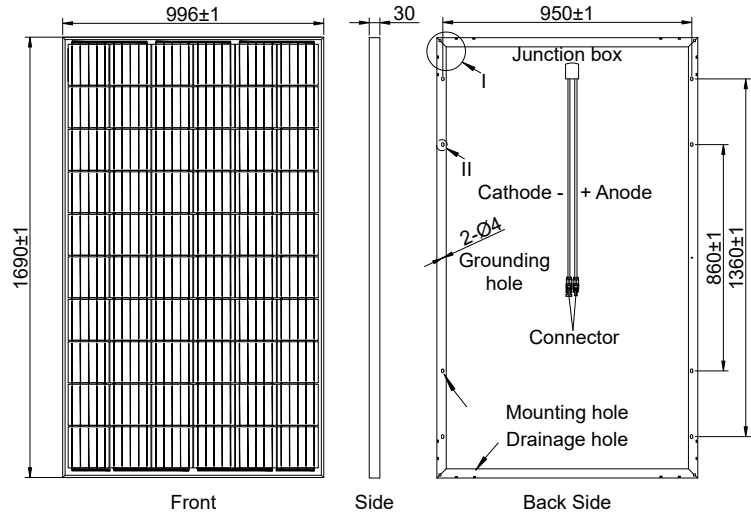
AE SMB-60 Series 320W-335W



MONO-CRYSTALLINE PV MODULES
FULL CELLS • MONO-FACIAL

Mechanical and design specification

Cell type	Mono c-Si PERC, Full cells, 158.75 mm
No. of cells	60
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	White Backsheet
Junction box	IP68 rated, 2 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 900 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1690 mm x 996 mm x 30 mm
Weight	17.5 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

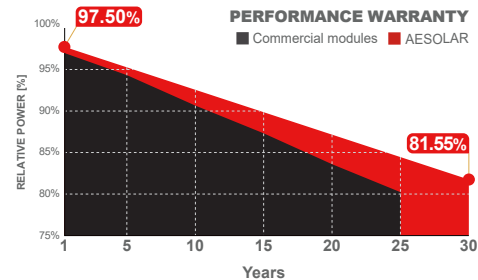
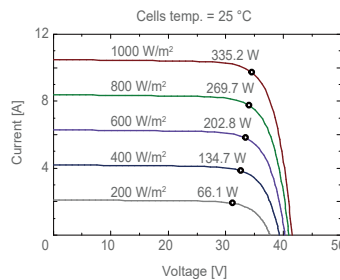
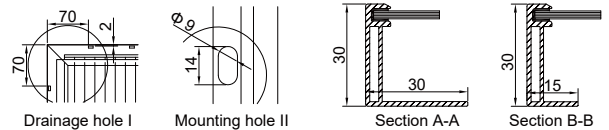


Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	988 pcs / 40 HQ
Size / Pallet	1725 mm x 1140 mm x 1117.5 mm
Weight	679 kg / pallet

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.37
Temp.coefficient of V_{oc}	(%/°C)	-0.28
Temp.coefficient of I_{sc}	(%/°C)	0.048
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):		AE320SMB-60	AE325SMB-60	AE330SMB-60	AE335SMB-60
Nominal Max. Power	P_{max} (Wp)	320	325	330	335
Maximum operating voltage	V_{MPP} (V)	33.40	33.61	33.81	34.02
Maximum operating current	I_{MPP} (A)	9.59	9.68	9.76	9.85
Open-circuit voltage	V_{oc} (V)	40.90	41.10	41.31	41.49
Short-circuit current	I_{sc} (A)	10.15	10.20	10.37	10.49
Module efficiency	η (%)	19.01	19.31	19.61	19.90
Power tolerance	(W)			0~+5	
Maximum system Voltage	(V)			1000	
Maximum series fuse rating	(A)			15	

*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*):		AE320SMB-60	AE325SMB-60	AE330SMB-60	AE335SMB-60
Nominal Max. Power	P_{max} (Wp)	241	245	248	252
Maximum operating voltage	V_{MPP} (V)	31.40	31.60	31.80	32.00
Maximum operating current	I_{MPP} (A)	7.67	7.74	7.81	7.88
Open-circuit voltage	V_{oc} (V)	37.71	37.90	38.10	38.30
Short-circuit current	I_{sc} (A)	8.14	8.16	8.30	8.39

*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.



AESOLAR

since 2003



METEOR

More power, less degradation

30
years

Performance
Warranty

15
years

Product
Warranty

420W-440W

AE CMD-108 Series

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

www.ae-solar.com

Ver. 24.1.1



HALF
CELLS



CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



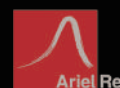
AMMONIA
RESISTANT



HIGHLY STABLE
AND TOUGH



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



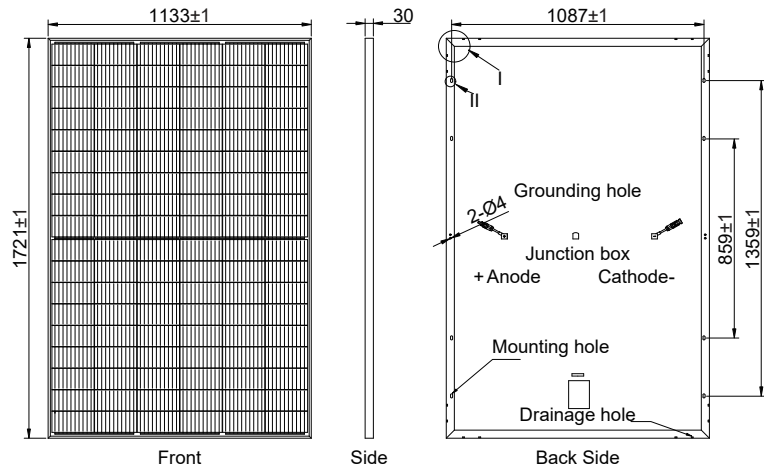
AE CMD-108 Series 420W-440W



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

Mechanical and design specification

Cell type	n-Type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	108
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	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 or 244 kg/m ²
Snow load	5400 Pa or 550 kg/m ²

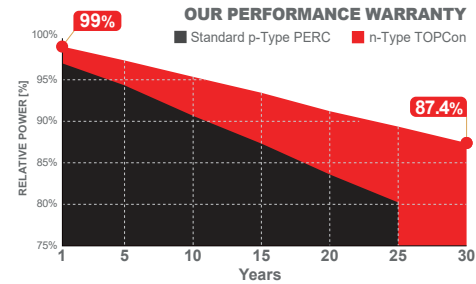
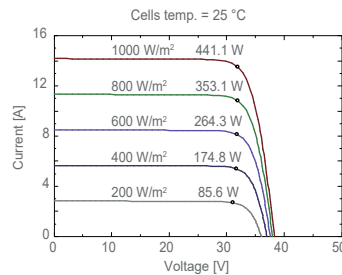


Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	936 pcs / 40 HQ
Size / Pallet	1755 mm x 1140 mm x 1245 mm
Weight	764 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*):		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), measurement tolerance P_{max} : ±3%

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)	29.70	29.90	30.10	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)	35.80	36.00	36.20	36.40	36.60
Short-circuit current	I_{sc} (A)	11.31	11.37	11.42	11.48	11.54

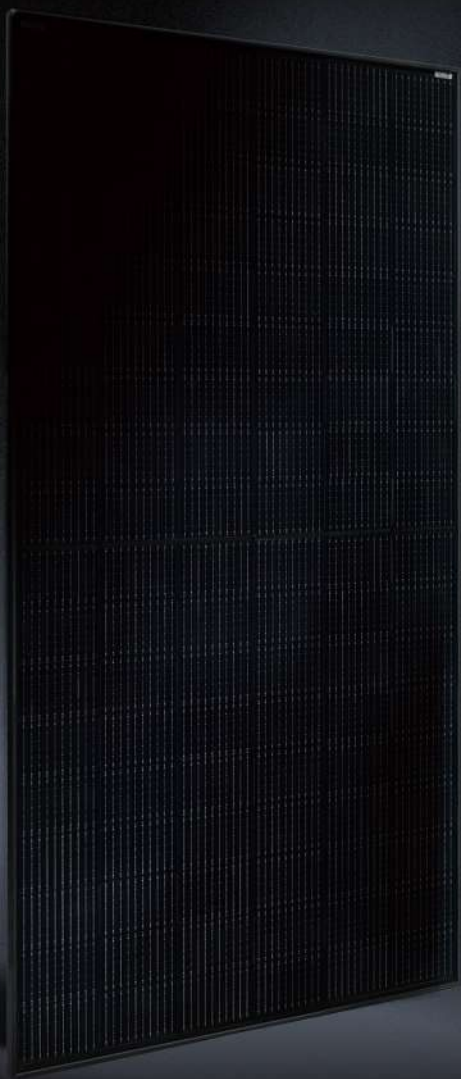
*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

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.



AESOLAR

since 2003



HSF2.0

**SMART HOT-SPOT FREE
SHADING RESISTANT TECHNOLOGY**

Maximizing the energy yield

30

years

Performance
Warranty

15

years

Product
Warranty

395W-410W

AE SMD-108E Series

MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL • BLACK

HOT-SPOT FREE TECHNOLOGY
protects different segments of cells
by dedicated bypass diodes

www.ae-solar.com

Ver. 24.1.1

108

HALF
CELLS

**182
mm**

CELL
SIZE



SHADING
RESISTANT



HOT SPOT
RESISTANT



LID
RESISTANT



HIGHLY STABLE
AND TOUGH



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



AE SMD-108E Series 395W-410W



MONO-CRYSTALLINE PV MODULES
HALF-CUT CELLS • MONO-FACIAL • BLACK

Mechanical and design specification

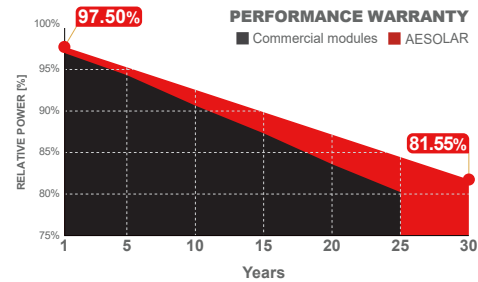
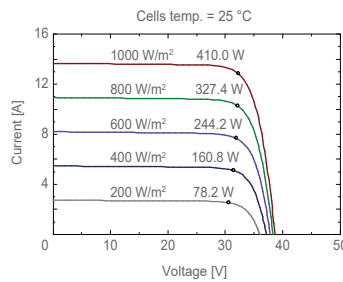
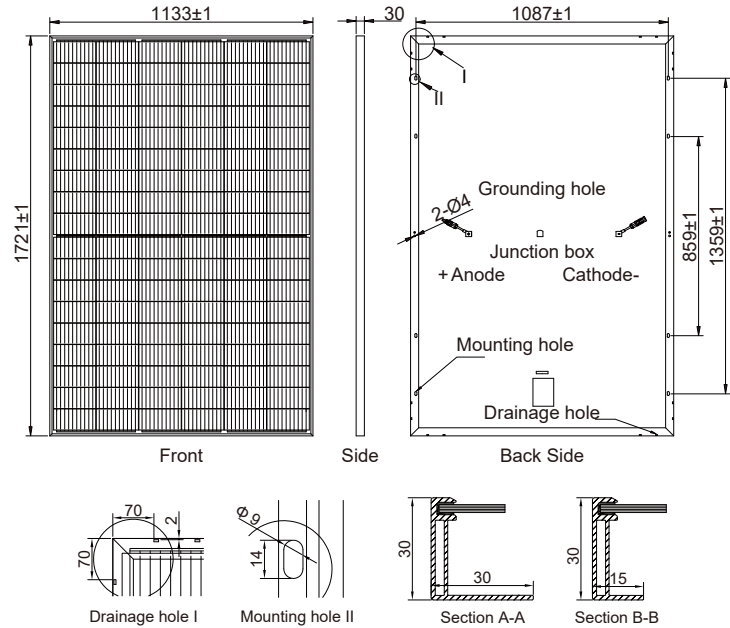
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 182 mm
No. of cells	108
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	Backsheet with black color on the solar cell side and white color on the air side
Junction box	IP68 rated, 3 Bypass Diodes
Frame	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 or 244 kg/m ²
Snow load	5400 Pa or 550 kg/m ²
Number of integrated bypass diodes	36

Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	936 pcs / 40 HQ
Size / Pallet	1755 mm x 1140 mm x 1245 mm
Weight	764 kg / pallet

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.35
Temp.coefficient of V_{oc}	(%/°C)	-0.275
Temp.coefficient of I_{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):		AE395SMD-108E	AE400SMD-108E	AE405SMD-108E	AE410SMD-108E
Nominal Max. Power	P_{max} (Wp)	395	400	405	410
Maximum operating voltage	V_{MPP} (V)	31.08	31.35	31.62	31.88
Maximum operating current	I_{MPP} (A)	12.71	12.76	12.81	12.86
Open-circuit voltage	V_{oc} (V)	37.36	37.69	38.02	38.35
Short-circuit current	I_{sc} (A)	13.47	13.52	13.57	13.62
Module efficiency	η (%)	20.26	20.51	20.77	21.03
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*):		AE395SMD-108E	AE400SMD-108E	AE405SMD-108E	AE410SMD-108E
Nominal Max. Power	P_{max} (Wp)	298	301	304	308
Maximum operating voltage	V_{MPP} (V)	29.30	29.50	29.70	29.90
Maximum operating current	I_{MPP} (A)	10.17	10.21	10.25	10.29
Open-circuit voltage	V_{oc} (V)	35.20	35.40	35.60	35.80
Short-circuit current	I_{sc} (A)	10.78	10.82	10.86	10.90

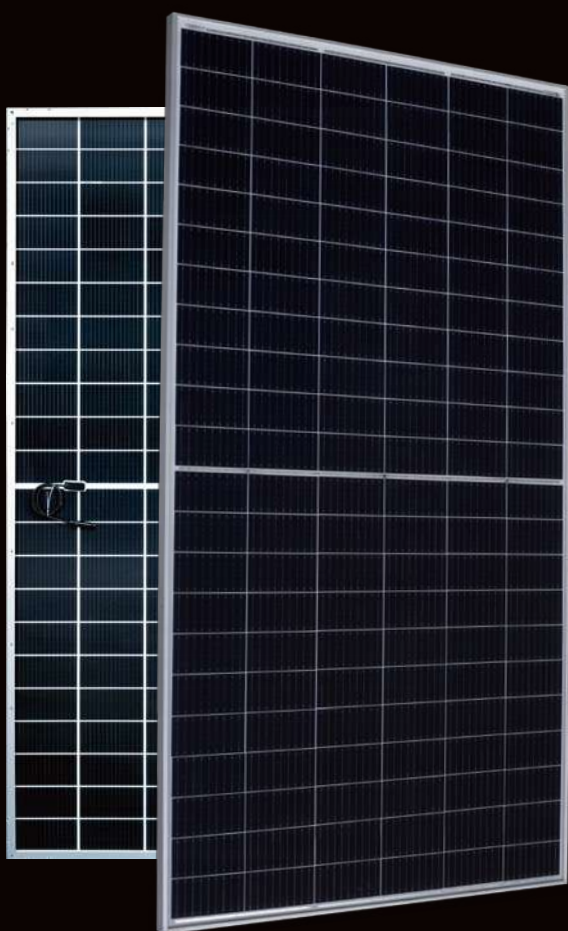
*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

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.



AESOLAR

since 2003



COMET

enrich your energy yield

30
years

Performance
Warranty

15
years

Product
Warranty

680W-700W

AE TME-132BDS Series

SILICON HETEROJUNCTION PV MODULES
HALF-CUT CELLS • BIFACIAL • DOUBLE-GLASS

www.ae-solar.com

Ver. 24.1.1

132

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 1111257249



AE TME-132BDS Series 680W-700W



SILICON HETEROJUNCTION PV MODULES
HALF-CUT CELLS • BIFACIAL • DOUBLE-GLASS

Mechanical and design specification

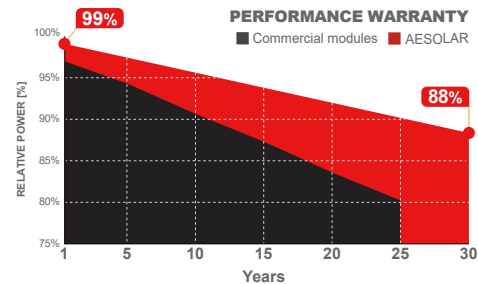
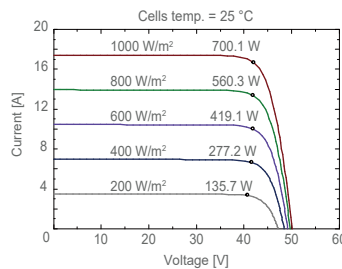
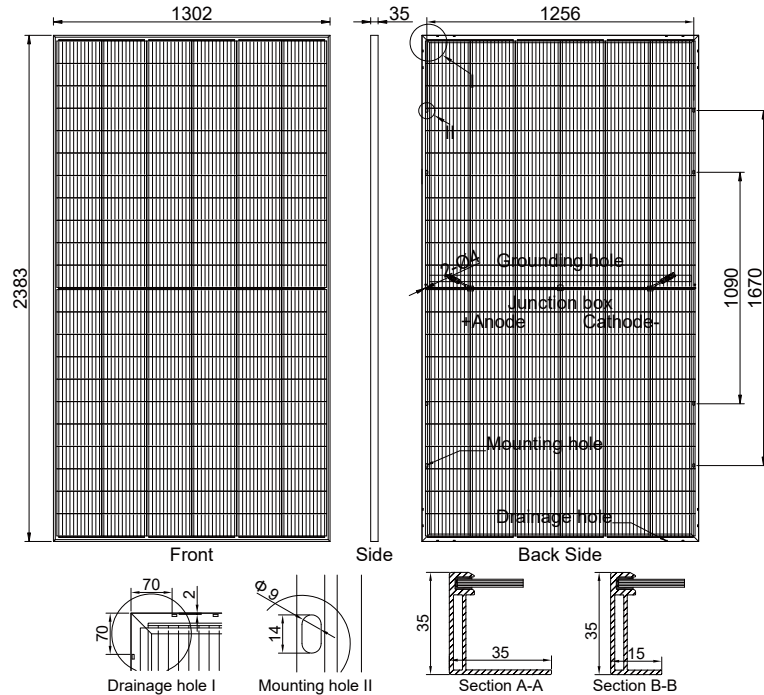
Cell type	Silicon Heterojunction Technology, Half-cut cells, 210 mm
No. of cells	132
Bifaciality	80 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm white glazed glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	35 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2383 mm x 1302 mm x 35 mm
Weight	38.5 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	31 pcs / pallet
Loading capacity	558 pcs / 40 HQ
Size / Pallet	1350 mm x 1100 mm x 2520 mm (upright)
Weight	1332 kg / pallet

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.26
Temp.coefficient of V_{oc}	(%/°C)	-0.24
Temp.coefficient of I_{sc}	(%/°C)	0.040
Nom. operating temp. NOCT	(°C)	44 ± 2



Electrical specifications (STC*):		AE680TME-132BDS	AE685TME-132BDS	AE690TME-132BDS	AE695TME-132BDS	AE700TME-132BDS
Nominal Max. Power	P_{max} (Wp)	680	685	690	695	700
Maximum operating voltage	V_{MPP} (V)	41.49	41.65	41.80	41.95	42.10
Maximum operating current	I_{MPP} (A)	16.39	16.45	16.51	16.57	16.63
Open-circuit voltage	V_{oc} (V)	49.50	49.66	49.82	49.98	50.13
Short-circuit current	I_{sc} (A)	17.19	17.25	17.31	17.37	17.43
Module efficiency	η (%)	21.92	22.08	22.24	22.40	22.56
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*):		AE680TME-132BDS	AE685TME-132BDS	AE690TME-132BDS	AE695TME-132BDS	AE700TME-132BDS
Nominal Max. Power	P_{max} (Wp)	510	513	517	521	525
Maximum operating voltage	V_{MPP} (V)	38.90	39.04	39.18	39.32	39.46
Maximum operating current	I_{MPP} (A)	13.11	13.16	13.21	13.26	13.30
Open-circuit voltage	V_{oc} (V)	46.36	46.54	46.71	46.89	47.06
Short-circuit current	I_{sc} (A)	13.75	13.80	13.85	13.90	13.94

*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.