



AESOLAR

since 2003



AURORA

HIGH ENERGY YIELD
RELIABILITY
DURABILITY

30
years
Performance
Guarantee

15
years
Product
Guarantee

640W-660W

AE ME-132BD Series

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

www.ae-solar.com



132

HALF
CELLS



210
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

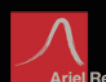


HIGHLY STABLE
AND TOUGH



IEC 61215
IEC 61730
Regular Production Surveillance
Type Tested and Monitored

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

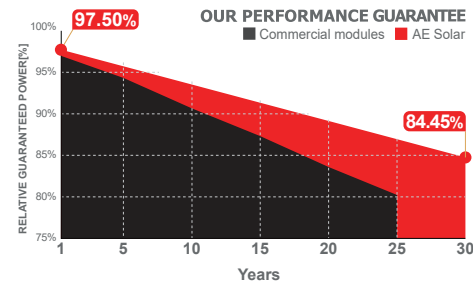
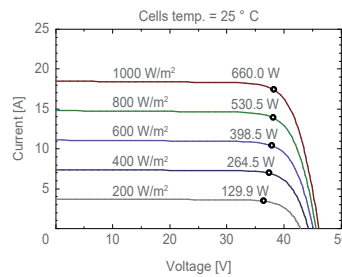
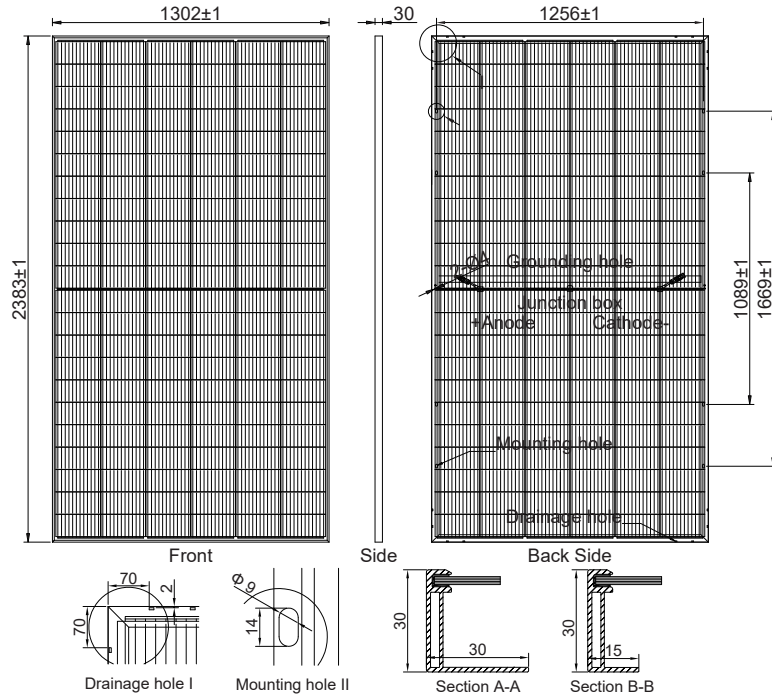
Cell type	Gallium-doped Mono c-Si PERC, Half-cut cells, 210 mm
No. of cells	132
Bifaciality	70±5%
Glass	2.0 mm, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm, high transmission solar glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
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/ 244 kg/ m ²
Mechanical load	5400 Pa/ 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)	0.04
Nom. operating temp. NOCT	(°C)	43 ± 2



Electrical specifications (STC*): AE640ME-132BD AE645ME-132BD AE650ME-132BD AE655ME-132BD AE660ME-132BD

	AE640ME-132BD	AE645ME-132BD	AE650ME-132BD	AE655ME-132BD	AE660ME-132BD
Nominal Max. Power	P _{max} (Wp)	640	645	650	655
Maximum operating voltage	V _{MPP} (V)	37.00	37.20	37.40	37.60
Maximum operating current	I _{MPP} (A)	17.30	17.34	17.38	17.42
Open-circuit voltage	V _{oc} (V)	45.10	45.30	45.50	45.70
Short-circuit current	I _{sc} (A)	17.74	18.25	18.32	18.38
Module efficiency	η (%)	20.63	20.79	20.95	21.11
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)

Electrical specifications (NMOT*): AE640ME-132BD AE645ME-132BD AE650ME-132BD AE655ME-132BD AE660ME-132BD

	AE640ME-132BD	AE645ME-132BD	AE650ME-132BD	AE655ME-132BD	AE660ME-132BD
Nominal Max. Power	P _{max} (Wp)	480	484	488	492
Maximum operating voltage	V _{MPP} (V)	34.70	34.90	35.10	35.30
Maximum operating current	I _{MPP} (A)	13.84	13.87	13.90	13.94
Open-circuit voltage	V _{oc} (V)	42.00	42.20	42.40	42.60
Short-circuit current	I _{sc} (A)	14.19	14.60	14.66	14.70

*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.

