



AESOLAR

since 2003



HSF

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

Maximizing the energy yield

30
years
Performance
Guarantee

15
years
Product
Guarantee

190W-200W
AE SMB-36 Series

MONO-CRYSTALLINE PV MODULES
FULL CELLS • MONO-FACIAL

www.ae-solar.com



HALF
CELLS



SHADING
RESISTANT



HOT SPOT
RESISTANT



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

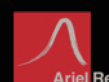


HIGHLY STABLE
AND TOUGH



IEC 61215
IEC 61730
Regular Production Surveillance
Type Tested and Monitored

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



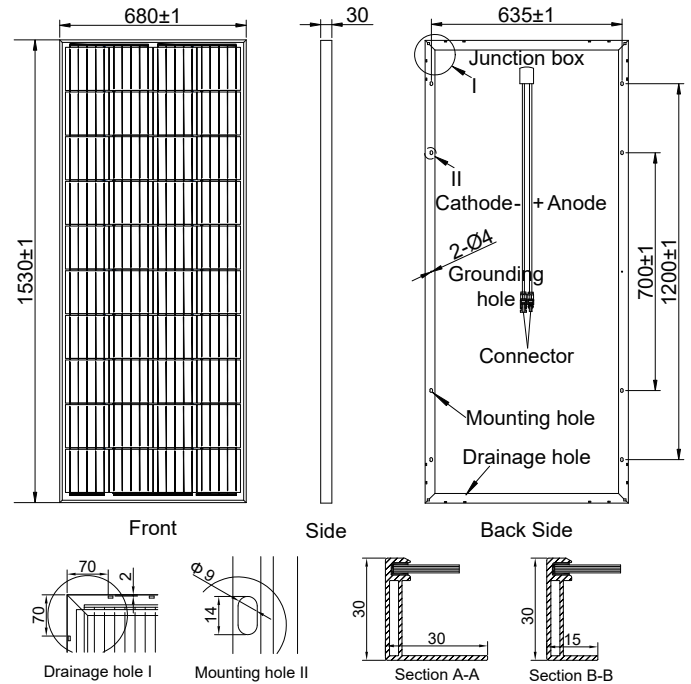
AE SMB-36 Series 190W-200W



MONO-CRYSTALLINE PV MODULES
FULL CELLS • MONO-FACIAL

Mechanical and design specification

Cell type	Mono c-Si PERC, Full cells, 158.75mm
No. of cells	36
Glass	3,2 mm, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	White Backsheet
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 900 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1530 mm x 680 mm x 30 mm
Weight	10.8 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

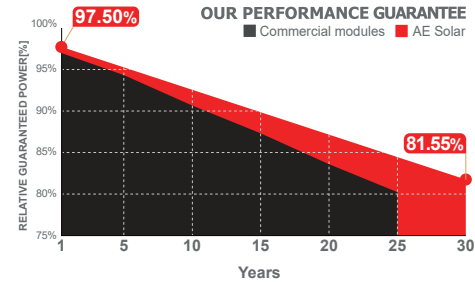
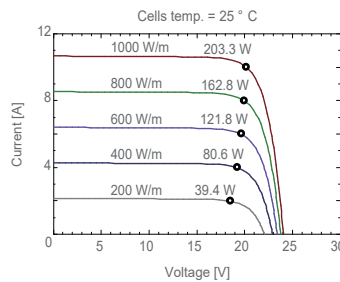


Packaging information

Packaging configuration	108 pcs / double pallets
Loading capacity	1512 pcs / 40 HQ
Size / Pallet	1725 mm x 1140 mm x 2400 mm
Weight	1272 kg / double pallets

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*):		AE190SMB-36	AE195SMB-36	AE200SMB-36
Nominal Max. Power	P_{max} (Wp)	190	195	200
Maximum operating voltage	V_{MPP} (V)	19.92	20.33	20.75
Maximum operating current	I_{MPP} (A)	9.54	9.59	9.64
Open-circuit voltage	V_{oc} (V)	23.19	23.60	24.03
Short-circuit current	I_{sc} (A)	10.50	10.59	10.67
Module efficiency	η (%)	18.26	18.74	19.22
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)

Electrical specifications (NMOT*):		AE190SMB-36	AE195SMB-36	AE200SMB-36
Nominal Max. Power	P_{max} (Wp)	135	137	140
Maximum operating voltage	V_{MPP} (V)	17.70	17.90	18.10
Maximum operating current	I_{MPP} (A)	7.63	7.67	7.71
Open-circuit voltage	V_{oc} (V)	21.50	21.70	21.90
Short-circuit current	I_{sc} (A)	8.40	8.47	8.54

*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.

