

MC full black solar panels

autarco

The Autarco MC series solar panels are based on high efficiency monocrystalline PERC cells with five bus-bars (5BB) in a 6x10 layout. The resulting rated power of up to 310Wp and Autarco's extra focus on consistent cell color, make this the module of choice for the residential market where roof space is limited and an aesthetic finish is desired.

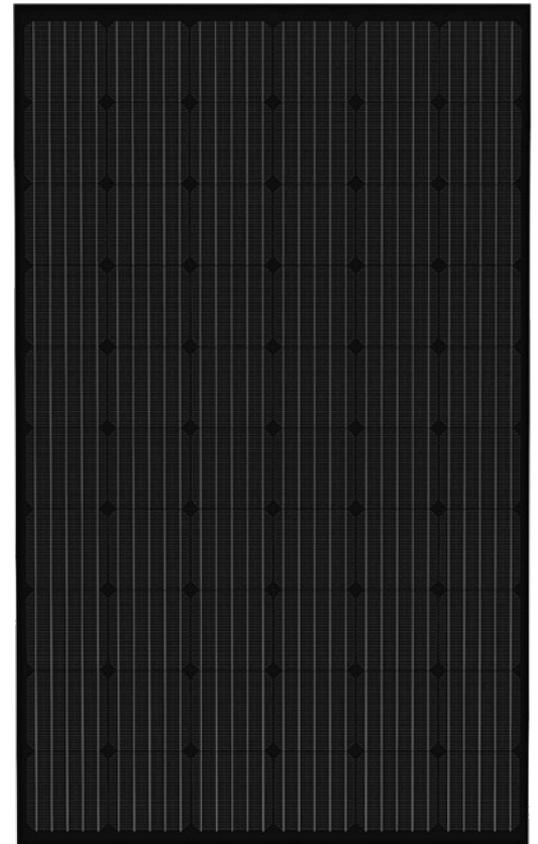
25 Insured linear 25-year performance guarantee up to 80.2%

10 10-year product warranty

 Salt and ammonia resistant

 Free of potential induced degradation (PID)

 Color consistent deep dark cells



QUALITY CERTIFICATES

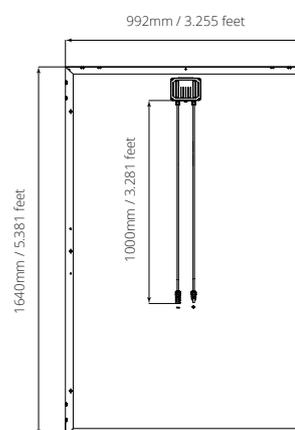
- ◆ IEC 61215, IEC61730, VDE, CE, MCS, CEC AU, UL1703
- ◆ ISO 9001, 14001, 18001 - CE
- ◆ Solarif, PV-Cycle



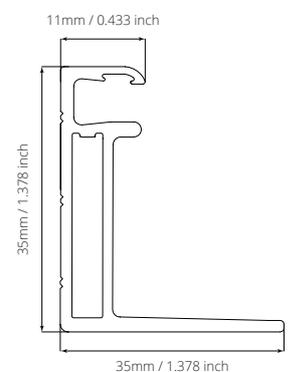
CELLS AND CONSTRUCTION

Cells	60 cells (157 x 157mm) in a 6 x 10 matrix connected in series	
Junction box	IP67 box with 1000mm 4mm ² cable fitted with MC4 connectors	
Diodes	Three by-pass diodes	
Construction	Front:	3.2mm glass
	Back:	Composite Film (black)
	Encapsulant:	EVA (black)
Frame	Anodized aluminium (black)	
Weight	18kg	
Dimensions	1640 x 992 x 35mm	

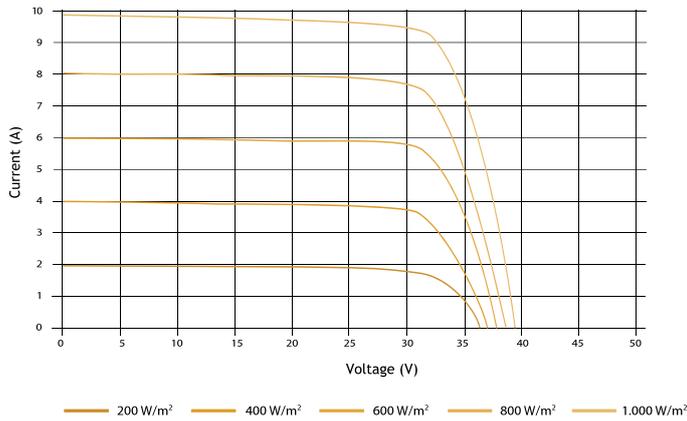
Panel



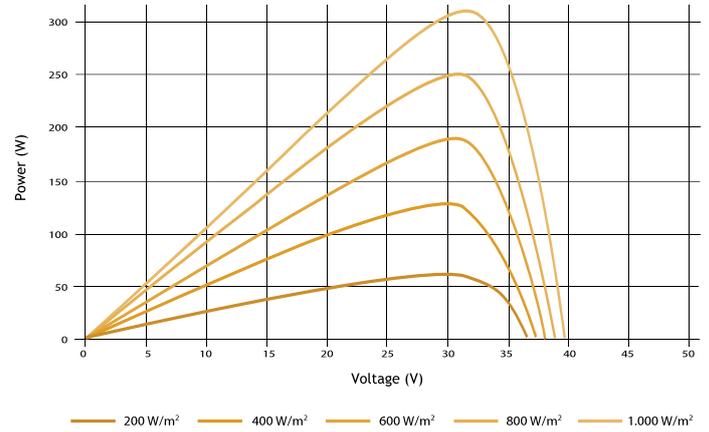
Frame cross section



IV CURVE



POWER CURVE



ELECTRICAL CHARACTERISTICS

		S1.MC290B	S1.MC295B	S1.MC300B	S1.MC305B	S1.MC310B
Nominal power output (Wp)	(Pmax)	290	295	300	305	310
Power output tolerance (W)	(Δ Pmax)	0/+5	0/+5	0/+5	0/+5	0/+5
Open circuit voltage (V)	(Voc)	39.31	39.45	39.65	40.00	39.84
Short circuit current (A)	(Isc)	9.59	9.68	9.74	9.87	9.93
Max. power voltage (V)	(Vmp)	32.02	32.25	32.44	32.35	32.75
Max. power current (A)	(Imp)	9.06	9.15	9.25	9.43	9.48
Module efficiency (%)	(η)	17.80	18.10	18.40	18.75	19.10

Electrical values at standard test conditions (STC): irradiation 1000W/m², air density AM1.5 and cell temperature 25°C
 Max string voltage: 1000V, max series fuse: 15A

TEMPERATURE CHARACTERISTICS

Isc (α)	+0.047% / °C
Voc (β)	-0.288% / °C
Pmax (γ)	-0.398% / °C
Nominal cell temperature	45°C (+/- 2°C)

OTHER CHARACTERISTICS

Operating temperature range	-40°C to 85°C
Max. load (front / wind)	5400 / 2400 Pa
Ammonia and salt resistance	IEC 62716, 61701
Max. hailstone impact	25mm @ 23m/s
Standard packaging	30 pcs
Quantity per 40'HQ container	840 pcs

The specifications contained in this datasheet may deviate slightly from our actual products due to on-going product improvement and are subject to change at any time without prior notice.

