


# MC series 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 ability to withstand mechanical loads of up to 6000 Pa, combined with superior resistance to sand, salt and ammonia delivers long lasting performance in even the harshest environments.

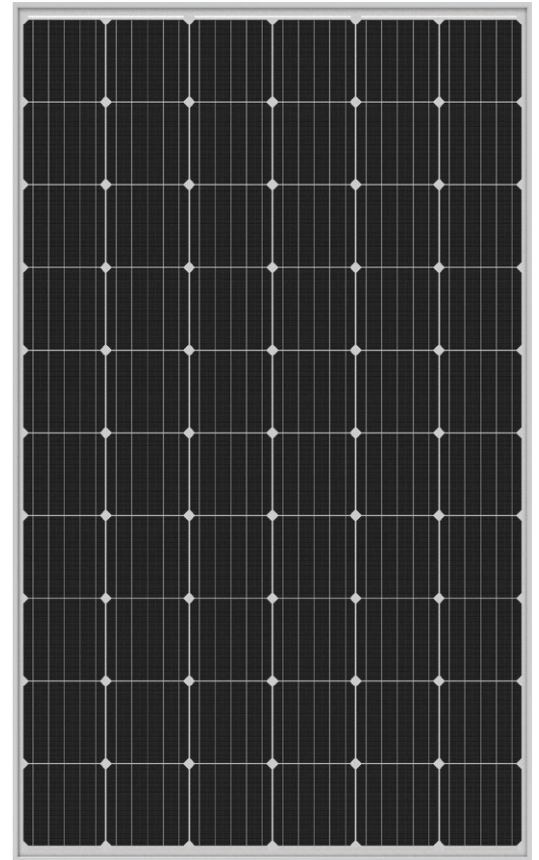
**25** Insured linear 25-year performance guarantee up to 80.2%

**10** 10-year product warranty

 Salt and ammonia resistant

 Free of potential induced degradation (PID)

 Higher reliability and durability (6000 Pa)



## QUALITY CERTIFICATES

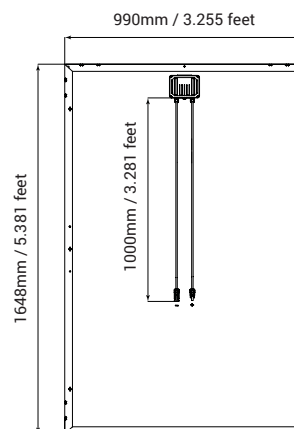
- ◆ IEC 61215, IEC61730, CE, MCS, CEC AU, UL1703
- ◆ ISO 9001, 14001, 18001
- ◆ Solarif, PV-Cycle



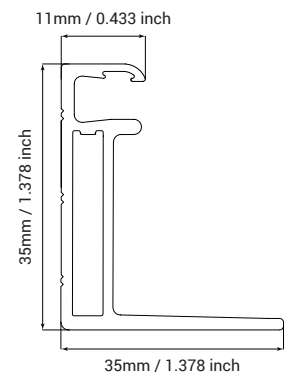
## CELLS AND CONSTRUCTION

<b>Cells</b>	60 cells (157 x 157mm) in a 6 x 10 matrix connected in series	
<b>Junction box</b>	IP67 box with 1000mm 4mm <sup>2</sup> cable fitted with MC4 connectors	
<b>Diodes</b>	Three by-pass diodes	
<b>Construction</b>	Front:	3.2mm glass
	Back:	Composite Film (white)
	Encapsulant:	EVA (white)
<b>Frame</b>	Anodized aluminium (silver)	
<b>Weight</b>	18.3kg	
<b>Dimensions</b>	1648 x 990 x 35mm	

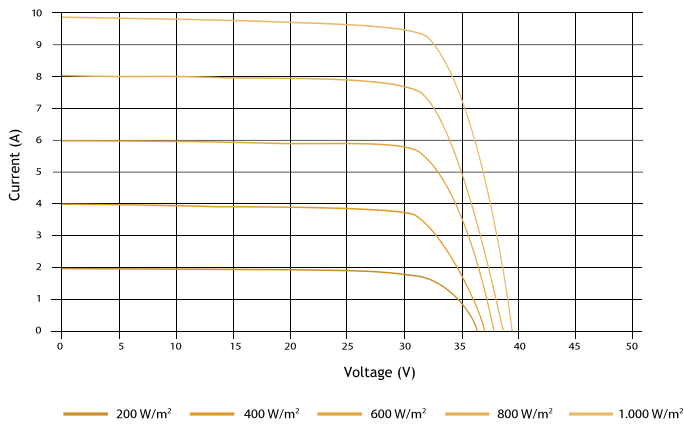
Panel



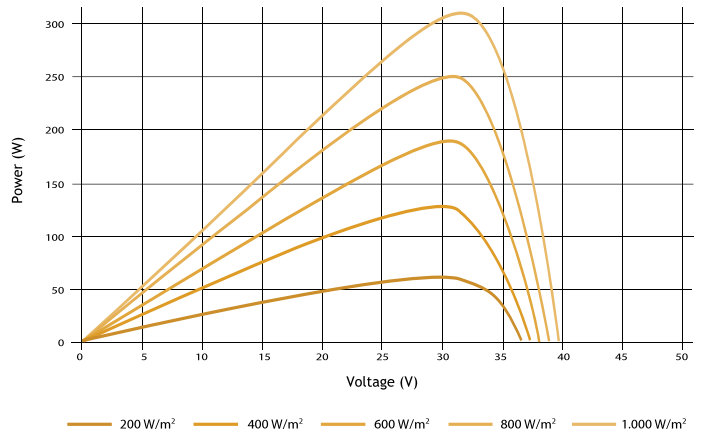
Frame doorsnede



## IV CURVE



## POWER CURVE



## ELECTRICAL CHARACTERISTICS

		S1.MC295	S1.MC300	S1.MC305	S1.MC310
Nominal power output (Wp)	(Pmax)	295	300	305	310
Power output tolerance (W)	(ΔPmax)	0/+5	0/+5	0/+5	0/+5
Open circuit voltage (V)	(Voc)	39.81	39.90	40.05	40.18
Short circuit current (A)	(Isc)	9.59	9.68	9.72	9.86
Max. power voltage (V)	(Vmp)	32.38	32.59	32.80	32.96
Max. power current (A)	(Imp)	9.12	9.21	9.30	9.42
Module efficiency (%)	(η)	18.10	18.40	18.70	19.00

Electrical values at standard test conditions (STC): irradiation 1000W/m<sup>2</sup>, air density AM1.5 and cell temperature 25°C  
 Max string voltage: 1000V, max series fuse: 15A

## TEMPERATURE CHARACTERISTICS

Isc (α)	+0.042% / °C
Voc (β)	-0.284% / °C
Pmax (γ)	-0.380% / °C
Nominal cell temperature	46°C (+/- 2°C)

## OTHER CHARACTERISTICS

Operating temperature range	-40°C to 85°C
Max. load (front / wind)	6000 / 2400 Pa
Ammonia and salt resistance	IEC 62716, 61701
Max. hailstone impact	25mm @ 23m/s
Standard packaging	Pallet 31 pieces
Quantity per 40'HQ container	868 pieces

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.

