

MHE full black solar panels

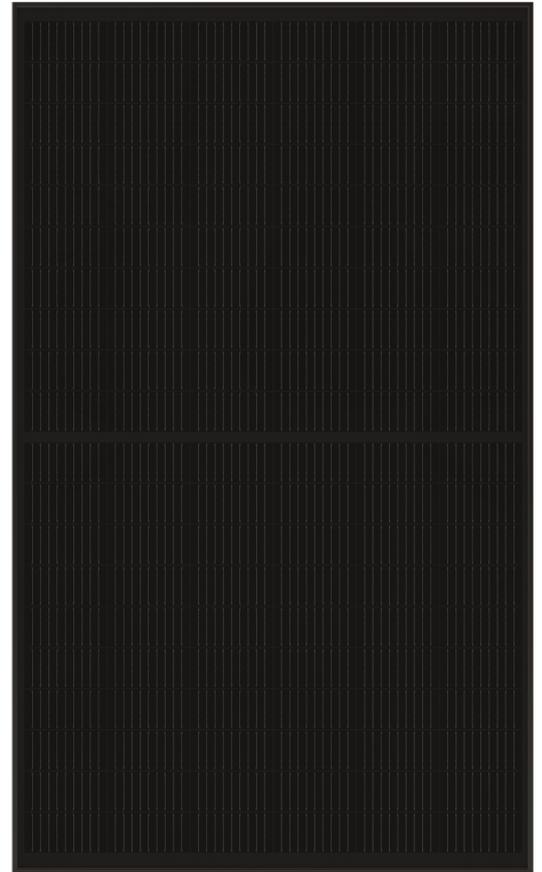
autarco

Autarco delivers a consistent full black solar panel ideal for the residential market where roof space is limited and an aesthetic finish is desired. The MHE series panels use halfcut monocrystalline PERC cells with advanced multi-wire technology to deliver higher efficiency without compromising on reliability. 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 83.1%
12-year product warranty for materials and processing
-  Multiwire technology for superior reliability and performance
-  Halfcut PERC technology for reduced resistance loss and improved shade tolerance
-  PID resistant
-  Full black with enhanced cell colour consistency

QUALITY CERTIFICATES

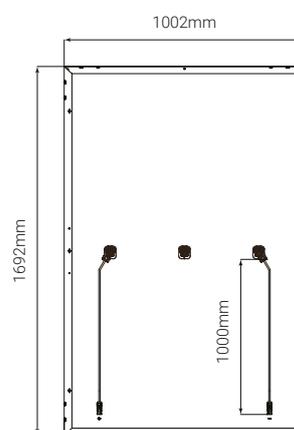
- ◆ IEC 61215, IEC 61730, C US, CNAS, IEC/TS 62941
- ◆ ISO 9001, ISO 14001, OHSAS 18001, CE



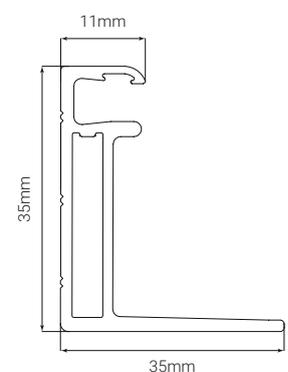
CELLS AND CONSTRUCTION

Cells	120 cells (159 x 79.5 mm) in a 6 x 20 matrix connected in series
Junction box	IP rating: IP67 Cable length: 1000mm Connector: MC4 compatible (.1) or Staubli (.11)
Diodes	3 by-pass diodes
Construction	Front: 3.2mm glass Back: Backsheet (black) Encapsulant: EVA
Frame	Anodized aluminum (black)
Weight	19.1kg
Dimensions	1692 x 1002 x 35mm

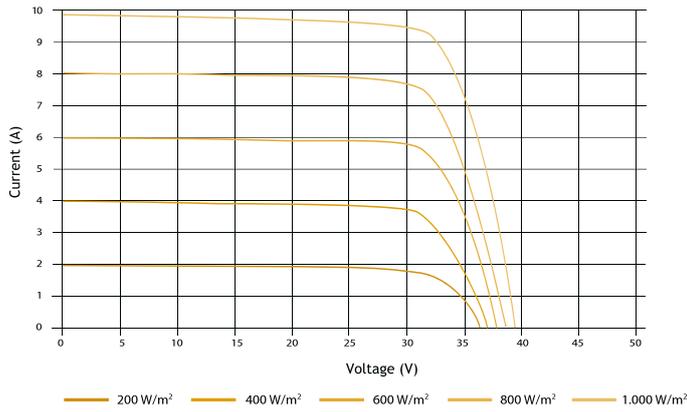
Solar panel



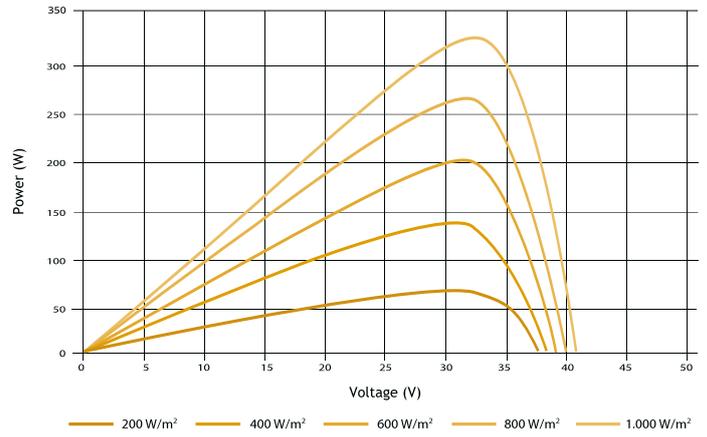
Frame cross section



IV CURVE



POWER CURVE



ELECTRICAL CHARACTERISTICS

		S1.MHE320B	S1.MHE325B	S1.MHE330B
Power output (Wp) *	(Pmax)	320	325	330
Power output tolerance (W)	(ΔPmax)	0/+5W	0/+5W	0/+5W
Open circuit voltage (V)	(Voc)	40.72	41.03	41.32
Short circuit current (A)	(Isc)	9.98	10.06	10.14
Max. power voltage (V)	(Vmax)	33.68	33.93	34.17
Max. power current (A)	(Imax)	9.50	9.58	9.66
Module efficiency (%)	(η)	18.9	19.2	19.5
Maximum system voltage (V)		1000	1000	1000
Maximum series fuse rating (A)		20	20	20

* Electrical values at standard test conditions (STC): irradiation 1000W/m², air density AM1.5 and cell temperature 25°C

TEMPERATURE CHARACTERISTICS

Isc (α)	+0.0353% / °C
Voc (β)	-0.2722% / °C
Pmax (γ)	-0.3438% / °C
Nominal operating cell temperature	44°C (+/- 2°C)

OTHER CHARACTERISTICS

Operating temperature	-40°C to 85°C
Max. load (front / wind)	6000 (front) / 3600 Pa (back)
Passed hail test	45mm hail @ 30.7m/s
Fire performance	Class C (IEC) or Type 1 (UL)
Weight of packaging	631 kg
Standard packaging	31 pcs / pallet
Quantity per 40'HQ container	806 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.

