



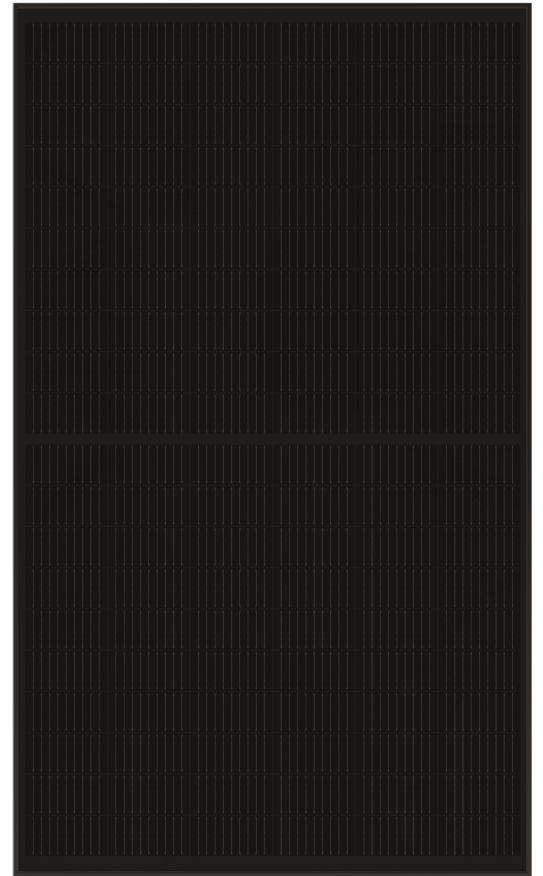


# MHI full black solar panels

autarco

Autarco's MHI full black solar panels use halfcut monocrystalline PERC cells with advanced multi-wire technology to deliver higher efficiency without compromising on reliability. Autarco delivers a consistent full black panel perfectly suited for the residential market where roof space is limited and an aesthetic finish is desired.

- 25** Insured linear 25-year power output guarantee up to 83.1%  
12-year product warranty
-  Multiwire technology for superior reliability and performance
-  Halfcut PERC technology for reduced resistance loss and improved shade tolerance
-  PID resistant
-  Aesthetic cell colour consistency and hail resistant durability (45mm @ 30 m/s)



## QUALITY CERTIFICATES

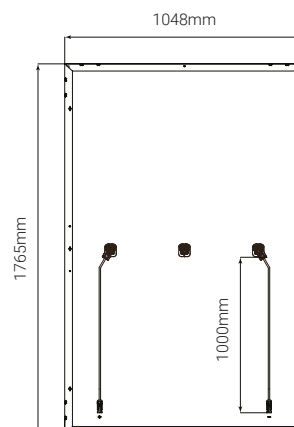
- ◆ IEC 61215, IEC 61730, C US, CNAS, IEC/TS 62941
- ◆ ISO 9001, ISO 14001, OHSAS 18001, CE



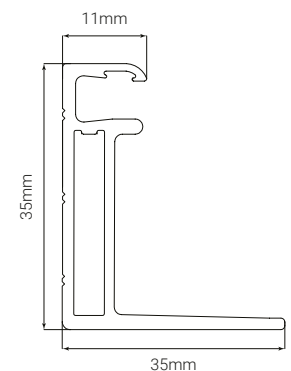
## CELLS AND CONSTRUCTION

|                     |  |
|---------------------|--|
| <b>Cells</b>        | 120 cells (166 x 83 mm) in a 6 x 20 matrix connected in series             |
| <b>Junction box</b> | IP rating: IP67<br>Cable length: 1200mm<br>Connector: Staubli standard MC4 |
| <b>Diodes</b>       | 3 by-pass diodes   |
| <b>Construction</b> | Front: 3.2mm glass<br>Backsheet: PET/F-coating (black)<br>Encapsulant: EVA |
| <b>Frame</b>        | Black anodized aluminum  |
| <b>Weight</b>       | 20 kg  |
| <b>Dimensions</b>   | 1765 x 1048 x 35mm   |

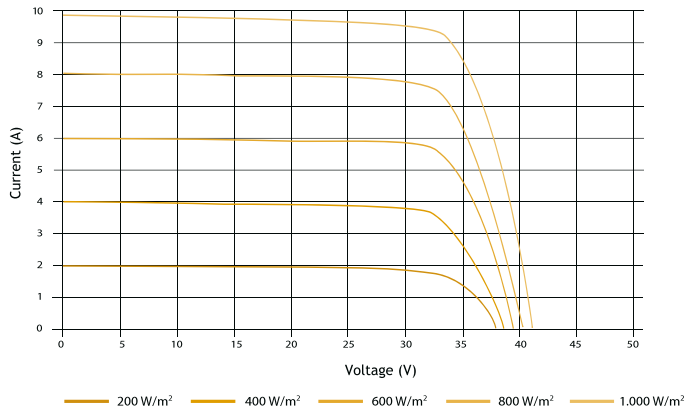
Solar panel



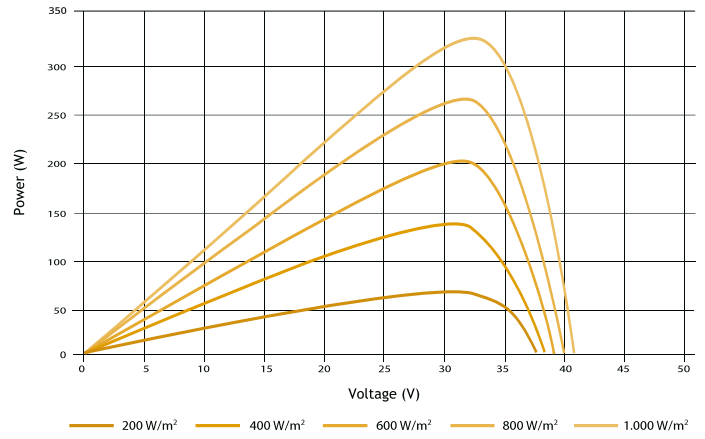
Frame cross section



## IV CURVE



## POWER CURVE



## ELECTRICAL CHARACTERISTICS

|                                |         | S1.MHI350B | S1.MHI355B | S1.MHI360B | S1.MHI365B |
|--------------------------------|---------|------------|------------|------------|------------|
| Power output (Wp) *            | (Pmax)  | 350        | 355        | 360        | 365        |
| Power output tolerance (W)     | (ΔPmax) | 0/+5W      | 0/+5W      | 0/+5W      | 0/+5W      |
| Open circuit voltage (V)       | (Voc)   | 39.49      | 39.80      | 40.14      | 40.41      |
| Short circuit current (A)      | (Isc)   | 11.08      | 11.15      | 11.21      | 11.29      |
| Max. power voltage (V)         | (Vmax)  | 32.99      | 33.24      | 33.49      | 33.73      |
| Max. power current (A)         | (Imax)  | 10.61      | 10.68      | 10.75      | 10.82      |
| Module efficiency (%)          | (η)     | 18.9       | 19.2       | 19.5       | 19.7       |
| Maximum system voltage (V)     |         | 1000       | 1000       | 1000       | 1000       |
| Maximum series fuse rating (A) |         | 20         | 20         | 20         | 20         |

\* Electrical values at standard test conditions (STC): irradiation 1000W/m<sup>2</sup>, 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                    | 5400 (front) / 2400 Pa (back) |
| Passed hail test             | 45mm hail @ 30.7m/s           |
| Fire performance             | Class C (IEC) or Type 1 (UL)  |
| Weight of packaging          | 659 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.

