0801.4012

# Solar tile M55-10 Full Black

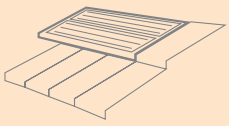
Glass-glass / monocrystalline / 55 Wp / Full Black

Meets highest aesthetic requirements

Lifespan of over 50 years due to glass-glass technology

Full traceability of all raw materials

Swiss development and warranty



Seamless transition from module to tile

No sheet metal flashings required

Perfect for small and medium-sized projects

**Alternative colour (option)**

Mxx-10 Terracotta

**Mounting accessories**

0801.4102 Aluminium clip for 30 mm battens
0801.4107 Aluminium clip for 24 mm battens
0801.4105 End rail for tile FS 03
0801.4106 End rail for tile MS 95

**Compatible tiles**

Pantile FS 03 (Gasser Ceramic)
Interlocking pantile MS 95 (Gasser Ceramic)
CANTUS tile (Creaton)
TERRA OPTIMA tile (Creaton)

# Solar tile M55-10 Full Black

Art. 0801.4012

## Electrical data STC

| | |
|---|---|
| Nominal power (Pmpp) | 55 Wp |
| Nominal voltage (Umpp) | 5.6 V |
| Nominal current (Impp) | 9.83 A |
| Open circuit voltage (Uoc) | 6.6 V |
| Short circuit current (Isc) | 10.21 A |
| Cell efficiency | 22.05 % |
| Module efficiency | 19.29 % |
| Power sorting | -5/+5 % |

STC (Standard Test Conditions): irradiance 1000 W/m², cell temperature 25 °C, AM 1.5
Measuring tolerances ±3 % (Pmpp); ±10 % (Umpp, Impp, Uoc, Isc)

## Electrical data at partial load 800 W/m²

| | |
|---|---|
| Nominal power (Pmpp) | 42 Wp |
| Nominal voltage (Umpp) | 5.2 V |
| Nominal current (Impp) | 8.01 A |
| Open circuit voltage (Uoc) | 6.2 V |
| Short circuit current (Isc) | 7.95 A |

Measuring tolerances ±5 % (Pmpp); ±10 % (Umpp, Impp)

## Thermal properties

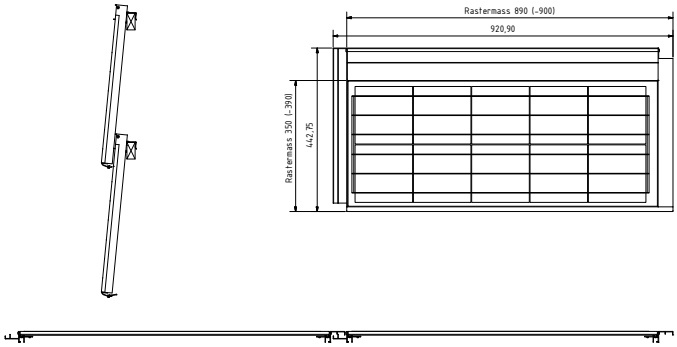
| | |
|---|---|
| Nominal operating cell temperature (NOCT) | 45 ±2 °C |
| Temperature coefficient Uoc | -0.26 %/°C |
| Temperature coefficient Isc | +0.031 %/°C |
| Temperature coefficient Pmpp | -0.37 %/°C |

## Operating conditions

| | |
|---|---|
| Temperature range | -40 ... +85 °C |
| Max. system voltage | 1000 V |
| Max. reverse current | 20 A |
| Max. string fuse | 16 A |
| Max. wind and snow loads * | Up to 2'400 N/m² (wind suction)<br>Up to 5'400 N/m² (snow pressure) |
| Hail resistance | ø40 mm at 23 m/s Hail protection class 4 |
| Application class (acc. to IEC/EN 61730) | A |
| Fire protection | Top and back layer are made of heat-resistant glass. The component is considered to be non-combustible material as defined by the Cantonal Fire Insurances. |
| Protection class | II |
| Salt spray test | IEC/EN 61701 I+II |
| Ammonium corrosion test | IEC/EN 62716 |

* Max. possible forces acting on the module. The maximum values in mounted condition depend on the substructure as well as the installation situation. If the requirements are higher than IEC/EN 61215, a project-specific dimensioning of the mounting system is necessary.

## Technical drawing

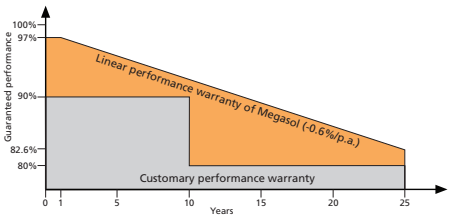



## General data

| | |
|---|---|
| Laminate structure | Glass-glass |
| Cell type | Monocrystalline |
| Cell size | 156 x 156 mm |
| Number of cells (matrix) | 10 (2x 5) |
| Colour between cells | Black |
| Frame | Solar tile Aluminium, anodized black, with assembled rubber lip |
| Front side | 3.2 mm solar glass<br>High-transmission, tempered/toughened, nano-finished/antireflective surface |
| Encapsulation material | Special EVA<br>(UV+/IR+) with lowest water vapour permeability |
| Back side | 3.2 mm solar glass<br>Tempered/toughened |
| Junction box | 1 bypass diode, IP67 |
| Cable cross section | 4 mm² |
| Connectors | MC4 compatible, IP67 |
| Dimensions (L x W x H) ±3.0 mm | 921 x 443 x 40 mm |
| Modular dimensions (L x W) | 890 (-900) x 350 (-380) mm |
| Weight | 6.5 kg |

## Quality and warranty

| | |
|---|---|
| Quality characteristics | PID-free (no potential induced degradation)<br>Yield-optimized low-light performance<br>Full traceability of all raw materials |
| Product warranty | 10 years |
| Linear performance warranty | 25 years |




Relative efficiency level in relation to the minimal output (%). At least 97 % of the minimum output during the first year. Afterwards, max. 0.6 % degradation per annum. At least 91.6 % of the minimum output after 10 years. At least 82.6 % of the minimum output after 25 years. All data within the measuring tolerances. Warranties according to the respective latest Megasol Warranty Conditions which can be found on www.megasol.ch/warranty.


E-mail: info@megasol.ch
Hotline: +41 62 919 90 90
**www.megasol.ch**


Megasol partner

Note: The instructions in the installation manual must be strictly complied with. Further information about approved utilization of products can be found in the installation manual or can be requested from the technical service.


Subject to errors and technical modifications. Data sheet in accordance with DIN EN 50380. © Megasol Energy Ltd | Version: 04/2019