

0322.0866 High performance module

M315-60-w U40

Glass-film / monocrystalline / 315Wp / white /
40 mm U-frame



5-busbar technology



High performance stability and maximum efficiency



Nano-finished solar glass with antireflective surface



Optimized low-light performance

Si

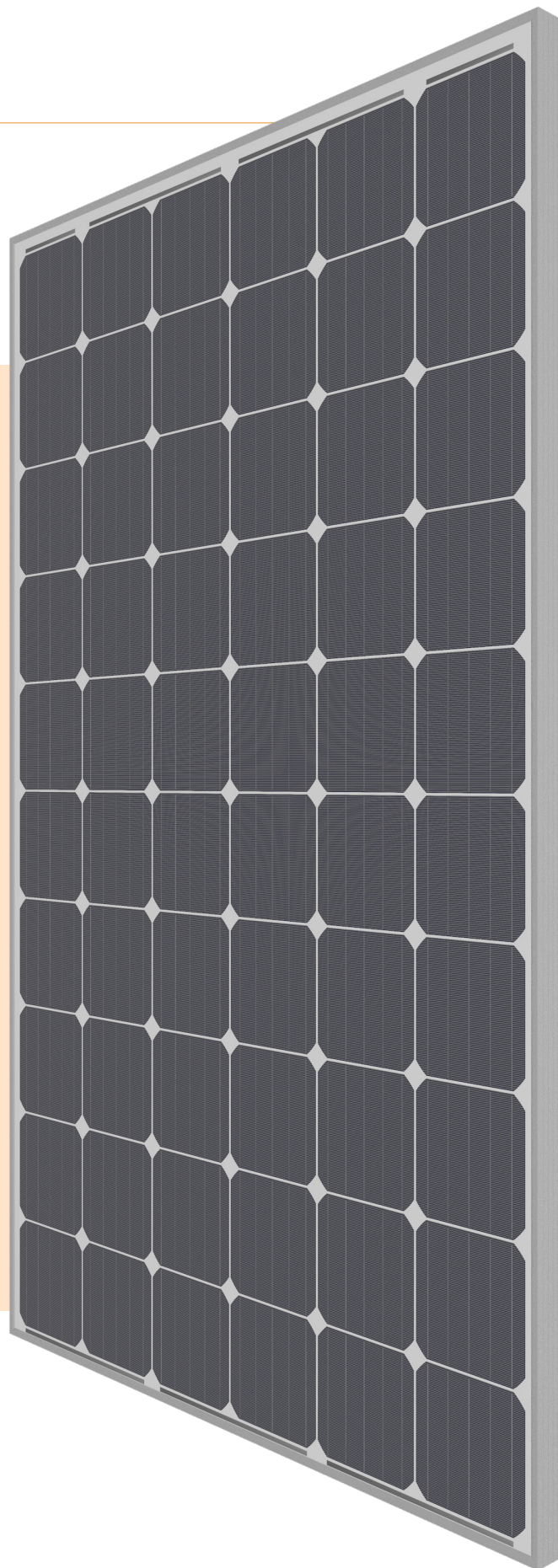
Based on 100 % silicon



Full traceability of all raw materials



Swiss development and warranty



It is owed to state-of-the-art spectral optimization that Megasol modules perform up to 15 % better than customary modules under cloudy conditions and during dusk or dawn. The monocrystalline Megasol module with 40 mm frame is Switzerland's best-selling solar module.

megasol

innovation in power



Electrical data STC

Nominal power (Pmpp)	315 Wp
Nominal voltage (Umpp)	33.0 V
Nominal current (Impp)	9.55 A
Open circuit voltage (Uoc)	39.2 V
Short circuit current (Isc)	9.90 A
Cell efficiency	22.10 %
Module efficiency	19.39 %
Power sorting	-0/+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)	238 Wp
Nominal voltage (Umpp)	30.5 V
Nominal current (Impp)	7.78 A
Open circuit voltage (Uoc)	36.8 V
Short circuit current (Isc)	7.71 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 5'400 N/m ²
Hail resistance	Ø 30 mm at 23 m/s Hail protection class 3
Application class (acc. to IEC/EN 61730)	A

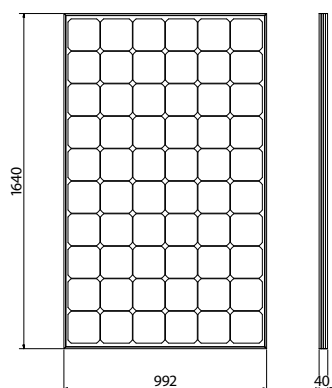
Fire protection

Top layer is made of heat-resistant glass. The component is considered to be non-combustible material as defined by the Cantonal Fire Insurances.

Protection class	II
Standards	IEC/EN 61215, 61730
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

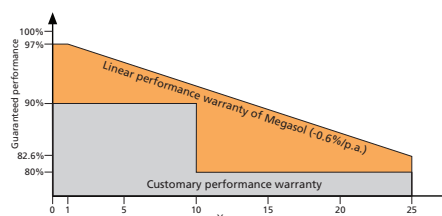


General data

Laminate structure	Glass-foil
Cell type	Monocrystalline, 5 busbars
Cell size	156x156 mm
Number of cells (matrix)	60 (6x 10)
Colour between cells	White
Frame	U-frame 40 mm Aluminium, anodized natural
Front side	3.2 mm solar glass High-transmission, tempered/toughened, nano-finished/antireflective surface
Encapsulation material	EVA with lowest yellowness index
Back side	Three-layer build-up (Polyester / PET / Tedlar) with lowest water vapour permeability
Junction box	3 bypass diodes, IP 67
Cable cross section	4 mm ²
Connectors	MC4 compatible, IP 67
Dimensions (LxWxH) ±3.0 mm	1640x992x40 mm
Modular dimensions (LxW)	Depending on the installation situation
Weight	18.5 kg

Quality and warranty

Quality characteristics	PID-free (no potential induced degradation) Yield-optimized low-light performance 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



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