

SOLARWATT M140-36 GEG LK

Monocrystalline solar cells, 130 Wp - 140 Wp

SOLARWATT PROMISE

Quality

Tested materials and thorough workmanship guarantee high yields and system longevity.

Made in Germany

SOLARWATT solar modules are exclusively produced in Germany.

Positive classification range (+0 Wp to +5 Wp)

The actual module output is guaranteed to be up to 5 Wp above the nominal value.

SOLARWATT WARRANTY

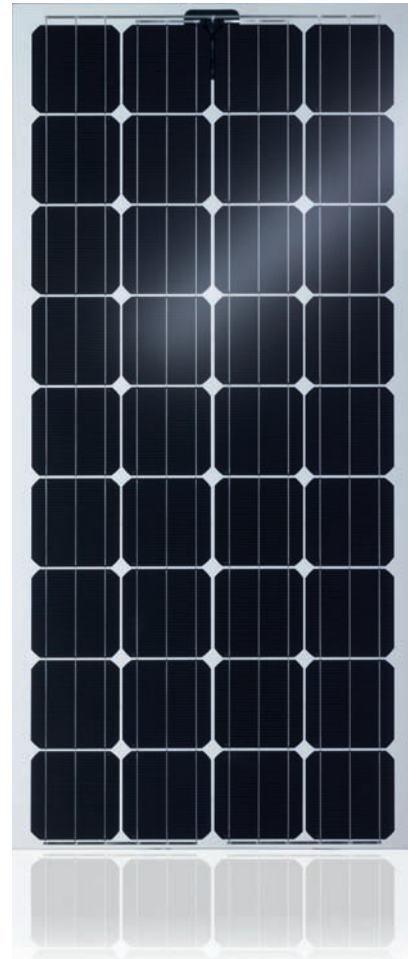
Standard warranty

10 year product warranty
staggered performance warranty covering 25 years

Extended warranty by purchasing SOLARWATT Full Coverage insurance

12 year product warranty
linear performance warranty covering 25 years

According to the „Special warranty conditions for SOLARWATT solar modules“



SOLARWATT ADVANTAGES

- ▶ Flexible usage through suitability for all established laminate fastening systems
- ▶ Design freedom in building integration
- ▶ Independent tests confirm resistance to hail, ammonia, salt mist, flame, and more*
- ▶ Take-back service and module recycling



* For further information visit us on www.solarwatt.de



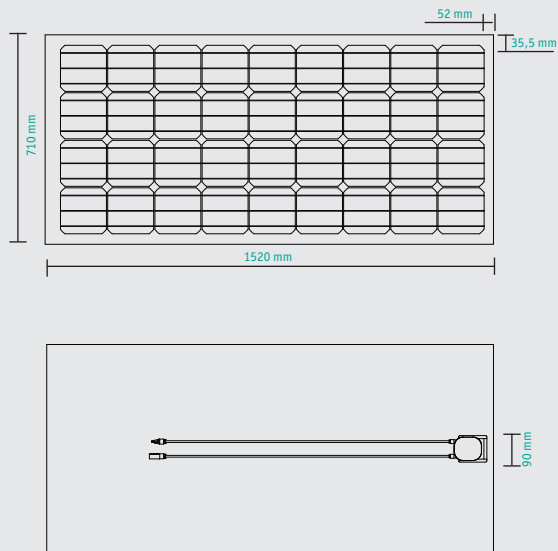
SOLARWATT AG
Maria-Reiche-Str. 2a
01109 Dresden, Germany
Tel. +49 351 8895-0
Fax +49 351 8895-111
info@solarwatt.de
www.solarwatt.de

Certified acc. to:
DIN EN ISO 9001 und 14001

SOLARWATT M140-36 GEG LK

Technical Data

DIMENSIONS



GENERAL DATA

Module technology	Glass-glass-laminate
Cover material	High transparent solar glass (tempered), 4 mm
Encapsulation	EVA-solar cells-EVA
Back material	Float Glass (tempered)
No. and type of cells	36 monocrystalline solar cells
Dimensions of cells	156 x 156 mm
Cables and connectors	tyco plug connector, cables 2 x 0,70 m/4 mm ²
Bypass-diodes	2
Application class	Application class A (nach IEC 61730)
Dimensions (LxWxH)	1520 ⁺² x 710 ⁺² x 10 ⁺¹ mm
Weight	25 kg
Max. system voltage	1000V (US 600 VDC)
Mechanical Ratings	Suction pressure of 2400 Pa approved (Wind speed 130 km/h with safety factor 3) Load of 5400 Pa approved
Qualifications	IEC 61215 Ed.2, IEC 61730 (incl. Safety class II)

ELECTRICAL DATA (STC)

STC: Standard Test Conditions: measurement conditions: Radiation strength 1000 W/m², spectral distribution AM 1.5, temperature 25 °C, in accordance with EN 60904-3

Nominal power P_N	130 Wp	135 Wp	140 Wp
Nominal voltage U_{mpp}	18,2 V	18,3 V	18,4 V
Nominal current I_{mpp}	7,17 A	7,40 A	7,63 A
Open circuit voltage U_{oc}	22,0 V	22,0 V	22,1 V
Short circuit current I_{sc}	8,48 A	8,56 A	8,59 A
IR*		20 A	

Measuring tolerances P_{max} ±5%;

* Reverse current power rating: Operation of the modules with an external power source is only permitted with a string fuse with a release current of < 20 A.

Reduction in the module efficiency with reduction in radiation strength of 1000 W/m² to 200 W/m² (25°C): 4±2% (relative) / -0,6±0,3% (absolute).

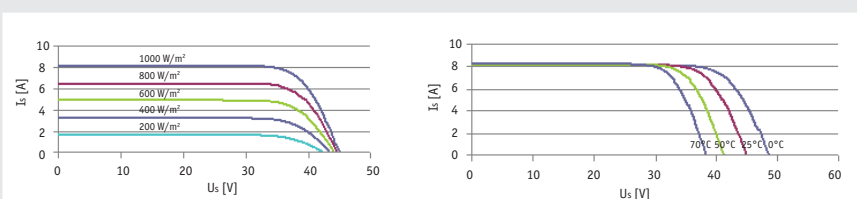
ELECTRICAL DATA (NOCT)

NOCT: Normal Operation Cell Temperature, measurement conditions: Radiation strength 800 W/m², AM 1.5, temperature 20 °C, wind speed 1m/s, electrical open-circuit operation

Nominal Power P_N	94 W	98 W	101 W
Nominal voltage U_{mpp}	16,6 V	16,7 V	16,8 V
Open circuit voltage U_{oc}	20,4 V	20,4 V	20,5 V
Short circuit current I_{sc}	6,82 A	6,89 A	6,91 A

CHARACTERISTIC LINES

Voltage charact. line at different irradiances and temperatures



performance class 140 Wp

THERMAL FEATURES

Operating Temperature Range	-40 ... +80 °C
Ambiente Temperature Range	-40 ... +45 °C
Temperature Coefficient of P_N	-0,50%/K
Temperature Coefficient of U_{oc}	-0,37%/K
Temperature Coefficient of I_{sc}	0,03%/K
NOCT	45°C