



SOLAR MODULES

GES-PV-16/12 AMP SOLAR MODULE

The 16 Wp framed ASI® solar module has been specially designed and optimized to power 12 V systems and to charge 12 V batteries. The modules are based on ASI® thin-film tandem solar cell technology. GESOLAR™ sources the raw laminates from RWE Solar GmbH, Germany and modules these laminates at its quality certified manufacturing facility in India.

FEATURES

- Specified module power refers to long-term stabilized values (after long exposure to sun light).
- High module voltage even at low irradiance levels down to 10 W/m².
- Low temperature coefficient maintains high power output even at elevated temperatures.
- Rugged aluminum frame facilitates mounting - Proven encapsulation ensures long service life.
- Hailstone resistance according to IEC 61646 guaranteed (pane is made of hardened glass).
- Climatic tests according to IEC 61646 passed.
- High-accuracy laser patterning provides reliable monolithic series connection of cells, without cell-to-cell solder joints.
- Advanced manufacturing process consumes less material and energy.
- ASI® modules do not contain cadmium or toxic materials and are compatible with official landfill requirements.

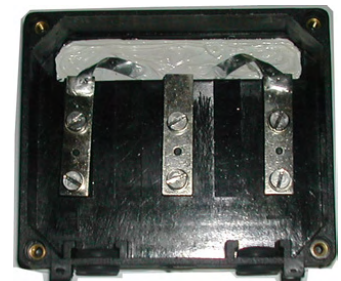
QUALITY

GESOLAR™ has established very high quality standards. Constant checks and inspections guarantee uniformly high quality. Each module which leaves the production line is subjected to thorough visual inspections as well as mechanical and electrical tests.

APPLICATIONS

- Water pumping stations
- Lighting
- Traffic control systems
- Telecommunication
- Home lighting systems
- Consumer products
- Electrical gate systems
- Recreational vehicles

- More Energy
- Excellent Value for Money
- Robust Encapsulation
- Easy Mounting
- 10 Years Power guarantee



ELECTRICAL DATA



Solar Module	Weight (Kg)	Irradiation (W/m ²)	Open circuit voltage (V)	Voltege at nominal Power V mpp (V)	Short circuit current I sc(A)	Current at Nominal Power I mpp (A)	Power Pmpp (W)	Initial Nominal Power (W)
16/12	3.2	1000	22.8	16.8	1.25	0.96	16	18.56

Electical parameters are subjected to a tolerance of ±10 %

* These data represent stabilised electrical module performance at standard test conditions (STC - 1000 w/m², spectrum AM 1.5, 25°C cell temperature.

The nominal Power may be initially approx. 14 to 18 % higher than the quoted stabilized power data.

CELL TEMP. COEFFICIENTS



Power	T _k (P _n)	-0.2 %/K
Open circuit Voltage	T _k (V _{oc})	-0.33 %/K
Short circuit current	T _k (I _{sc})	+0.08%/K

The temperature depends of the nominal power rating is especially low for ASi modules.

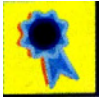
LIMITS



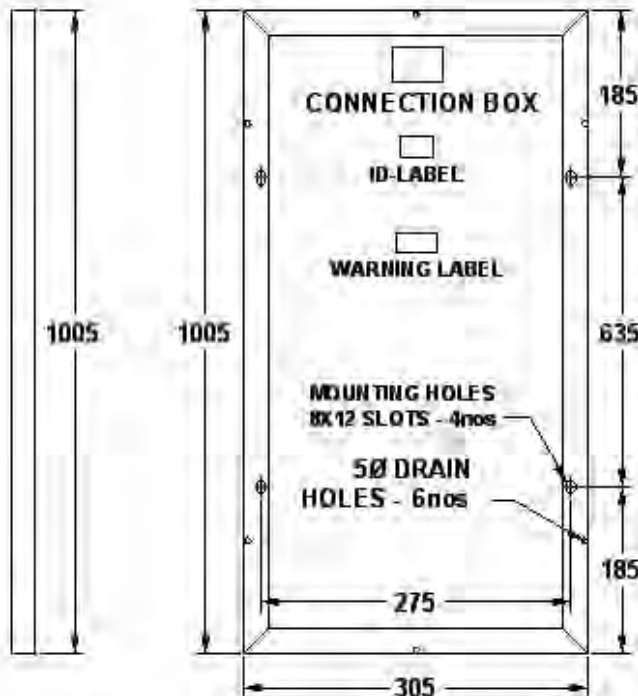
Permissible module Temperature	-40 ...+85 °C
Module Operation Temperature	Typically 20 to 25°C above ambient temperature

Specifications are subject to change without notice

QUALIFICATIONS



Hail Resistance according to IEC 61646 (25 mm diameter hailstones at 23m/s), CE Conformity
Climatic tests according to IEC 61646 passed



All Dimensions are in mm