

NEW GENERATION PHOTOVOLTAIC MODULE

The H175/H220 modules have been specifically designed for grid-connected systems where quick and easy installation first and long term consistent outputs are essential to make your investment in solar energy worthwhile.

Comprising of 72 and 96 125x125mm high-efficiency I-Max® monocrystalline cells respectively, their high power output give the installer more power in less space, fewer modules to connect, lift and work with. This becomes relevant for grid-connected installations or big solar arrays systems where installation costs are an important factor.

Thanks to I-Max® technology developed in Italy for E-Solar range of high-efficiency modules, this series produce an increased current output (10-17%) at operating battery voltage when installed in standalone systems and applications.

With a proven lifespan of over 30 years E-Solar Modules are designed to operate under most challenging conditions. Every cell and module is tested several times throughout the manufacturing process.

Easy and practical interconnections allow any voltage configuration. The smart anodized aluminium frame design makes the series safe and easy to install by anyone.

Guaranteed power \geq 80% 25 years

Relative humidity up to 100%

Dimensions 1580 x 808 x 35 - 1624 x 996 x 35 \pm 1mm

Weight kg 16 -

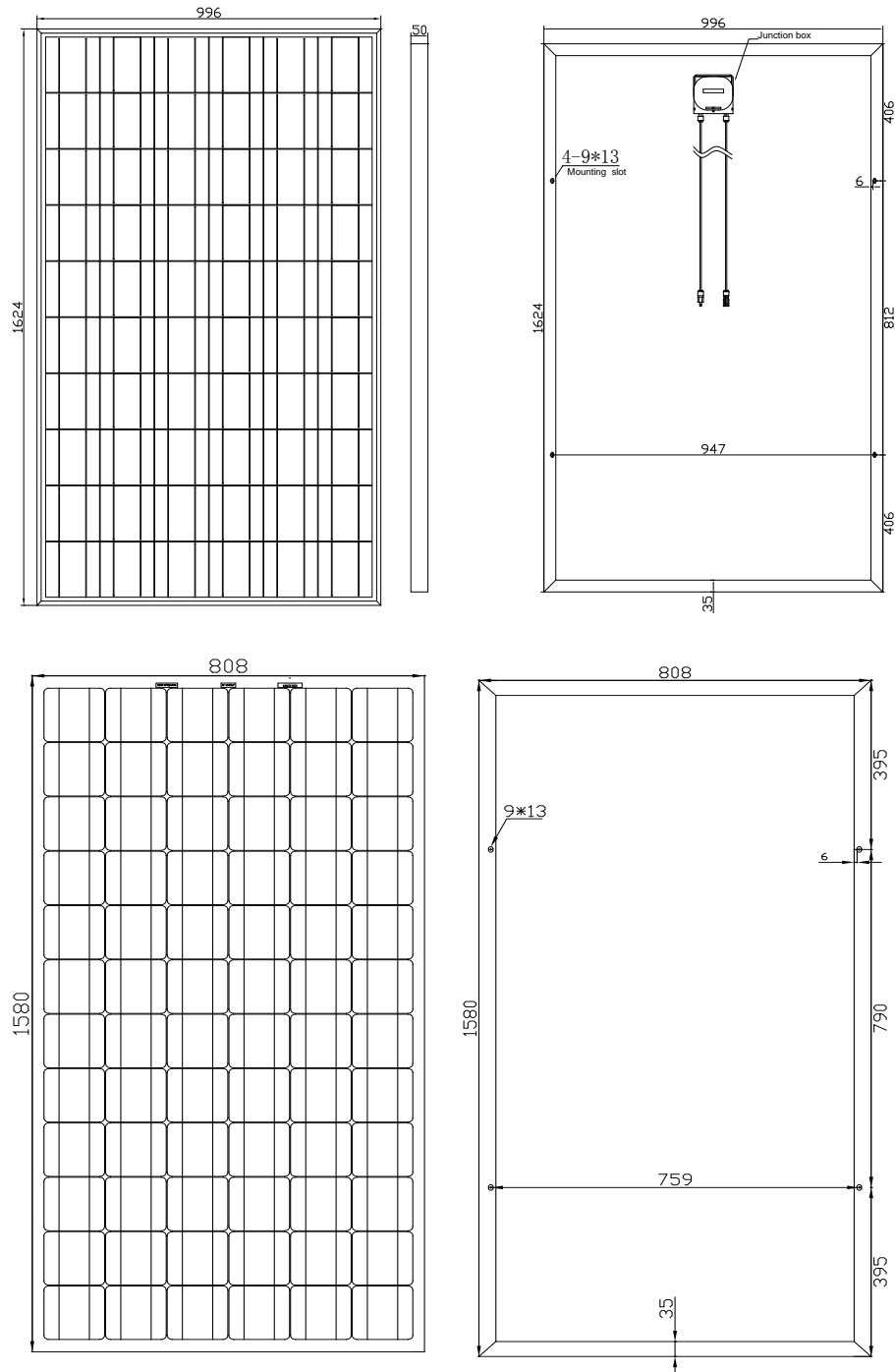
Power Tolerance: + 3%

Certified in accordance with IEC61215, IEC61730-1/2 and UL 1703. TUV



ELECTRICAL SPECIFICATIONS (at 100mW/cm², 25°C, AM 1,5)

Maximum Power (Wp)	Watts	175	220
Short circuit current (Isc)	Amps	5.34	8,2
Open circuit voltage (Voc)	Volts	44.5	21,00
Voltage at max power (Vmp)	Volts	35.3	17,00
Current at max power (Imp)	Amps	4.96	7,36
NOCT (Nominal operating cell temp)	°C	48+2	48+2
Change of Voc with temperature (β)	mV/°C	-90	-90
Wind loading or surface pressure		N/m ² 2400 (200 km/h equiv.)	
Hailstone impact resistance	28 mm	at 23 m/s	
Storage and operating temperature	°C	-40 to 95	-40 to 95
Maximum System Voltage	Volts	1000	1000
Modules tested at	Volts	3500	3500
Junction box	with 3 bypass diodes		
Cable length	900 mm, 1x4 mm sq.		



MODULE CROSS SECTION

The cells are laminated in permanent way between sheets of ethylene vinyl acetate (EVA), tempered glass and white Tedlar, in order to offer an ideal protection against humidity penetration and salty corrosion. The tempered glass, whose main characteristic is the high transparency to the direct and diffused light, is fixed to the frame by silicone sealant which assures an efficient protection against mechanical and environmental stress. The high insulation between the cells and the frame reduces the risks of current leakages which are often the main cause of power losses in high-voltage PV installations.

JUNCTION BOX

A waterproof, high capacity junction box with protection degree IP65 contains two by-pass diodes and appropriate connection terminals. It is equipped with two M16 cable glands for easy interconnections. The junction box is made always keeping in mind the requirements of the installers.

Specifications are subject to change without notice