

IBEX

HIGH TECHNOLOGY SOLAR MODULES

**IBEX 144MHC
AEON BIFACIAL**

525/530/535/540/545

9BB HALF-CELL MONO PV MODULE

BIFACIAL HIGH TECHNOLOGY
GLASS SOLAR MODULES

SWISS SOLAR

IBEX HIGH EFFICIENCY MONOCRYSTALLINE SOLAR MODULES WITH HALF CELL TECHNOLOGY

0+5 Positive power tolerance (0+5W) guaranteed



High performance under low light.
Works at cloudy, rainy days



The monolithic perc cell structure technology (low resistance characteristics) is adopted (the maximum conversion efficiency of modules is up to 21.03%)



EXTREME WEATHER RATING. High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (3800 Pa)



Reduced resistance between cells Less micro cracks, higher output power



Combines high efficiency PERC bifacial cells with a dual glass construction, which can convert light that hits the back of the module into electricity, generating up to 25% more energy

IBEX MHC144-AEON BIFACIAL 525-545

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

Module Type	525W	530W	535W	540W	545W
	STC	STC	STC	STC	STC
Rated power P _{mp} [Wp]	525	530	535	540	545
P _{mp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mp} [A]	12.66A	12.73A	12.8A	12.87A	12.94A
Rated voltage V _{mp} [V]	41.47V	41.63V	41.8V	41.96V	42.12V
Short-circuit current I _{sc} [A]	13.55A	13.62A	13.69A	13.76A	13.83A
Open-circuit voltage U _{oc} [V]	49.59V	49.74V	49.89V	50.04V	50.18V
Efficiency at STC up to	20.26%	20.45%	20.65%	20.84%	21.03%
Application Class	Class A	Class A	Class A	Class A	Class A

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (Reference to 440W Front)

5%	Maximum Power At STC (P _{max})	551W	557W	562W	567W	572W
	Module Efficiency STC (%)	21.27%	21.48%	21.68%	21.88%	22.08%
15%	Maximum Power At STC (P _{max})	604W	610W	615W	621W	627W
	Module Efficiency STC (%)	23.30%	23.52%	23.74%	23.97%	24.19%
25%	Maximum Power At STC (P _{max})	656W	663W	669W	675W	681W
	Module Efficiency STC (%)	25.33%	25.57%	25.81%	26.05%	26.29%

STC: 1000W/m² irradiance, 25°C cell temperature, AM1.5.

LIMITING VALUES

Max. system voltage [V]	1500V DC (IEC)
Max. return current [I]	20A
Operating Temperature	- 40 to +85°C
Max.tested pressure load [Pa]2	5400
Max. tested tensile load [Pa]2	3800

TEMPERATURE COEFFICIENT

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28 % /°C	-0.36% /°C

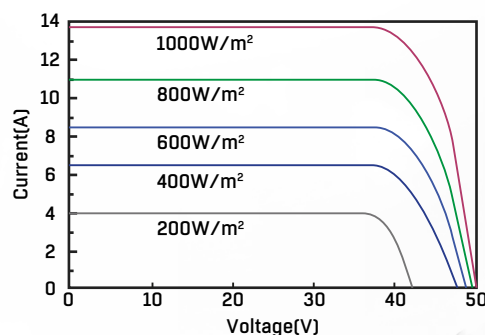
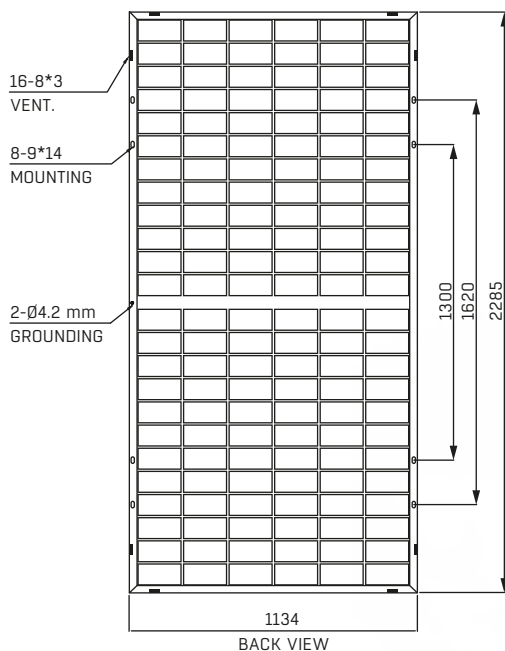
SPECIFICATIONS

Number of cells	144 (6 x 24) 168.75x83mm
Dimensions	2285 x 1134 x 35 mm
Weight	31.5 kg
Front-side glass	2.0 mm ^{tempered highly transp. anti-reflection solar glass}
Frame	Stable, anodised aluminium frame, black
Junction box	Split Junction Box (IP68)
Cable	4 mm ² , +300mm,-400mm Cust.Length
Diodes	3 Diodes
Plug-in connection	MC4 Compatible
Hail test (max. hailstrom)	Ø45mm 23 m/s 83 km/h

PACKING CONFIGURATION

Container	40 HQ	Pieces Per Pallet	30
Pallets Per container	20	Pieces per Container	600

The specifications and average values can vary slightly. Relevant is the corresponding data of the individual measurement. Specifications are subject to change without notice. Measurement tolerance depending on equipment: rated power +/- 3%, other values +/- 10%. All information given in this data sheet corresponds to DIN EN 50380. A potential light-induced degradation of the power after commissioning is not considered here. Further information in the installation manual: 1 The specific warranty conditions are given under www.swissenergy-solar.ch | 2 Horizontal mounted | 3 Tolerance L/W = +/- 3 mm. H +/-2mm, the dimensions given in the order confirmation will be decisive | 4 Location and dimensions of holes on request



WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar