

IBEX

HIGH TECHNOLOGY SOLAR MODULES

**IBEX 144MHC
EIGER BIFACIAL**

530/535/540/545/550

10BB 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 21.3%)



EXTREME WEATHER RATING. High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (2400 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

- IEC61215(2016), IEC61730(2016)
- ISO9001:2015: Quality Management System
- ISO45001:2018 Occupational health and safety management systems



IBEX MHC144-EIGER BIFACIAL 530-550

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

Module Type	530W		535W		540W		545W		550W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Rated power P _{mp} [Wp]	530	396	535	400	540	404	545	408	550	412
P _{mp} range to	0/+5W		0/+5W		0/+5W		0/+5W		0/+5W	
Rated current I _{mp} [A]	12.83A	10.56A	12.90A	10.63A	12.97A	10.69A	13.05A	10.75A	13.12A	10.81A
Rated voltage V _{mp} [V]	41.35V	37.49V	41.50V	37.64V	41.65V	37.79V	41.80V	37.94V	41.95V	38.09V
Short-circuit current I _{sc} [A]	13.76A	11.22A	13.83A	11.29A	13.90A	11.36A	13.95A	11.43A	14.00A	11.50A
Open-circuit voltage U _{oc} [V]	49.20V	45.25V	49.35V	45.40V	49.50V	45.55V	49.65V	45.70V	49.80V	45.85V
Efficiency at STC up to	20.50%		20.70%		20.90%		21.10%		21.30%	
Application Class	Class A		Class A		Class A		Class A		Class A	

ELECTRICAL CHARACTERISTICS WITH DIFFERENT POWER RANGES (REFERENCE TO 25% SOLAR ILLUMINANCE RATIO)

TYPE	530 (+5%)	535 (+10%)	540 (+15%)	545 (+20%)	550 (+25%)
Rated power P _{mp} [Wp]	562	589	615	642	669
Rated current I _{mp} [A]	13.54	14.19	14.82	15.47	16.12
Rated voltage V _{mp} [V]	41.50	41.50	41.50	41.50	41.50
Short-circuit current I _{sc} [A]	14.52	15.21	15.90	16.59	17.29
Open-circuit voltage U _{oc} [V]	49.35	49.35	49.35	49.35	49.35

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

LIMITING VALUES

Max. system voltage [V]	1500V DC (IEC)
Max. return current [I]	25A
Operating Temperature	- 40 to +85°C
Max. tested pressure load [Pa] ²	5400
Max. tested tensile load [Pa] ²	2400

TEMPERATURE COEFFICIENT

I _{sc}	V _{oc}	P _{max}
0.049% /°C	-0.29 % /°C	-0.39% /°C

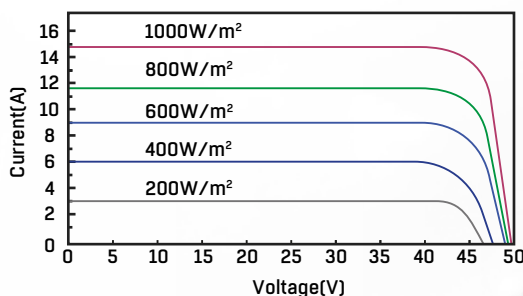
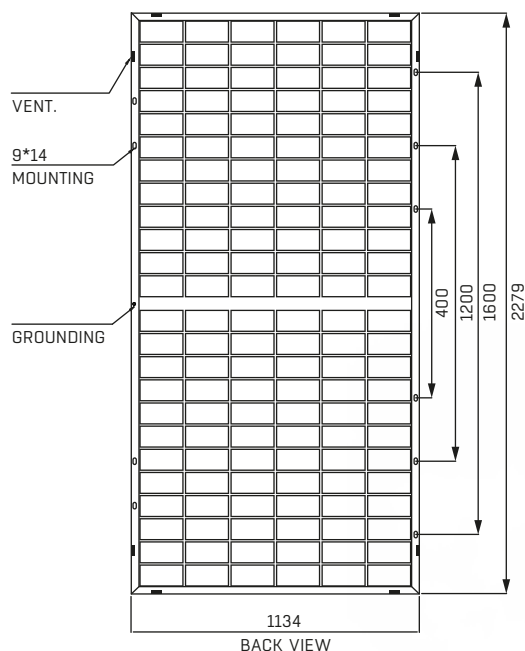
SPECIFICATIONS

Number of cells	144 (6 x 24) 182x91mm
Dimensions	2279 x 1134 x 35 mm
Weight	27.2 kg
Front-side glass	2.0/2.0 mm <small>tempered highly transp. anti-reflection solar glass</small>
Frame	Stable, anodised aluminium frame, black
Junction box	Split Junction Box (IP68)
Cable	4 mm ² , +400mm,-200mm 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	31
Pallets Per container	20	Pieces per Container	620

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 manuals. 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

25 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar