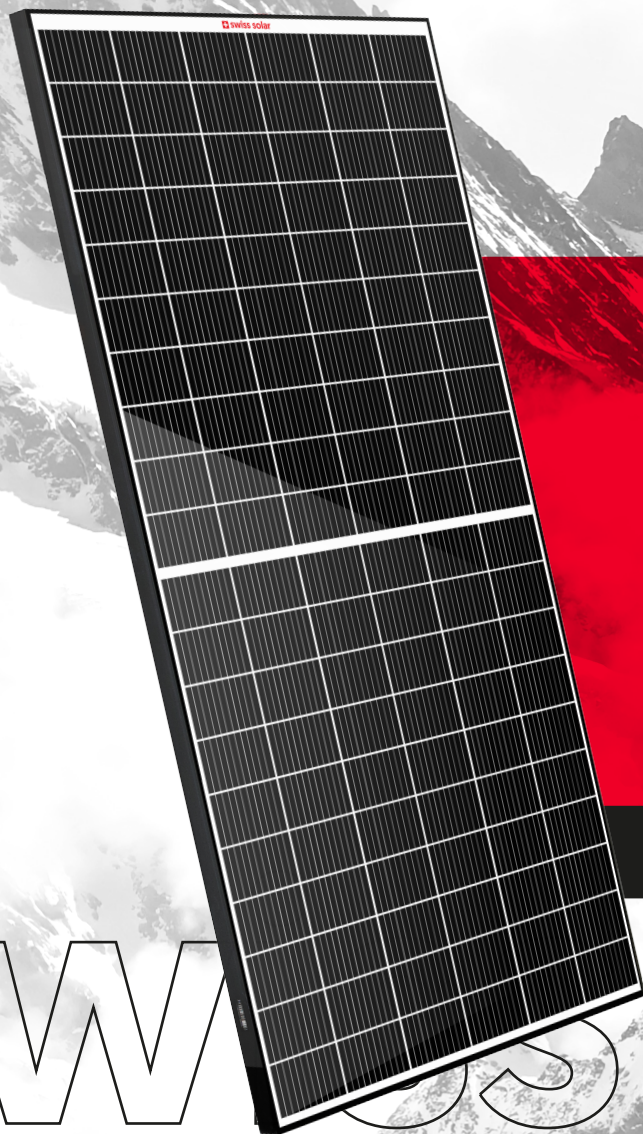




IBEX

HIGH TECHNOLOGY
SOLAR MODULES

**IBEX 120MHC
EIGER BIFACIAL**

440/445/450/455/460

10BB HALF-CELL MONO PV MODULE

BIFACIAL HIGH TECHNOLOGY
GLASS SOLAR MODULES

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 MHC120-EIGER BIFACIAL 440-460

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

Module Type	440W		445W		450W		455W		460W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Rated power P _{mp} [Wp]	440	330	445	334	450	338	455	342	460	346
P _{mp} range to	0/+5W		0/+5W		0/+5W		0/+5W		0/+5W	
Rated current I _{mp} [A]	12.77A	10.54A	12.86A	10.62A	12.95A	10.69A	13.04A	10.77A	13.13A	10.84A
Rated voltage V _{mp} [V]	34.48V	31.32V	34.63V	31.47V	34.78V	31.62V	34.93V	31.77V	35.08V	31.92V
Short-circuit current I _{sc} [A]	13.76A	11.12A	13.83A	11.20A	13.90A	11.29A	13.97A	11.37A	14.04A	11.46A
Open-circuit voltage U _{oc} [V]	41.03V	37.60V	41.18V	37.75V	41.33V	37.90V	41.48V	38.05V	41.63V	38.20V
Efficiency at STC up to	20.40%		20.60%		20.80%		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	440 (+5%)	445 (+10%)	450 (+15%)	455 (+20%)	460 (+25%)
Rated power P _{mp} [Wp]	483	506	529	552	575
Rated current I _{mp} [A]	13.77	14.42	15.08	15.73	16.39
Rated voltage V _{mp} [V]	35.08	35.08	35.08	35.08	35.08
Short-circuit current I _{sc} [A]	14.74	15.44	16.14	16.85	17.55
Open-circuit voltage U _{oc} [V]	41.63	41.63	41.63	41.63	41.63

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

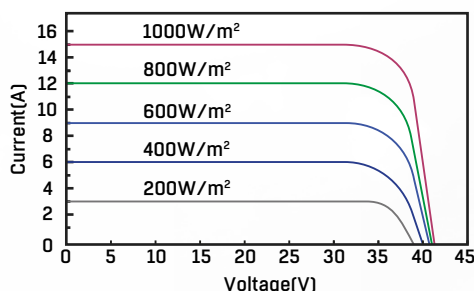
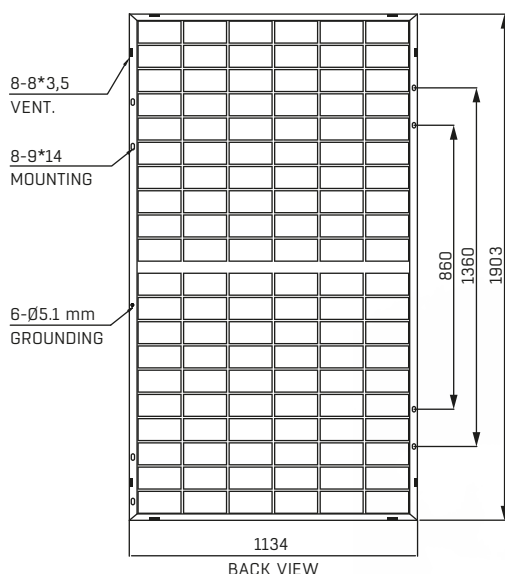
SPECIFICATIONS

Number of cells	120 (6 x 20) 182x91mm
Dimensions	1903 x 1134 x 35 mm
Weight	22.7 kg
Front-side glass	2.0/2.0 mm tempered highly transp. anti-reflection solar glass
Frame	Stable, anodised aluminium frame, black
Junction box	Split Junction Box (IP68)
Cable	4 mm ² , +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	24	Pieces per Container	744

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