

**IBEX**

HIGH TECHNOLOGY SOLAR MODULES

**IBEX 144BF  
MHC-EIGER**

545/550

**10BB** HALF-CELL MONO PV MODULE

BIFACIAL HIGH TECHNOLOGY  
TRANSPARENT BACKSHEET 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 21.28%)



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 144BF-MHC-EIGER 545-550

MONOCRYSTALLINE SOLAR MODULE

## ELECTRICAL DATA AT STC

Module Type	545W	550W	
	<b>STC</b>	<b>STC</b>	
Rated power P <sub>mp</sub> [Wp]	545	550	
P <sub>mp</sub> range to	0/+5W	0/+5W	
Rated current I <sub>mp</sub> [A]	12.94A	13.01A	
Rated voltage V <sub>mp</sub> [V]	42.12V	42.28V	
Short-circuit current I <sub>sc</sub> [A]	13.83A	13.90A	
Open-circuit voltage U <sub>oc</sub> [V]	50.18V	50.32V	
Efficiency at STC up to	21.09%	21.28%	
Application Class	Class A	Class A	

## ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN

5%	15%	25%			
Maximum Power At STC (P <sub>max</sub> )	575W	610W	663W	562W	615W
Module Efficiency STC (%)	21.53%	23.58%	25.63%	21.74%	23.81%
Maximum Power At STC (P <sub>max</sub> )	567W	621W	675W	572W	627W
Module Efficiency STC (%)	21.94%	24.03%	26.12%	22.14%	24.25%
Maximum Power At STC (P <sub>max</sub> )	578W	633W	688W	572W	633W
Module Efficiency STC (%)	22.35%	24.47%	26.60%	22.14%	24.47%

STC: 1000W/m<sup>2</sup> irradiance, 25°C cell temperature, AM1.5.

## LIMITING VALUES

Max. system voltage [V]	1500V DC (IEC)
Max. return current [I]	30A
Operating Temperature	- 40 to +85°C
Max.tested pressure load [Pa]2	5400
Max. tested tensile load [Pa]2	2400

## TEMPERATURE COEFFICIENT

I <sub>sc</sub>	V <sub>oc</sub>	P <sub>max</sub>
0.05% /°C	-0.28% /°C	-0.36% /°C

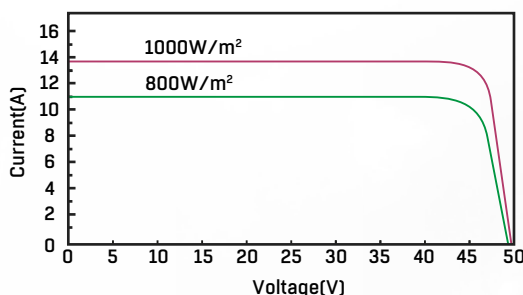
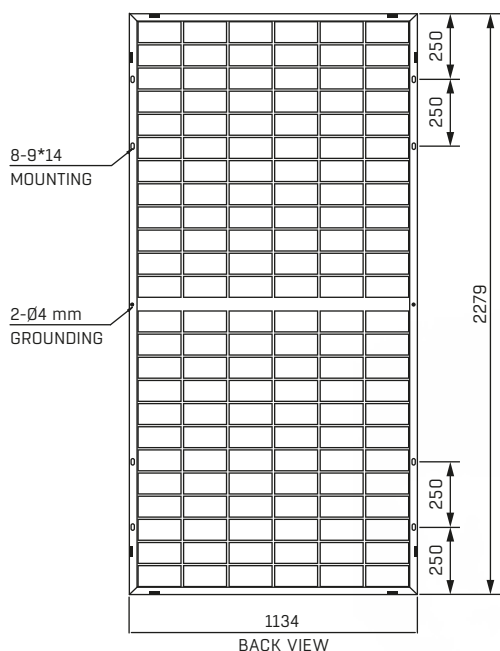
## SPECIFICATIONS

Number of cells	144 (6x24)   182x91mm
Dimensions	2279 x 1134 x 35 mm
Weight	27.5 kg
Frontglass	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 <sup>2</sup> , +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	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](http://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

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