

# IBEX 144MHC-EIGER **FULL BLACK**

525/530/535/540/545

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 per cell structure technology (low resistance characteristics) is adopted ( the maximum conversion efficiency of modules is up to 21.09%)



**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



**SUPER STRONG FRAME.** The overflow tank is waterproof with double layers. Aluminum frame enhances the mechanical load strength by 10%

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



# IBEX 144MHC-EIGER 525-545 FULL BLACK

## MONOCRYSTALLINE SOLAR MODULE

### ELECTRICAL DATA AT STC

	525	530	535	540	545
Rated power P <sub>mpp</sub> [Wp]	525	530	535	540	545
P <sub>mpp</sub> range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I <sub>mpp</sub> [A]	12.66A	12.73A	12.80A	12.87A	12.94A
Rated voltage V <sub>mpp</sub> [V]	41.47V	41.63V	41.80V	41.96V	42.12V
Short-circuit current I <sub>sc</sub> [A]	13.55A	13.62A	13.69A	13.76A	13.83A
Open-circuit voltage U <sub>oc</sub> [V]	49.59V	49.74V	49.89V	50.04V	50.18V
Efficiency at STC up to	20.31%	20.51%	20.70%	20.89%	21.09%
Application Class	Class A	Class A	Class A	Class A	Class A

Specification as per STC (Standard test conditions): irradiance 1000 W/m<sup>2</sup> | module temperature 25°C | Air Mass = 1.5

### ELECTRICAL DATA AT NOCT

	397.00	401.00	405.00	409.00	413.00
Power at P <sub>mpp</sub> [Wp]	397.00	401.00	405.00	409.00	413.00
Rated current I <sub>mpp</sub> [A]	10.25	10.29	10.33	10.37	10.41
Rated voltage V <sub>mpp</sub> [V]	38.73	38.97	39.21	39.44	39.67
Short-circuit I <sub>sc</sub> [A]	10.87	10.91	10.95	10.99	11.03
Open-circuit voltage U <sub>oc</sub> [V]	46.92	47.16	47.40	47.63	47.87

NOCT (nominal operating cell temperature): irradiance 800 W/m<sup>2</sup> | Wind speed 1 m/sec | Ambient temperature | 20°C cell operating temperature 45 +/-2°C | Air Mass = 1.5

### 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] <sup>2</sup>	5400
Max. tested tensile load [Pa] <sup>2</sup>	3800

### TEMPERATURE COEFFICIENT

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

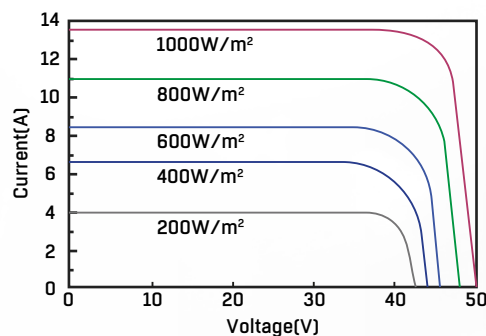
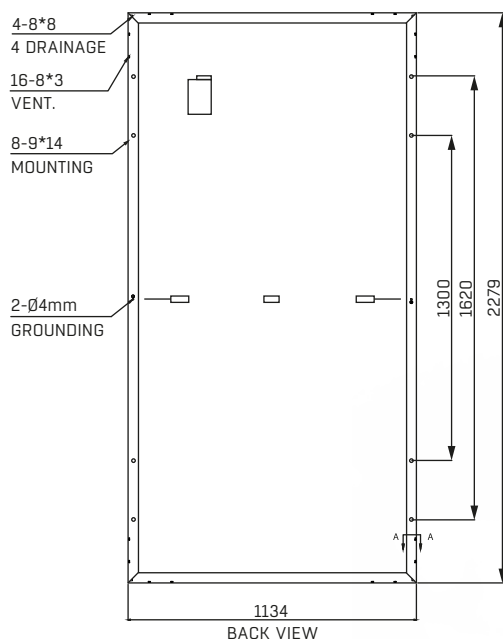
### SPECIFICATIONS

Number of cells	144 (6 x 24)   182x182 mm
Dimensions	2279x1134x35 mm
Weight	28.5 kg
Front-side glass	3.2 mm tempered Low Iron Glass
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	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 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

**20 YEARS**  
PRODUCT WARRANTY

**30 YEARS**  
POWER WARRANTY