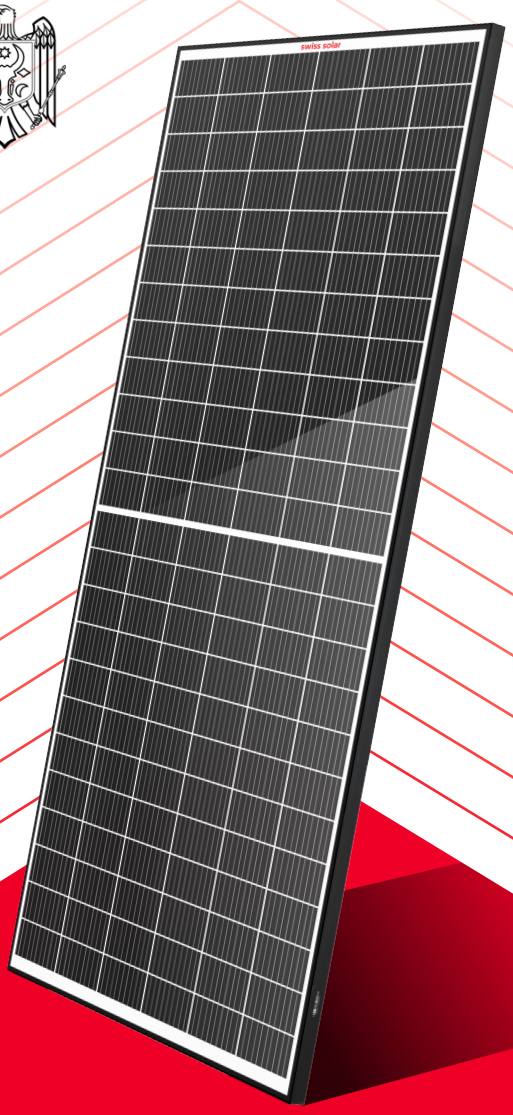
swiss solar QUALITY TECHNOLOGY

ENGINEERED IN SWITZERLAND






# IBEX 144MHC-EiGER

## 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 perc 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

10% 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

MONOCRYSTALLINE SOLAR MODULE

## ELECTRICAL DATA AT STC

| | | | | | |
|---|---|---|---|---|---|
| Rated power Pmpp [Wp] | 525 | 530 | 535 | 540 | 545 |
| Pmpp range to | 0/+5W | 0/+5W | 0/+5W | 0/+5W | 0/+5W |
| Rated current Impp [A] | 12.66A | 12.73A | 12.80A | 12.87A | 12.94A |
| Rated voltage Vmpp [V] | 41.47V | 41.63V | 41.80V | 41.96V | 42.12V |
| Short-circuit current Isc [A] | 13.55A | 13.62A | 13.69A | 13.76A | 13.83A |
| Open-circuit voltage Uoc [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/m² | module temperature 25°C | Air Mass = 1.5

## ELECTRICAL DATA AT NOCT

| | | | | | |
|---|---|---|---|---|---|
| Power at Pmpp [Wp] | 397.00 | 401.00 | 405.00 | 409.00 | 413.00 |
| Rated current Impp [A] | 10.25 | 10.29 | 10.33 | 10.37 | 10.41 |
| Rated voltage Vmpp [V] | 38.73 | 38.97 | 39.21 | 39.44 | 39.67 |
| Short-circuit Isc [A] | 10.87 | 10.91 | 10.95 | 10.99 | 11.03 |
| Open-circuit voltage Uoc [V] | 46.92 | 47.16 | 47.40 | 47.63 | 47.87 |

NOCT (nominal operating cell temperature): irradiance 800 W/m² | 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]2 | 5400 |
| Max. tested tensile load [Pa]2 | 3800 |

## TEMPERATURE COEFFICIENT

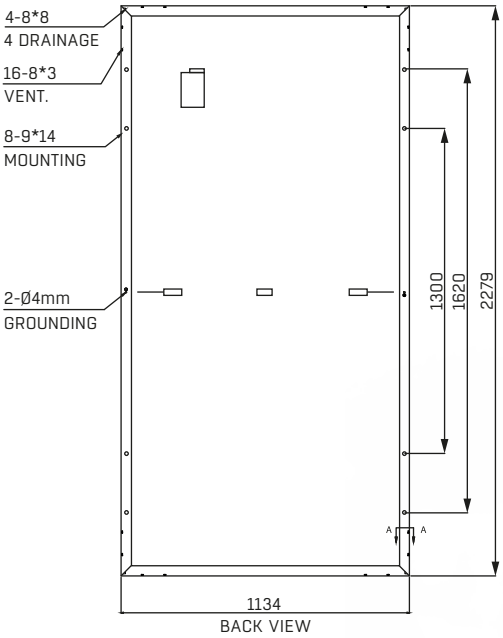
| Isc | Voc | Pmax |
|---|---|---|
| 0.05% /°C | -0.28% /°C | -0.36% /°C |

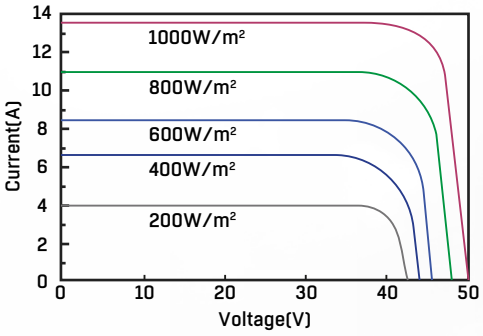
## SPECIFICATIONS

| | |
|---|---|
| Number of cells | 144 (6 x 24) I 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 mm², +300mm,-400mm Cust.Length |
| Diodes | 3 Diodes |
| Plug-in connection | MC4 Compatible |
| Hail test (max. hailstrom) | Ø45mm \| 23 m/s \| 83 km/h |

## PACKING CONFIRGURATION

| | | | |
|---|---|---|---|
| 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 | 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

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