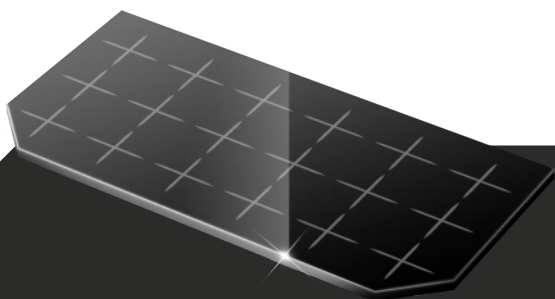
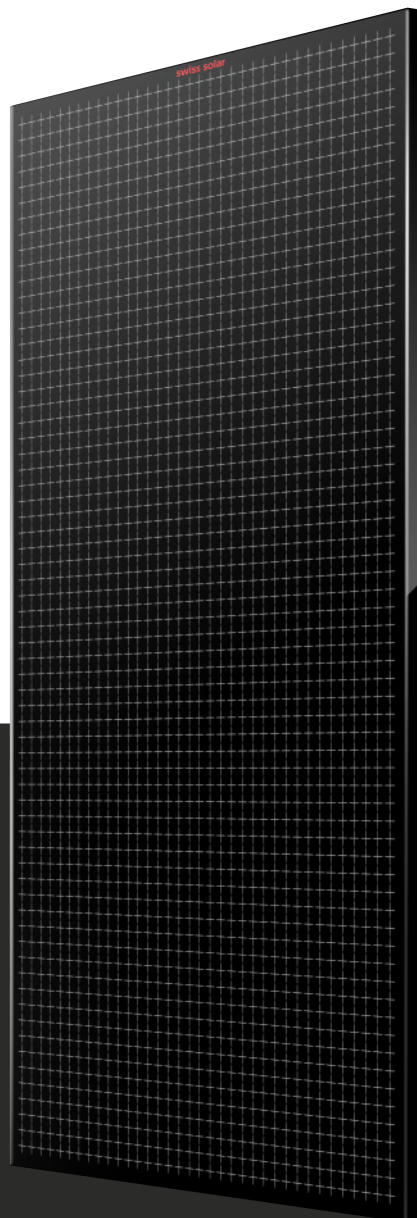


mwt  
graphene+

IBEX 132MWT-GRAPHENE  
400/410



Graphene  
coating Technology

+ Technological  
solution for solar  
panel



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



**Full Black:** All black design for more elegant applications



**High Reliability:** conductive back sheet's 2D encapsulation avoids welding stress and micro crack, resulting lower degradation under multiple harsh testing conditions



**Innovative Layout:** Innovative back contact module layout with asymmetric design for higher efficiency power



**Lead Free:** Eco-friendly PV design achieves lead-free MWT module without soldering materials

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



# IBEX 132MWT-GRAPHENE 400-410

## MONOCRYSTALLINE SOLAR MODULE

### ELECTRICAL DATA AT STC

Rated power P <sub>mpp</sub> [Wp]	400	405	410
P <sub>mpp</sub> range to	0/+5W	0/+5W	0/+5W
Rated current I <sub>mpp</sub> [A]	10.79A	10.86A	10.93A
Rated voltage V <sub>mpp</sub> [V]	37.10V	37.30V	37.50V
Short-circuit current I <sub>sc</sub> [A]	11.28A	11.35A	11.42A
Open-circuit voltage U <sub>oc</sub> [V]	44.90V	45.10V	45.30V
Efficiency at STC up to	20.50%	20.70%	20.90%
Application Class	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

Power at P <sub>mpp</sub> [Wp]	300.00	305.00	305.00
Rated current I <sub>mpp</sub> [A]	8.63	8.71	8.79
Rated voltage V <sub>mpp</sub> [V]	34.80	35.00	35.20
Short-circuit I <sub>sc</sub> [A]	9.12	9.18	9.24
Open-circuit voltage U <sub>oc</sub> [V]	42.00	42.20	42.40

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]2	5400
Max. tested tensile load [Pa]2	2400

### TEMPERATURE COEFFICIENT

I <sub>sc</sub>	V <sub>oc</sub>	P <sub>max</sub>
0.06% /°C	-0.28% /°C	-0.36% /°C

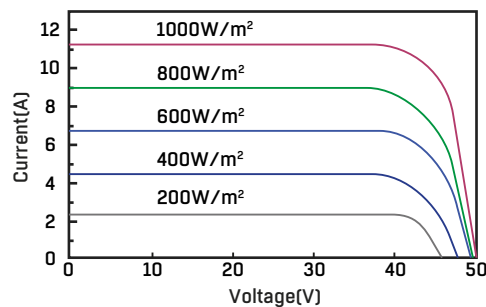
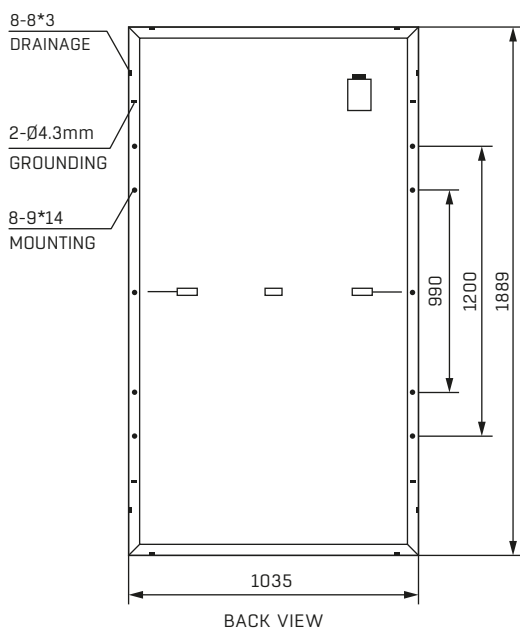
### SPECIFICATIONS

Number of cells	132 (22 x 6)   166 x 83 mm
Dimensions	1889x1035x30mm
Weight	20.5 kg
Front-side glass	3.2mm high transmittance anti-reflective coated tempered glass
Frame	Anodized Aluminum Black
Junction box	Split Junction Box (IP68)
Cable	4 mm <sup>2</sup> , +350mm,-150mm 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	36
Pallets Per container	24	Pieces per Container	864

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