

IMPROVED LOAD

pressure
 **6200**
 tensile
 **4200**

 **TESTED**

**TOPCON
 CELLS INSIDE**

12BB

HALF-CELL
 MONO PV MODULE

IBEX 120MHC-TOPCON

460/465/470/475/480/485

IBEX HIGH EFFICIENCY MONOCRYSTALLINE SOLAR MODULES WITH TOPCON CELLS TECHNOLOGY



SMBB TECHNOLOGY



LESS HOT SPOT SHADING EFFECTS



N-TOPCON CELL TECHNOLOGY



LOWER COST OF KILOWATT-HOUR
 ELECTRICITY (LCOE)



EXCELLENT ANTI-PID
 LOW LID PERFORMANCE



HIGH TECHNOLOGY
 SOLAR MODULES

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



IBEX 120MHC-TOPCON 460-485

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

Module Type	460W	465W	470W	475W	480W	485W
	STC	STC	STC	STC	STC	STC
Rated power P _{mpp} [Wp]	460	465	470	475	480	485
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	13.25A	13.33A	13.41A	13.49A	13.57A	13.65A
Rated voltage V _{mpp} [V]	34.72V	34.89V	35.05V	35.21V	35.37V	35.53V
Short-circuit current I _{sc} [A]	13.99A	14.07A	14.15A	14.23A	14.31A	14.39A
Open-circuit voltage U _{oc} [V]	42.05V	42.22V	42.38V	42.54V	42.70V	42.86V
Efficiency at STC up to	21.32%	21.55%	21.78%	22.01%	22.24%	22.47%
Application Class	Class A	Class A	Class A	Class A	Class A	Class A

*STC: irradiance 1000W/m² | AM1.5 | Cell temperature of 25°C

ELECTRICAL DATA AT NOCT

Power at P _{mpp} [Wp]	346	350	353	357	361	365
Rated current I _{mpp} [A]	10.61	10.67	10.73	10.79	10.85	10.91
Rated voltage V _{mpp} [V]	32.60	32.77	32.94	33.10	33.26	33.42
Short-circuit I _{sc} [A]	11.29	11.36	11.42	11.49	11.56	11.63
Open-circuit voltage U _{oc} [V]	39.94	40.10	40.25	40.41	40.57	40.73

*NOCT: irradiance 800 W/m² | Wind speed 1 m/sec | Ambient temperature | 20°C cell operating | AM 1.5

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	6200
Max. tested tensile load [Pa]2	4200

TEMPERATURE COEFFICIENT

I _{sc}	V _{oc}	P _{max}
0.046% /°C	-0.25 % /°C	-0.30% /°C

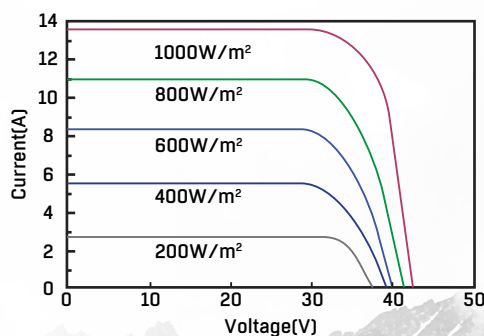
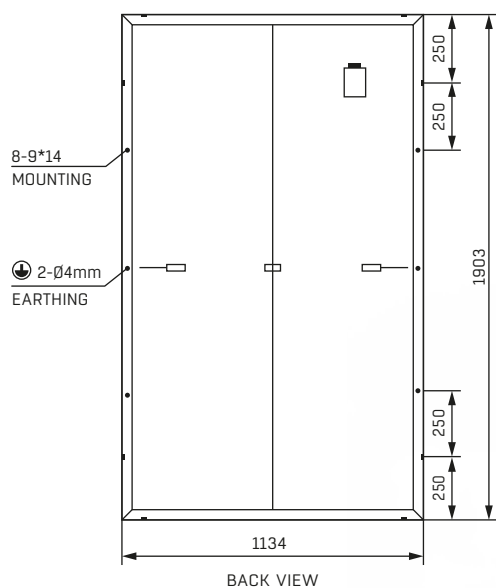
SPECIFICATIONS

Type of cells	N-type Mono
Number of cells	120 (12x10) 182x91mm
Dimensions	1903 x 1134 x 35mm
Weight	23.8 kg
Frontglass	3.2 mm coated tempered glass
Frame	Anodized Aluminium Alloy
Junction box	Split Junction Box (IP68)
Cable	4 mm ² , +300mm,-300mm 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

SWISSENERGY-SOLAR.CH