



HIGH TECHNOLOG SOLAR MODULES

## IBEX-120MHC COSMOS-BLACK

355/360/365/370/375

**URR** HALF-CELL MONO PV MODULE

## 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 20.27%)



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 120MHC-COSMOS-BLACK 355-375

MONOCRYSTALLINE SOLAR MODULE

| ELECTRICAL DATA AT STC        |         |         |         |         |         |
|-------------------------------|---------|---------|---------|---------|---------|
| Rated power Pmpp [Wp]         | 355     | 360     | 365     | 370     | 375     |
| Pmpp range to                 | 0/+5W   | 0/+5W   | 0/+5W   | 0/+5W   | 0/+5W   |
| Rated current Impp [A]        | 10.60A  | 10.68A  | 10.76A  | 10.84A  | 10.92A  |
| Rated voltage Vmpp [V]        | 33.49V  | 33.71V  | 33.92V  | 34.13V  | 34.34V  |
| Short-circuit current Isc [A] | 11.10A  | 11.18A  | 11.26A  | 11.34A  | 11.42A  |
| Open-circuit voltage Uoc [V]  | 40.59V  | 40.79V  | 40.99V  | 41.18V  | 41.37V  |
| Efficiency at STC up to       | 19.19%  | 19.46%  | 19.73%  | 20.00%  | 20.27%  |
| Application Class             | Class A |

Specification as per STC (Standard test conditions): irradiance  $1000 \text{ W/m}^2$  | module temperature  $25^{\circ}\text{C}$  | Air Mass = 1.5

| ELECTRICAL DATA AT NOCT      |       |       |       |       |       |  |
|------------------------------|-------|-------|-------|-------|-------|--|
| Power at Pmpp [Wp]           | 270.6 | 274.4 | 278.1 | 281.9 | 285.6 |  |
| Rated current Impp [A]       | 8.49  | 8.55  | 8.62  | 8.69  | 8.75  |  |
| Rated voltage Vmpp [V]       | 31.9  | 32.1  | 32.3  | 32.5  | 32.7  |  |
| Short-circuit Isc [A]        | 8.95  | 9.02  | 9.10  | 9.16  | 9.23  |  |
| Open-circuit voltage Uoc [V] | 38.1  | 38.3  | 38.5  | 38.7  | 38.9  |  |

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 |  |  |  |

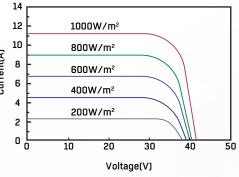
| SPECIFICATIONS             |   |
|----------------------------|---|
| Number of cells            | 120 (6 x 20) I 166x83 mm                |
| Dimensions                 | 1765x1048x35 mm                         |
| Weight                     | 20.5 kg                                 |
| Front-side glass           | 3.2 mm tempered Low Iron Glass          |
| Frame                      | Stable, anodised aluminium frame, black |
| Junction box               | Split Junction Box (IP68)               |
| Cable                      | 4 mm², +300mm,-300mm Cust.Length        |
| Diodes                     | 3 Diodes                                |
| Plug-in connection         | MC4 Compatible                          |
| Hail test (max. hailstrom) | Ø45mm   23 m/s   83 km/h                |

| 4-8*8 DRAINAGE 16-8*3 VENT. |      |      | <del>-</del> | •     | <u> </u> |            |
|-----------------------------|------|------|--------------|-------|----------|------------|
| 8-9*14<br>MOUNTING          |      |      |              | •     |          |            |
| ● 2-Ø4mm<br>EARTHING        |      |      |              | • 800 | 1300     | i          |
|                             | •    |      |              | •     | <u> </u> | Current(A) |
|                             | <br> | 1048 | -            | -     |          | <u> </u>   |

BACK VIEW

| PACKING CONFIRGURATION |       |                      |     |  |  |  |
|------------------------|-------|----------------------|-----|--|--|--|
| Container              | 40 HQ | Pieces Per Pallet    | 30  |  |  |  |
| Pallets Per container  | 26    | Pieces per Container | 780 |  |  |  |
|                        |       |                      |     |  |  |  |

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 correspondes 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



## 20 YEARS PRODUCT WARRANTY 30 YEARS POWER WARRANTY

swiss solar