

SOLIC

IBEX

HIGH TECHNOLOGY
SOLAR MODULES

IBEX-120MHC COSMOS-BLACK

355/360/365/370/375

9BB 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%

IBEX 120MHC-COSMOS-BLACK 355-375

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

	355	360	365	370	375
Rated power P _{mpp} [Wp]	355	360	365	370	375
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	10,60A	10,68A	10,76A	10,84A	10,92A
Rated voltage V _{mpp} [V]	33,49V	33,71V	33,92V	34,13V	34,34V
Short-circuit current I _{sc} [A]	11,10A	11,18A	11,26A	11,34A	11,42A
Open-circuit voltage U _{oc} [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	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 P _{mpp} [Wp]	270,6	274,4	278,1	281,9	285,6
Rated current I _{mpp} [A]	8,49	8,55	8,62	8,69	8,75
Rated voltage V _{mpp} [V]	31,9	32,1	32,3	32,5	32,7
Short-circuit I _{sc} [A]	8,95	9,02	9,10	9,16	9,23
Open-circuit voltage U _{oc} [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	2400

TEMPERATURE COEFFICIENT

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28% /°C	-0.36% /°C

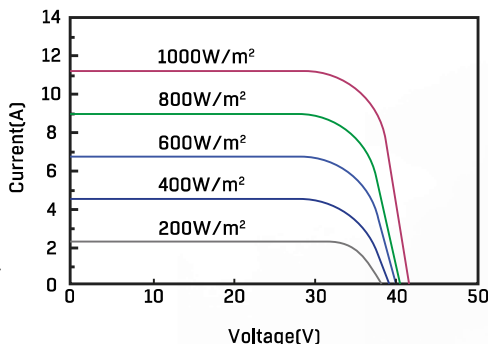
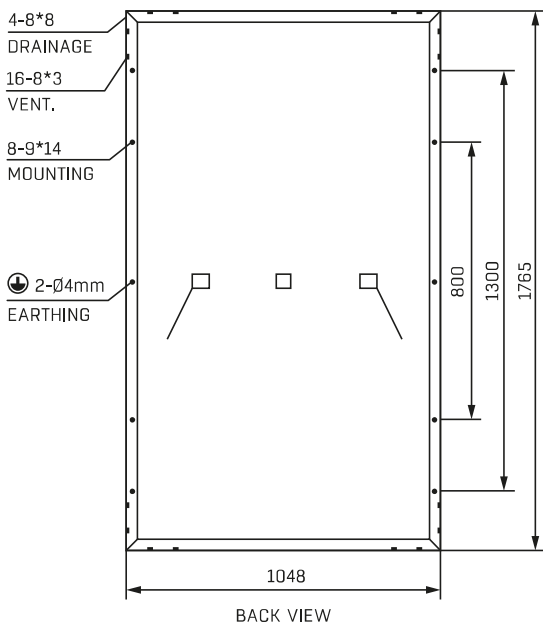
SPECIFICATIONS

Number of cells	120 (6 x 20) 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 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	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 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

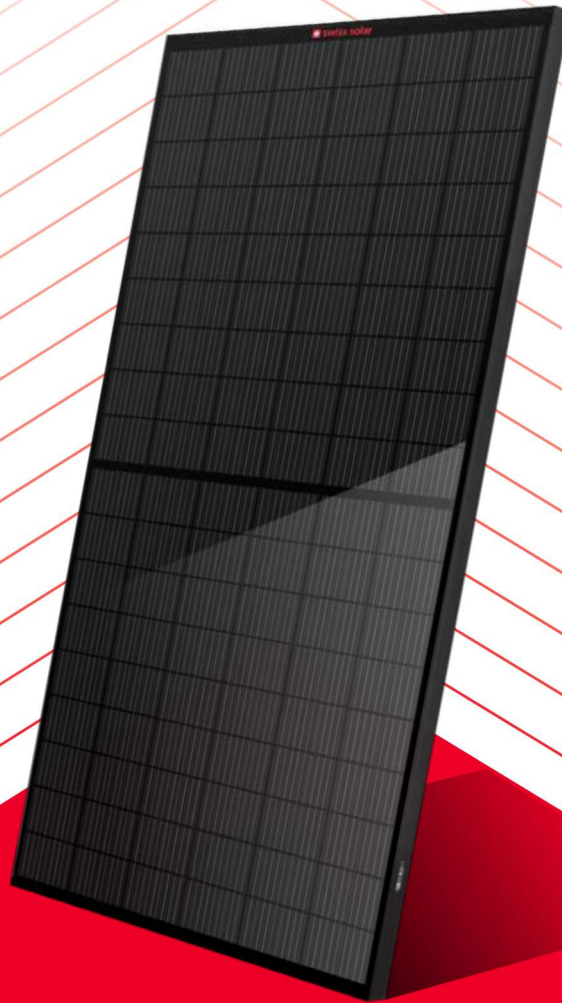


WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar



IBEX 108MHC-EIGER **FULL BLACK**

390/395/400/405/410

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 20.97%)



EXTREME WEATHER RATING. High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (2400 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%

IBEX 108MHC-EiGER 390-410 FULL BLACK

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

Rated power P _{mpp} [Wp]	390	395	400	405	410
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	12.82A	12.88A	12.94A	13.00A	13.06A
Rated voltage V _{mpp} [V]	30.42V	30.62V	30.82V	31.02V	31.22V
Short-circuit current I _{sc} [A]	13.50A	13.55A	13.60A	13.65A	13.70A
Open-circuit voltage U _{oc} [V]	36.54V	36.74V	36.94V	37.14V	37.34V
Efficiency at STC up to	19.95%	20.20%	20.46%	20.72%	20.97%
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 P _{mpp} [Wp]	287.00	291.00	295.00	298.00	302.00
Rated current I _{mpp} [A]	10.11	10.18	10.25	10.28	10.35
Rated voltage V _{mpp} [V]	28.38	28.58	28.78	28.98	29.18
Short-circuit I _{sc} [A]	10.60	10.65	10.70	10.75	10.80
Open-circuit voltage U _{oc} [V]	34.09	34.29	34.49	34.69	34.89

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]	15A
Operating Temperature	- 40 to +85°C
Max. tested pressure load [Pa] ²	5400
Max. tested tensile load [Pa] ²	2400

TEMPERATURE COEFFICIENT

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28% /°C	-0.36% /°C

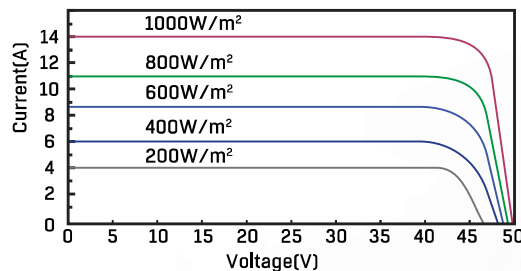
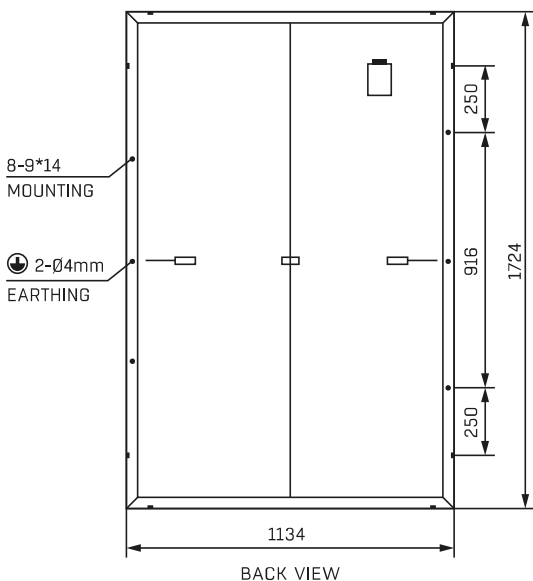
SPECIFICATIONS

Number of cells	108 (6 x 18) 182x182 mm
Dimensions	1724x1134x30 mm
Weight	21.5 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 ² , +300mm,-200mm 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	26	Pieces per Container	936

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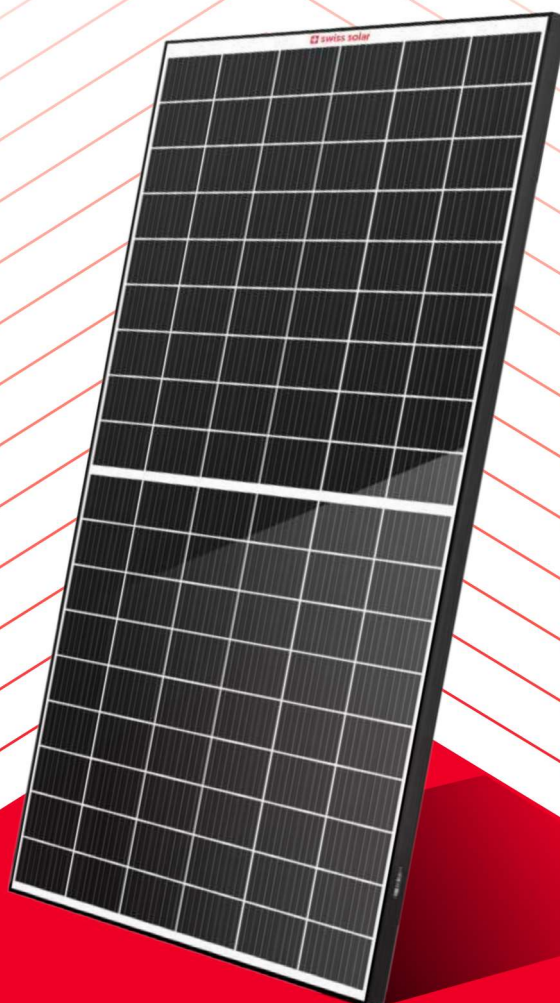


WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar



IBEX 108MHC-EiGER

390/395/400/405/410

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 20.97%)



EXTREME WEATHER RATING. High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (2400 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%

IBEX 108MHC-EiGER 390-410

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

	390	395	400	405	410
Rated power P _{mpp} [Wp]	390	395	400	405	410
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	12.82A	12.88A	12.94A	13.00A	13.06A
Rated voltage V _{mpp} [V]	30.42V	30.62V	30.82V	31.02V	31.22V
Short-circuit current I _{sc} [A]	13.50A	13.55A	13.60A	13.65A	13.70A
Open-circuit voltage U _{oc} [V]	36.54V	36.74V	36.94V	37.14V	37.34V
Efficiency at STC up to	19.95%	20.20%	20.46%	20.72%	20.97%
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 P _{mpp} [Wp]	287.00	291.00	295.00	298.00	302.00
Rated current I _{mpp} [A]	10.11	10.18	10.25	10.28	10.35
Rated voltage V _{mpp} [V]	28.38	28.58	28.78	28.98	29.18
Short-circuit I _{sc} [A]	10.60	10.65	10.70	10.75	10.80
Open-circuit voltage U _{oc} [V]	34.09	34.29	34.49	34.69	34.89

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]	15A
Operating Temperature	- 40 to +85°C
Max. tested pressure load [Pa] ²	5400
Max. tested tensile load [Pa] ²	2400

TEMPERATURE COEFFICIENT

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28% /°C	-0.36% /°C

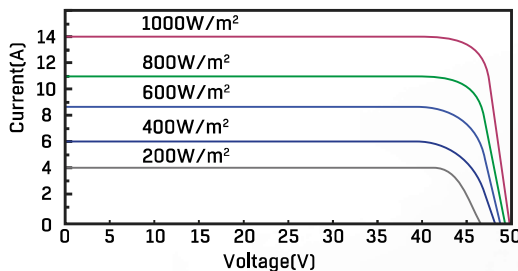
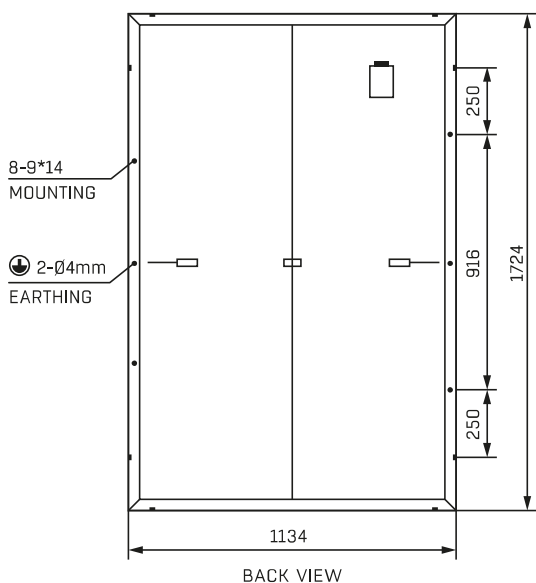
SPECIFICATIONS

Number of cells	108 (6 x 18) 182x182 mm
Dimensions	1724x1134x30 mm
Weight	21.5 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 ² , +300mm,-200mm 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	26	Pieces per Container	936

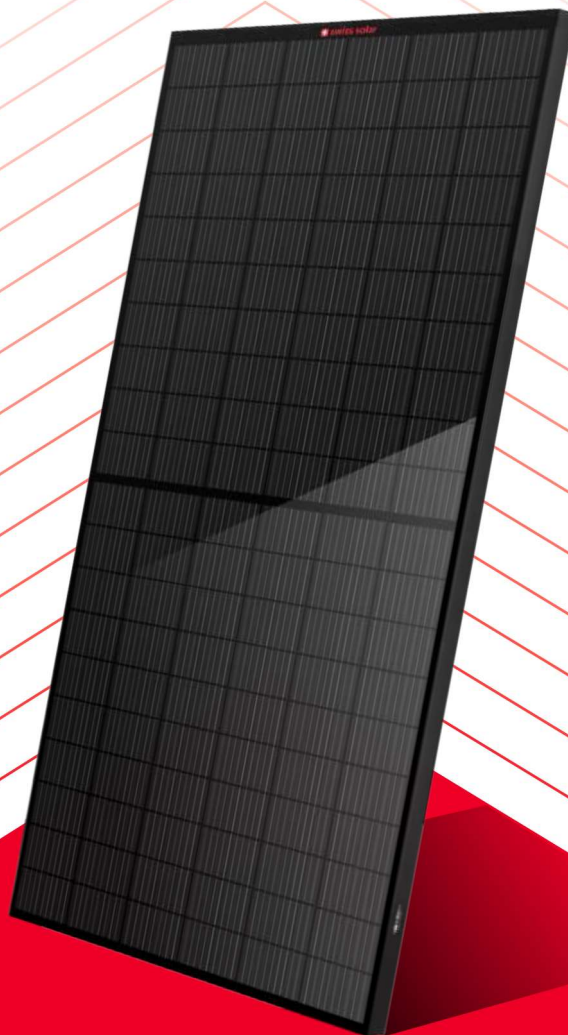
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WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY



IBEX 120MHC-EIGER **FULL BLACK**

440/445/450/455/460

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 21.25%)



EXTREME WEATHER RATING. High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (2400 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%

IBEX 120MHC-EiGER 440-460 FULL BLACK

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

Rated power P _{mpp} [Wp]	440	445	450	455	460
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	12.84A	12.90A	12.96A	13.02A	13.08A
Rated voltage V _{mpp} [V]	34.20V	34.50V	34.70V	34.90V	35.20V
Short-circuit current I _{sc} [A]	13.58A	13.63A	13.68A	13.73A	13.78A
Open-circuit voltage U _{oc} [V]	41.00V	41.20V	41.40V	41.60V	41.80V
Efficiency at STC up to	20.33%	20.56%	20.79%	21.02%	21.25%
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 P _{mpp} [Wp]	324.00	328.00	331.00	335.00	339.00
Rated current I _{mpp} [A]	10.14	10.21	10.24	10.30	10.35
Rated voltage V _{mpp} [V]	31.94	32.14	32.34	32.54	32.74
Short-circuit I _{sc} [A]	10.68	10.73	10.78	10.83	10.88
Open-circuit voltage U _{oc} [V]	38.28	38.48	38.68	38.88	39.08

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]	25A
Operating Temperature	- 40 to +85°C
Max. tested pressure load [Pa] ²	5400
Max. tested tensile load [Pa] ²	2400

TEMPERATURE COEFFICIENT

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28% /°C	-0.36% /°C

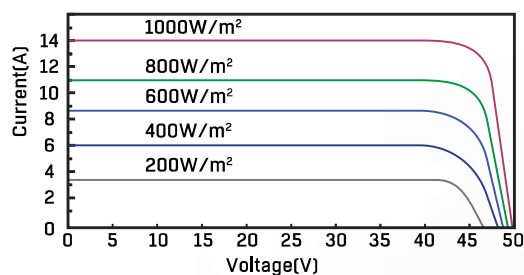
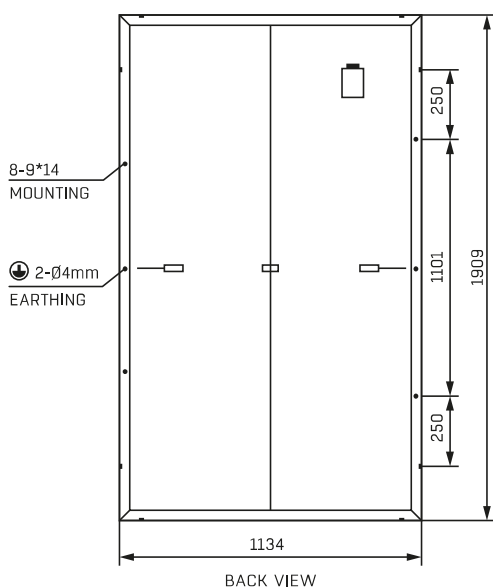
SPECIFICATIONS

Number of cells	120 (6 x 20) 182x182 mm
Dimensions	1909x1134x30 mm
Weight	23.5 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 ² , +300mm,-200mm 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 | 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

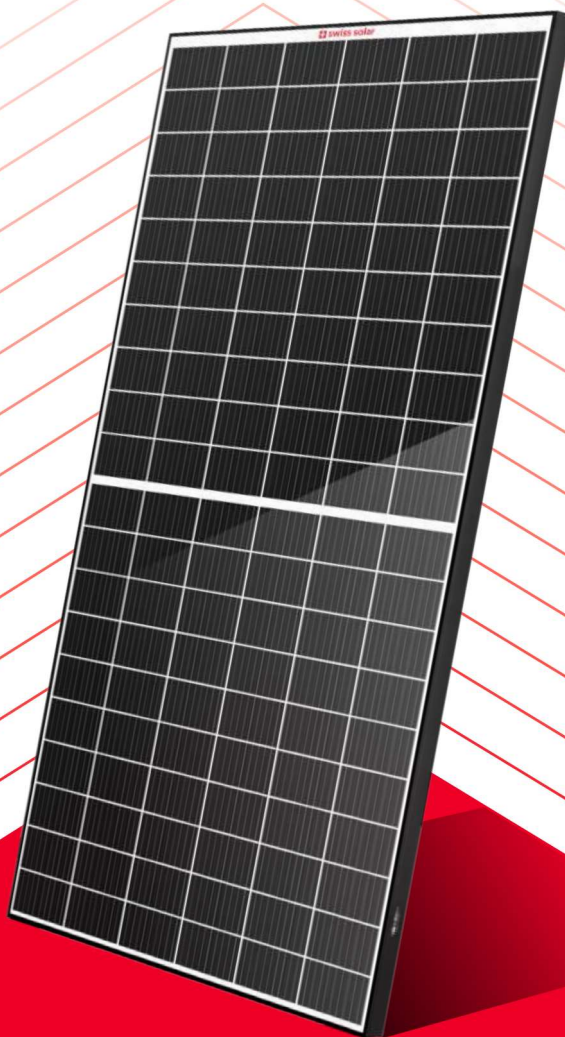


WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar



IBEX 120MHC-EIGER

440/445/450/455/460

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 21.25%)



EXTREME WEATHER RATING. High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (2400 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%

IBEX 120MHC-EiGER 440-460

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

	440	445	450	455	460
Rated power P _{mpp} [Wp]	440	445	450	455	460
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	12.84A	12.90A	12.96A	13.02A	13.08A
Rated voltage V _{mpp} [V]	34.20V	34.50V	34.70V	34.90V	35.20V
Short-circuit current I _{sc} [A]	13.58A	13.63A	13.68A	13.73A	13.78A
Open-circuit voltage U _{oc} [V]	41.00V	41.20V	41.40V	41.60V	41.80V
Efficiency at STC up to	20.33%	20.56%	20.79%	21.02%	21.25%
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 P _{mpp} [Wp]	324.00	328.00	331.00	335.00	339.00
Rated current I _{mpp} [A]	10.14	10.21	10.24	10.30	10.35
Rated voltage V _{mpp} [V]	31.94	32.14	32.34	32.54	32.74
Short-circuit I _{sc} [A]	10.68	10.73	10.78	10.83	10.88
Open-circuit voltage U _{oc} [V]	38.28	38.48	38.68	38.88	39.08

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]	25A
Operating Temperature	- 40 to +85°C
Max. tested pressure load [Pa] ²	5400
Max. tested tensile load [Pa] ²	2400

TEMPERATURE COEFFICIENT

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28% /°C	-0.36% /°C

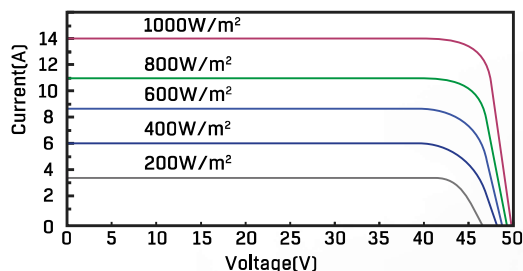
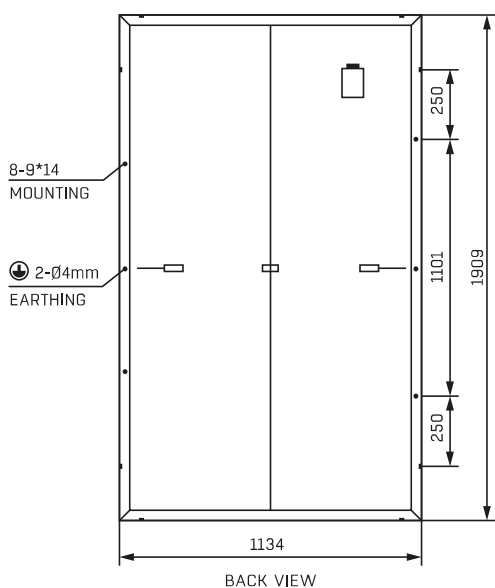
SPECIFICATIONS

Number of cells	120 (6 x 20) 182x182 mm
Dimensions	1909x1134x30 mm
Weight	23.5 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 ² , +300mm,-200mm 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

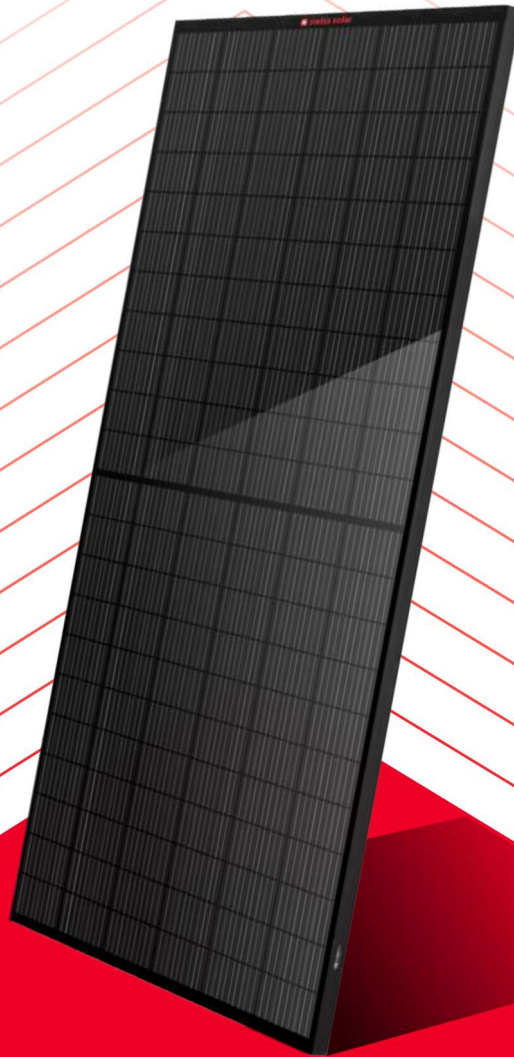
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WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY



IBEX 132MHC-EIGER **FULL BLACK**

495/500

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 21.06%)



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%

IBEX 132MHC-EIGER 495-500 FULL BLACK

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

Rated power P _{mpp} [Wp]	495	500
P _{mpp} range to	0/+5W	0/+5W
Rated current I _{mp} [A]	12,24A	12,31A
Rated voltage V _{mp} [V]	40,44V	40,62V
Short-circuit current I _{sc} [A]	13,13A	13,20A
Open-circuit voltage U _{oc} [V]	48,67V	48,83V
Efficiency at STC up to	20,85%	21,06%
Application Class	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 P _{mpp} [Wp]	373,00	377,00
Rated current I _{mp} [A]	10,01	10,05
Rated voltage V _{mp} [V]	37,26	37,51
Short-circuit I _{sc} [A]	10,63	10,67
Open-circuit voltage U _{oc} [V]	45,44	45,69

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

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28% /°C	-0.36% /°C

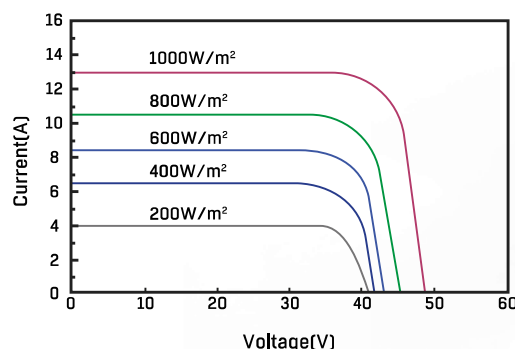
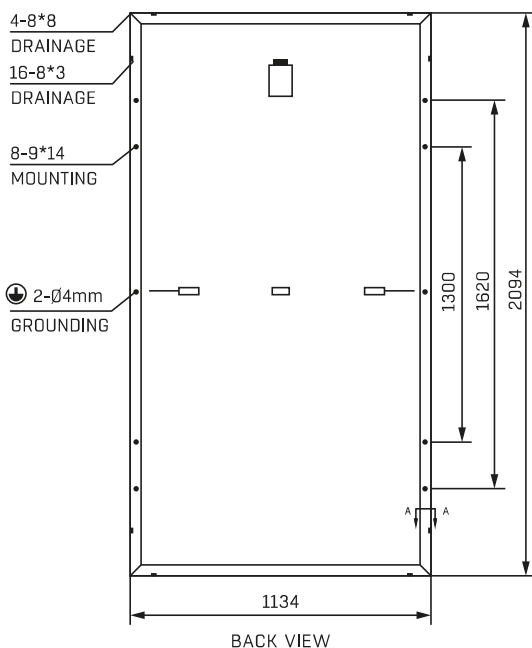
SPECIFICATIONS

Number of cells	132 (6 x 22) 182x182 mm
Dimensions	2094x1134x35 mm
Weight	26.0 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 ² , +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	22	Pieces per Container	660

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

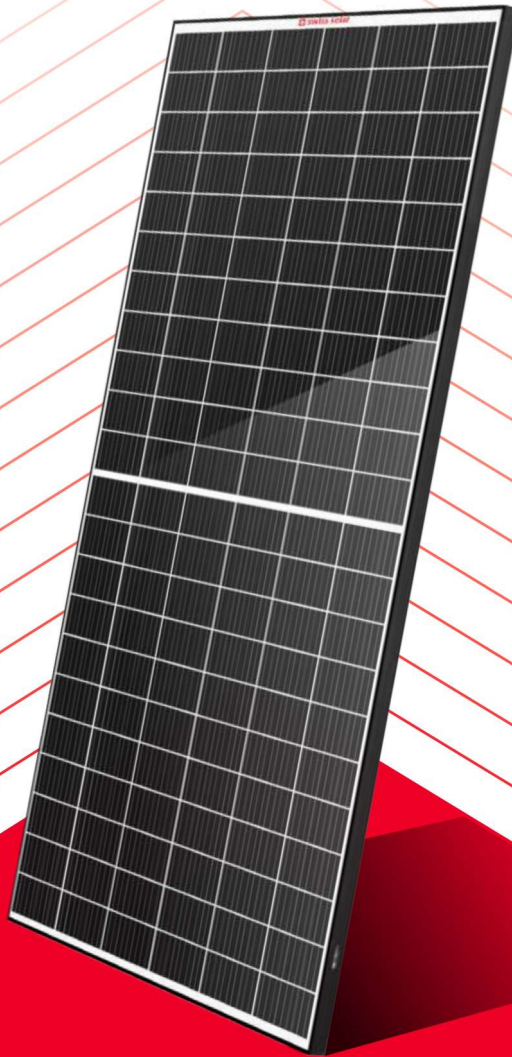


WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar



IBEX 132MHC-EIGER

495/500

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 21.06%)



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%

IBEX 132MHC-EIGER 495-500

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

Rated power P _{mpp} [Wp]	495	500
P _{mpp} range to	0/+5W	0/+5W
Rated current I _{mp} [A]	12,24A	12,31A
Rated voltage V _{mp} [V]	40,44V	40,62V
Short-circuit current I _{sc} [A]	13,13A	13,20A
Open-circuit voltage U _{oc} [V]	48,67V	48,83V
Efficiency at STC up to	20,85%	21,06%
Application Class	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 P _{mpp} [Wp]	373,00	377,00
Rated current I _{mp} [A]	10,01	10,05
Rated voltage V _{mp} [V]	37,26	37,51
Short-circuit I _{sc} [A]	10,63	10,67
Open-circuit voltage U _{oc} [V]	45,44	45,69

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

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28% /°C	-0.36% /°C

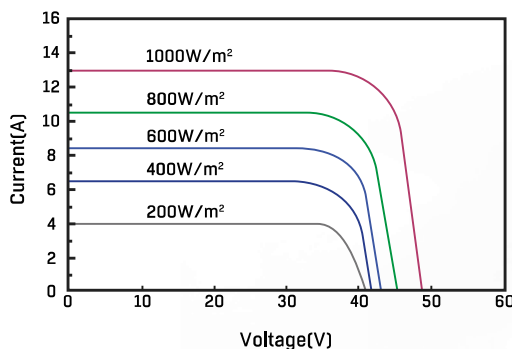
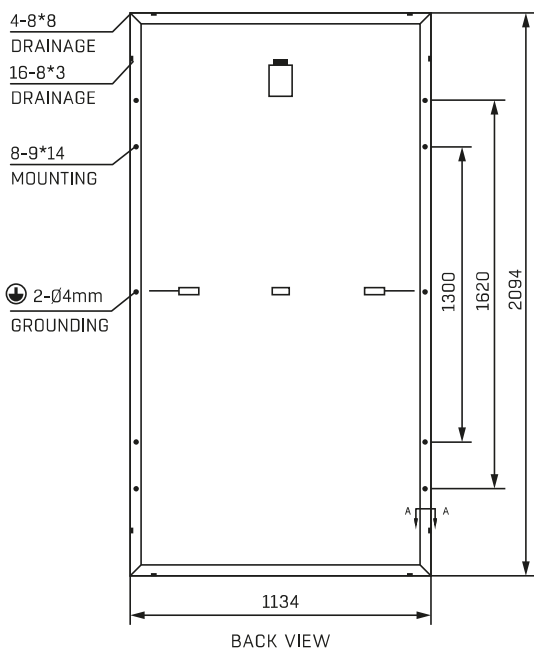
SPECIFICATIONS

Number of cells	132 (6 x 22) 182x182 mm
Dimensions	2094x1134x35 mm
Weight	26.0 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 ² , +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	22	Pieces per Container	660

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

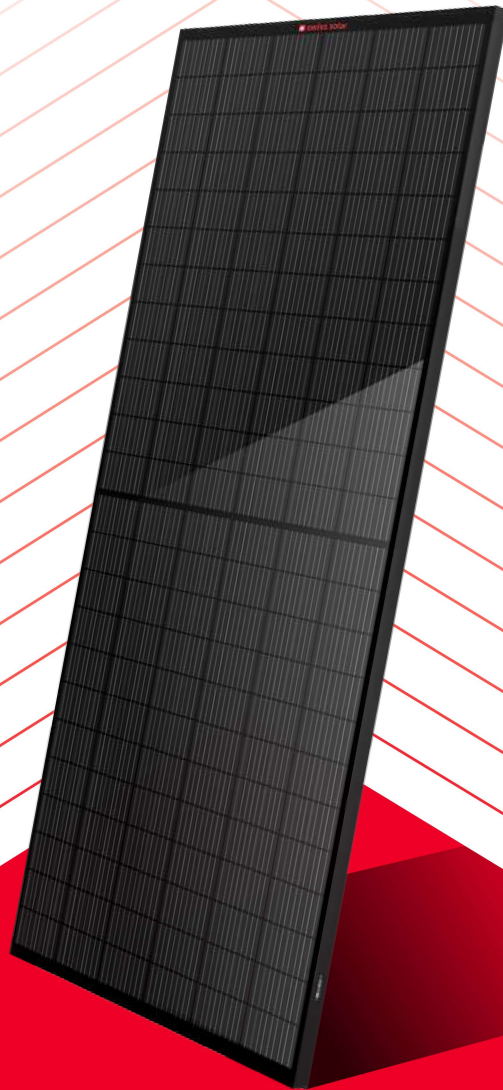


WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar



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 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



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

IBEX 144MHC-EIGER 525-545 FULL BLACK

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

	525	530	535	540	545
Rated power P _{mpp} [Wp]	525	530	535	540	545
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	12.66A	12.73A	12.80A	12.87A	12.94A
Rated voltage V _{mpp} [V]	41.47V	41.63V	41.80V	41.96V	42.12V
Short-circuit current I _{sc} [A]	13.55A	13.62A	13.69A	13.76A	13.83A
Open-circuit voltage U _{oc} [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

	397.00	401.00	405.00	409.00	413.00
Power at P _{mpp} [Wp]	397.00	401.00	405.00	409.00	413.00
Rated current I _{mpp} [A]	10.25	10.29	10.33	10.37	10.41
Rated voltage V _{mpp} [V]	38.73	38.97	39.21	39.44	39.67
Short-circuit I _{sc} [A]	10.87	10.91	10.95	10.99	11.03
Open-circuit voltage U _{oc} [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

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28% /°C	-0.36% /°C

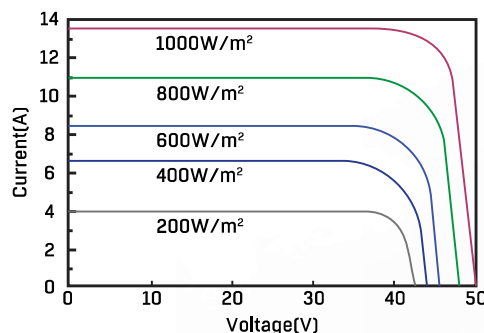
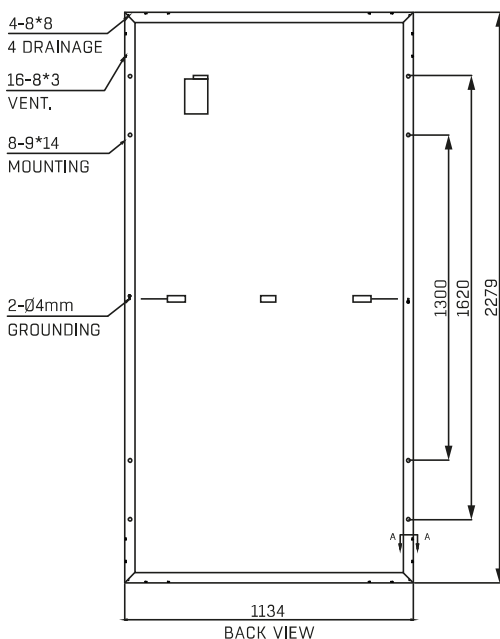
SPECIFICATIONS

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 ² , +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 | 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

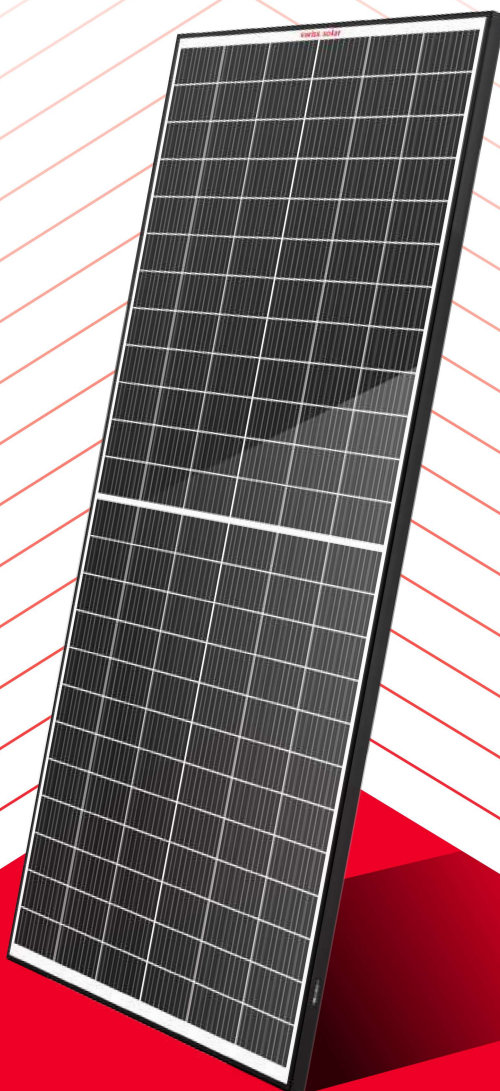


WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar



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



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

IBEX 144MHC-EIGER 525-545

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

	525	530	535	540	545
Rated power P _{mpp} [Wp]	525	530	535	540	545
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	12.66A	12.73A	12.80A	12.87A	12.94A
Rated voltage V _{mpp} [V]	41.47V	41.63V	41.80V	41.96V	42.12V
Short-circuit current I _{sc} [A]	13.55A	13.62A	13.69A	13.76A	13.83A
Open-circuit voltage U _{oc} [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

	525	530	535	540	545
Power at P _{mpp} [Wp]	397.00	401.00	405.00	409.00	413.00
Rated current I _{mpp} [A]	10.25	10.29	10.33	10.37	10.41
Rated voltage V _{mpp} [V]	38.73	38.97	39.21	39.44	39.67
Short-circuit I _{sc} [A]	10.87	10.91	10.95	10.99	11.03
Open-circuit voltage U _{oc} [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

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28% /°C	-0.36% /°C

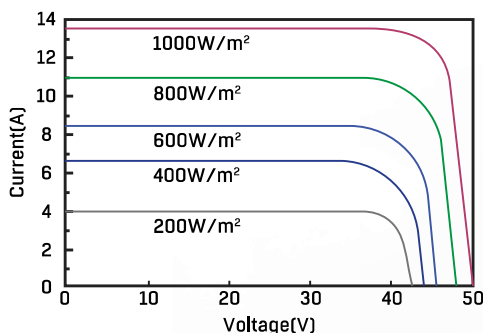
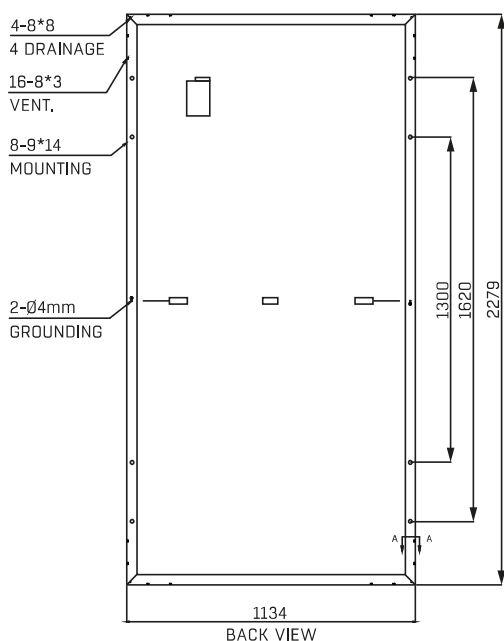
SPECIFICATIONS

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 ² , +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 | 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

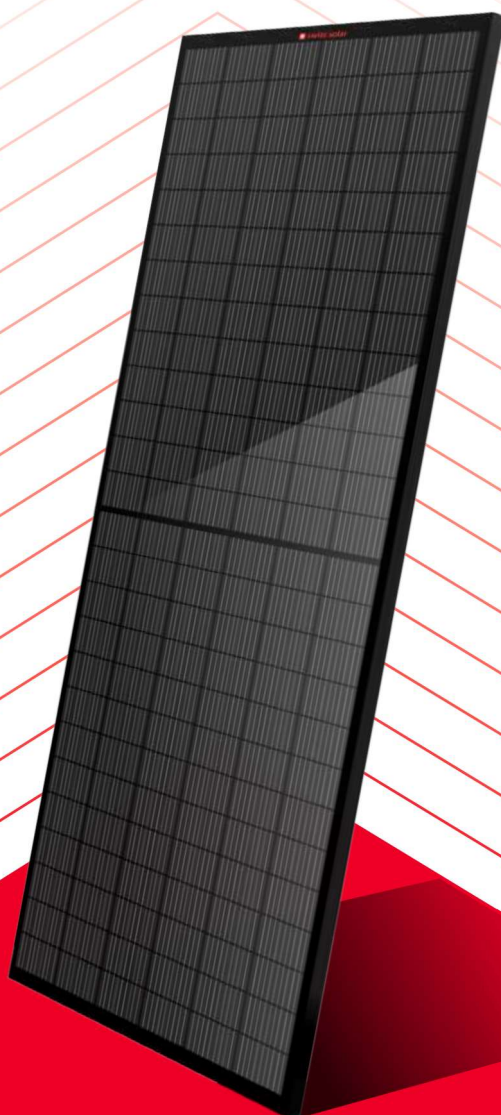


WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar



IBEX 156MHC-EIGER

FULL BLACK

570/575/580/585/590

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 21.11%)



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%

IBEX 156MHC-EiGER 570-590 FULL BLACK

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

	570	575	580	585	590
Rated power P _{mpp} [Wp]	570	575	580	585	590
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	13.29A	13.36A	13.43A	13.50A	13.57A
Rated voltage V _{mpp} [V]	42.89V	43.04V	43.19V	43.33V	43.48V
Short-circuit current I _{sc} [A]	14.18A	14.25A	14.32A	14.39A	14.46A
Open-circuit voltage U _{oc} [V]	50.88V	51.02V	51.15V	51.29V	51.42V
Efficiency at STC up to	20.39%	20.57%	20.75%	20.93%	21.11%
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

	570	575	580	585	590
Power at P _{mpp} [Wp]	433.00	437.00	441.00	445.00	449.00
Rated current I _{mpp} [A]	10.61	10.65	10.69	10.73	10.77
Rated voltage V _{mpp} [V]	40.81	41.03	41.25	41.47	41.69
Short-circuit I _{sc} [A]	11.23	11.27	11.31	11.35	11.39
Open-circuit voltage U _{oc} [V]	49.02	49.25	49.47	49.69	49.91

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

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28% /°C	-0.36% /°C

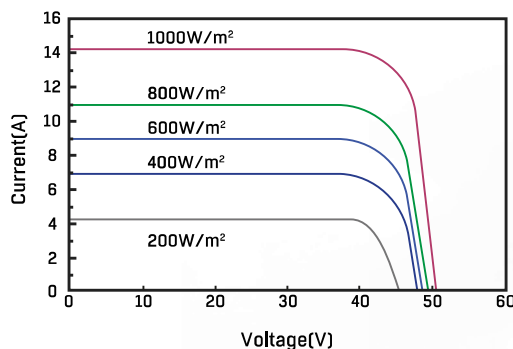
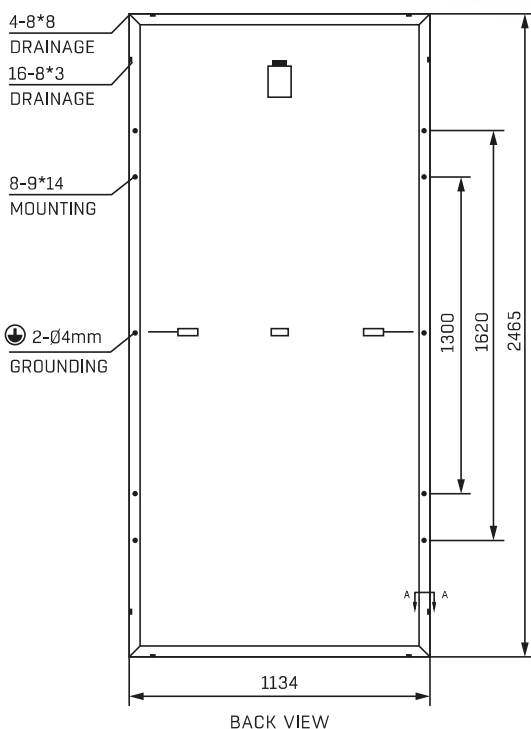
SPECIFICATIONS

Number of cells	156 (6 x 26) 182x182
Dimensions	2465x1134x35 mm
Weight	30.5 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 ² , +900mm,-900mm 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	18	Pieces per Container	540

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

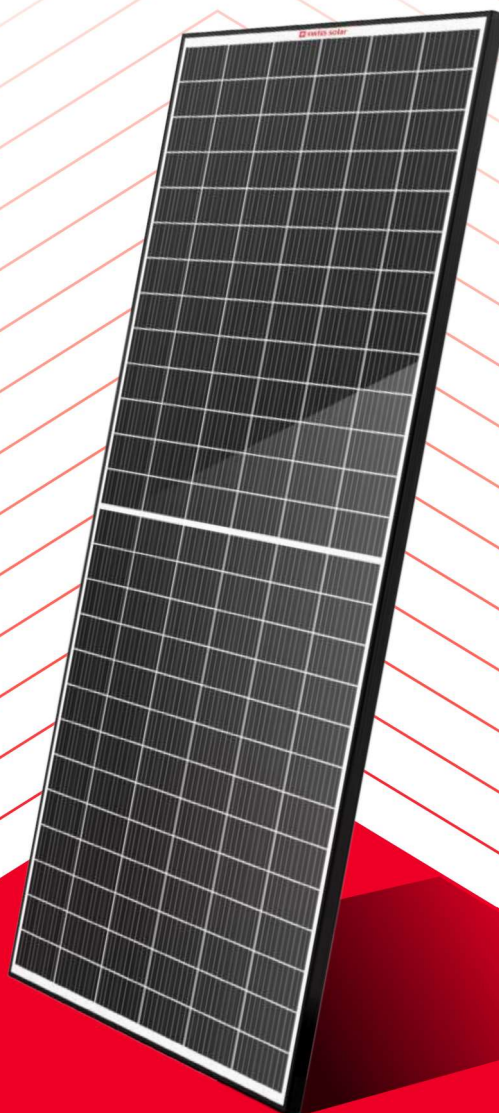


WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar



IBEX 156MHC-EIGER

570/575/580/585/590

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 21.11%)



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%

IBEX 156MHC-EiGER 570-590

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

	570	575	580	585	590
Rated power P _{mpp} [Wp]	570	575	580	585	590
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	13.29A	13.36A	13.43A	13.50A	13.57A
Rated voltage V _{mpp} [V]	42.89V	43.04V	43.19V	43.33V	43.48V
Short-circuit current I _{sc} [A]	14.18A	14.25A	14.32A	14.39A	14.46A
Open-circuit voltage U _{oc} [V]	50.88V	51.02V	51.15V	51.29V	51.42V
Efficiency at STC up to	20.39%	20.57%	20.75%	20.93%	21.11%
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

	570	575	580	585	590
Power at P _{mpp} [Wp]	433.00	437.00	441.00	445.00	449.00
Rated current I _{mpp} [A]	10.61	10.65	10.69	10.73	10.77
Rated voltage V _{mpp} [V]	40.81	41.03	41.25	41.47	41.69
Short-circuit I _{sc} [A]	11.23	11.27	11.31	11.35	11.39
Open-circuit voltage U _{oc} [V]	49.02	49.25	49.47	49.69	49.91

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

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28% /°C	-0.36% /°C

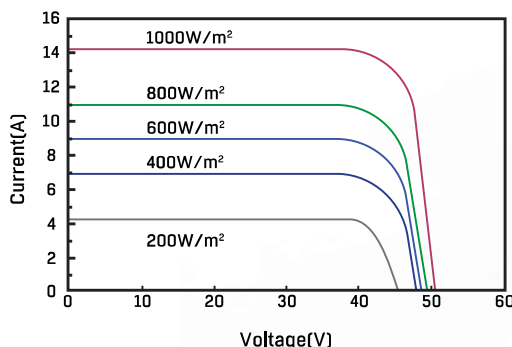
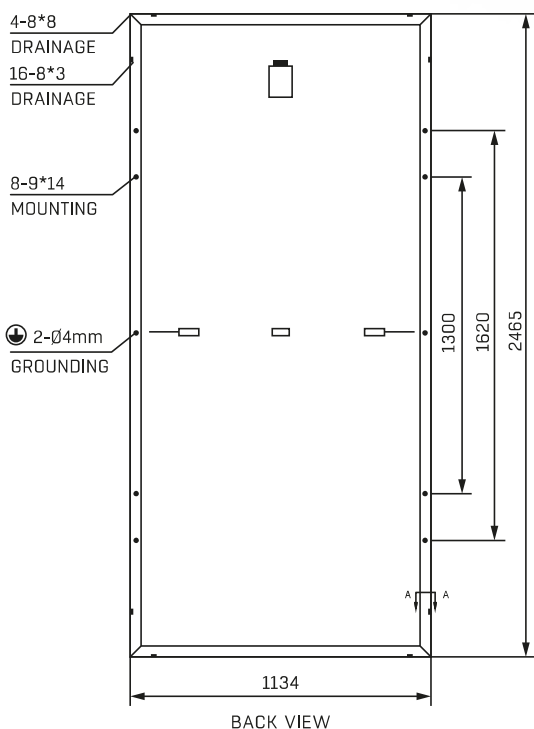
SPECIFICATIONS

Number of cells	156 (6 x 26) 182x182
Dimensions	2465x1134x35 mm
Weight	30.5 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 ² , +900mm,-900mm 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	18	Pieces per Container	540

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

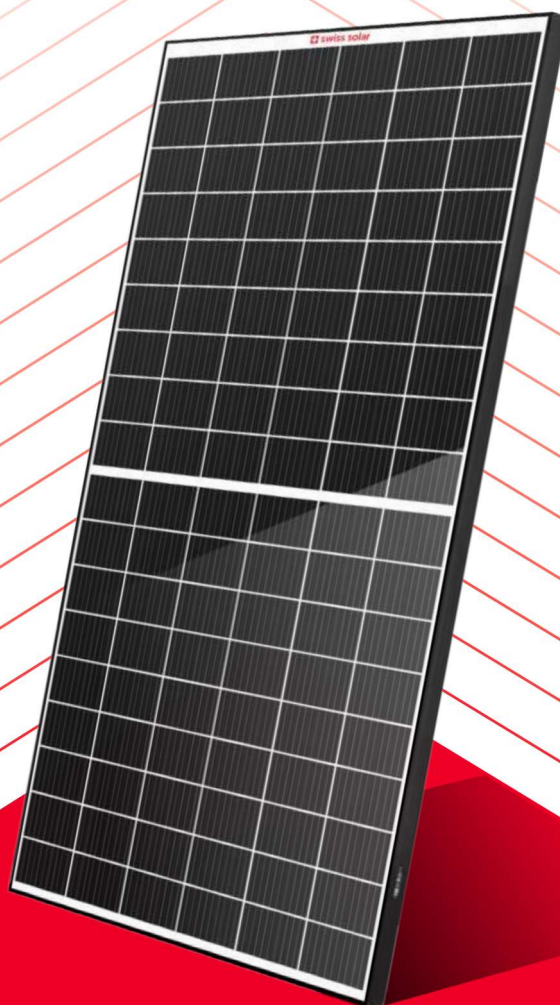


WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar



IBEX54M-EiGER

530/535/540/545/550

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 21.48%)



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%

IBEX54M-EiGER 530-550

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

	530	535	540	545	550
Rated power P _{mpp} [Wp]	530	535	540	545	550
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	17,27A	17,31A	17,36A	17,42A	17,46A
Rated voltage V _{mpp} [V]	30,70V	30,90V	31,10V	31,30V	31,50V
Short-circuit current I _{sc} [A]	18,28A	18,33A	18,38A	18,45A	18,49A
Open-circuit voltage U _{oc} [V]	37,00V	37,20V	37,50V	37,70V	37,90V
Efficiency at STC up to	20,70%	20,90%	21,09%	21,29%	21,48%
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 P _{mpp} [Wp]	401,7	405,5	409,3	413,1	416,9
Rated current I _{mpp} [A]	14,00	14,04	14,08	14,13	14,16
Rated voltage V _{mpp} [V]	28,70	28,90	29,10	29,20	29,40
Short-circuit I _{sc} [A]	14,77	14,81	14,85	14,91	14,94
Open-circuit voltage U _{oc} [V]	34,70	34,80	35,10	35,30	35,50

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]	30A
Operating Temperature	- 40 to +85°C
Max. tested pressure load [Pa] ²	5400
Max. tested tensile load [Pa] ²	3800

TEMPERATURE COEFFICIENT

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.27% /°C	-0.35% /°C

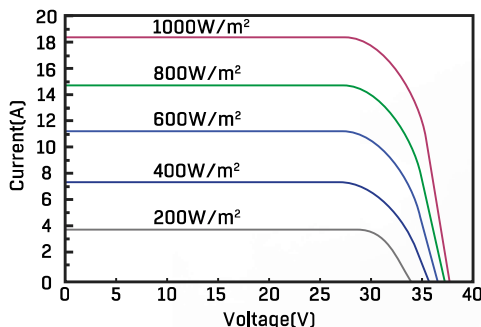
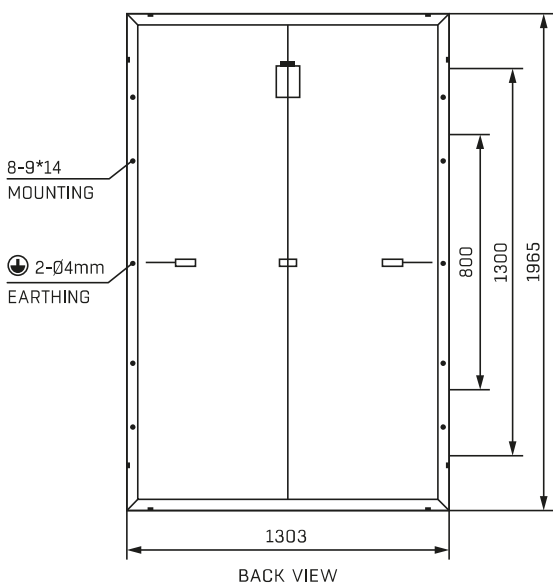
SPECIFICATIONS

Number of cells	108 (6 x 18) 210x105 mm
Dimensions	1965x1303x35 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 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	30
Pallets Per container	16	Pieces per Container	480

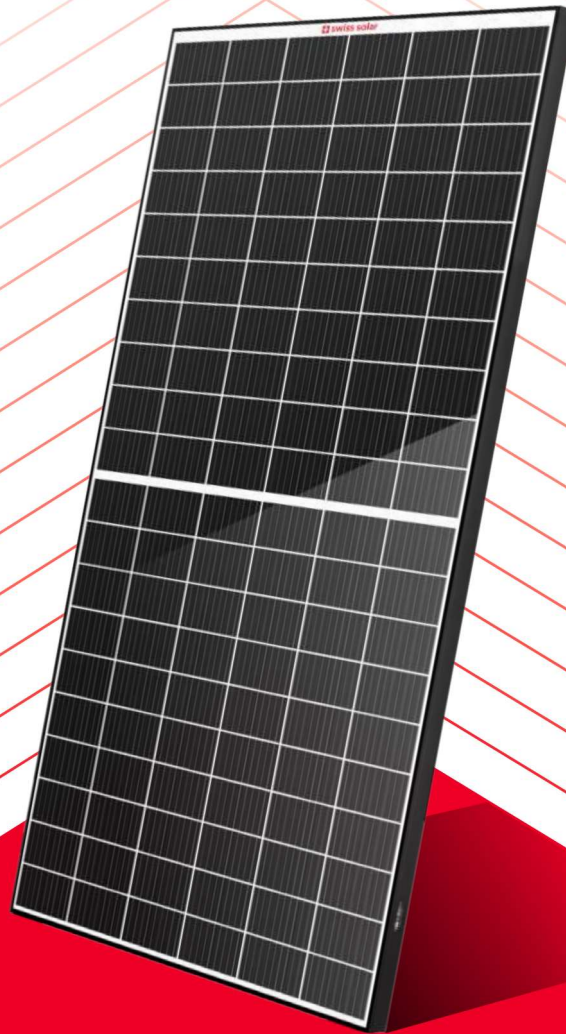
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WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY



IBEX60M-EIGER

590/595/600/605/610

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 21.55%)



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%

IBEX60M-EiGER 590-610

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

Rated power P _{mpp} [Wp]	590	595	600	605	610
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	17.30A	17.40A	17.50A	17.54A	17.58A
Rated voltage V _{mpp} [V]	34.10V	34.20V	34.30V	34.50V	34.70V
Short-circuit current I _{sc} [A]	18.33A	18.43A	18.53A	18.58A	18.62A
Open-circuit voltage U _{oc} [V]	41.10V	41.30V	41.50V	41.70V	41.90V
Efficiency at STC up to	20.85%	21.02%	21.20%	21.38%	21.55%
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 P _{mpp} [Wp]	447.20	451.00	454.80	458.60	462.30
Rated current I _{mpp} [A]	14.04	14.12	14.19	14.23	14.26
Rated voltage V _{mpp} [V]	31.90	32.00	32.00	32.20	32.40
Short-circuit I _{sc} [A]	14.81	14.89	14.97	15.01	15.04
Open-circuit voltage U _{oc} [V]	38.50	38.70	38.90	39.10	39.20

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]	30A
Operating Temperature	- 40 to +85°C
Max. tested pressure load [Pa] ²	5400
Max. tested tensile load [Pa] ²	3800

TEMPERATURE COEFFICIENT

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.27% /°C	-0.35% /°C

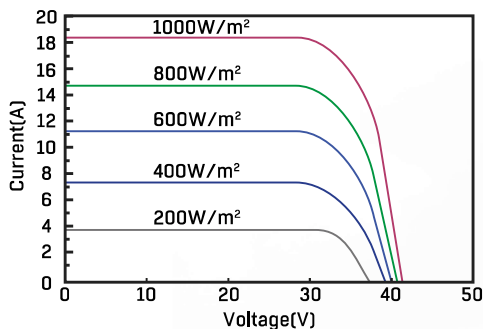
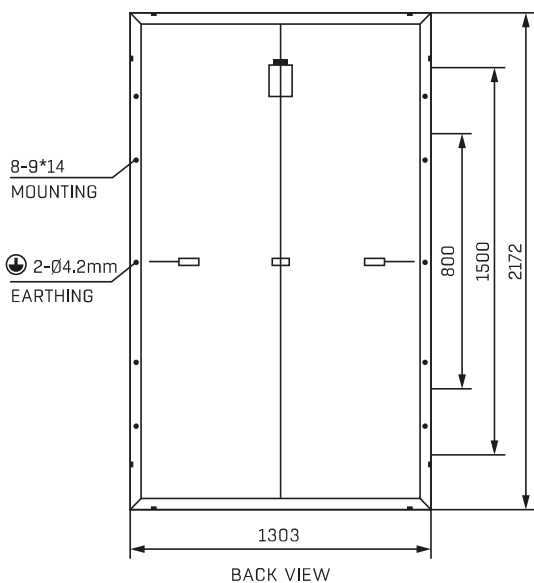
SPECIFICATIONS

Number of cells	120 (6 x 20) 210x105 mm
Dimensions	2172x1303x35 mm
Weight	31.0 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 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	30
Pallets Per container	16	Pieces per Container	480

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

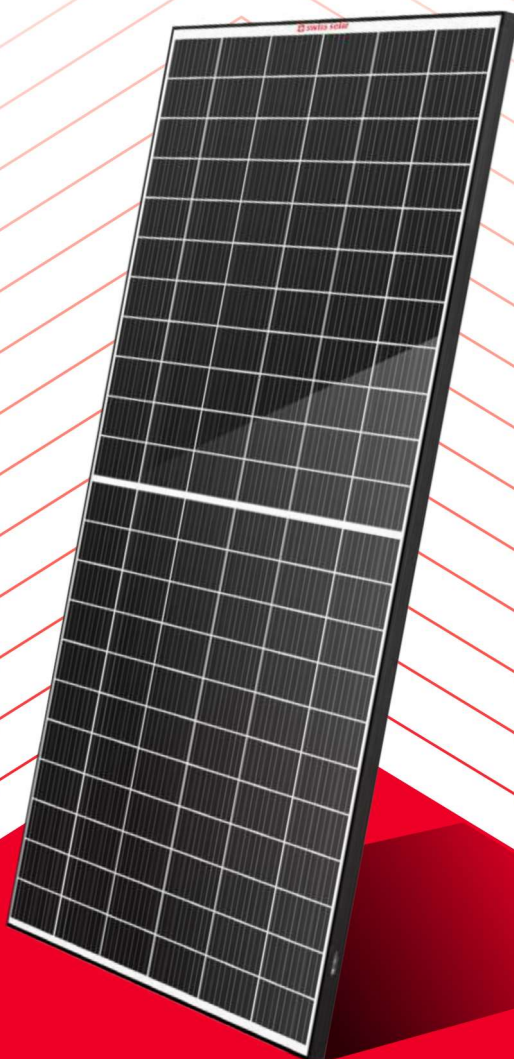


WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar



IBEX66M-EIGER

650/655/660/665/670

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 21.57%)



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%

IBEX66M-EiGER 650-670

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

	650	655	660	665	670
Rated power P _{mpp} [Wp]	650	655	660	665	670
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	17,34A	17,38A	17,42A	17,46A	17,50A
Rated voltage V _{mpp} [V]	37,50V	37,70V	37,90V	38,10V	38,30V
Short-circuit current I _{sc} [A]	18,35A	18,39A	18,44A	18,48A	18,51A
Open-circuit voltage U _{oc} [V]	45,20V	45,40V	45,60V	45,80V	46,00V
Efficiency at STC up to	20,92%	21,09%	21,25%	21,41%	21,57%
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 P _{mpp} [Wp]	492,70	496,50	500,20	504,00	507,80
Rated current I _{mpp} [A]	14,05	14,08	14,12	14,15	14,18
Rated voltage V _{mpp} [V]	35,10	35,20	35,40	35,60	35,80
Short-circuit I _{sc} [A]	14,83	14,86	14,90	14,93	14,96
Open-circuit voltage U _{oc} [V]	42,30	42,50	42,70	42,90	43,10

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]	30A
Operating Temperature	- 40 to +85°C
Max. tested pressure load [Pa] ²	5400
Max. tested tensile load [Pa] ²	3800

TEMPERATURE COEFFICIENT

I _{sc}	V _{oc}	P _{max}
0.05% /°C	-0.28% /°C	-0.35% /°C

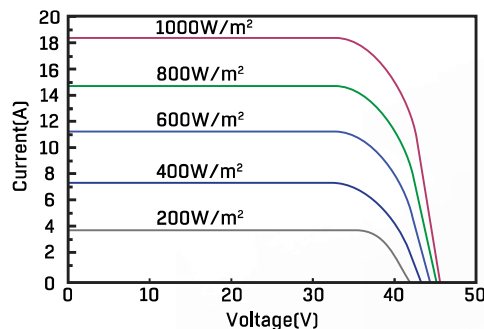
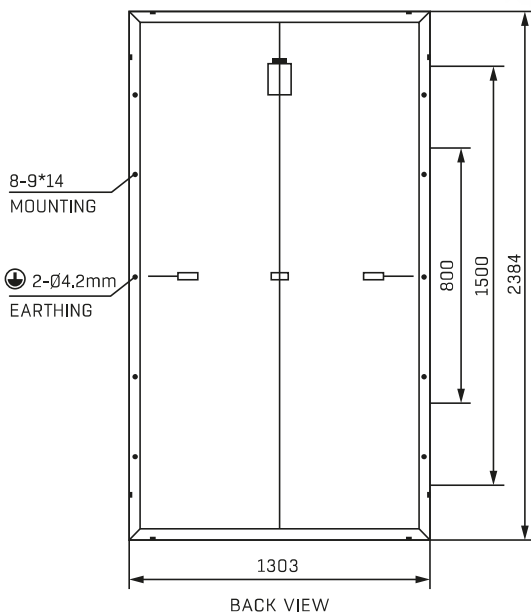
SPECIFICATIONS

Number of cells	132 (6 x 22) 210x105 mm
Dimensions	2384x1303x35 mm
Weight	34.5 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 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	30
Pallets Per container	16	Pieces per Container	480

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

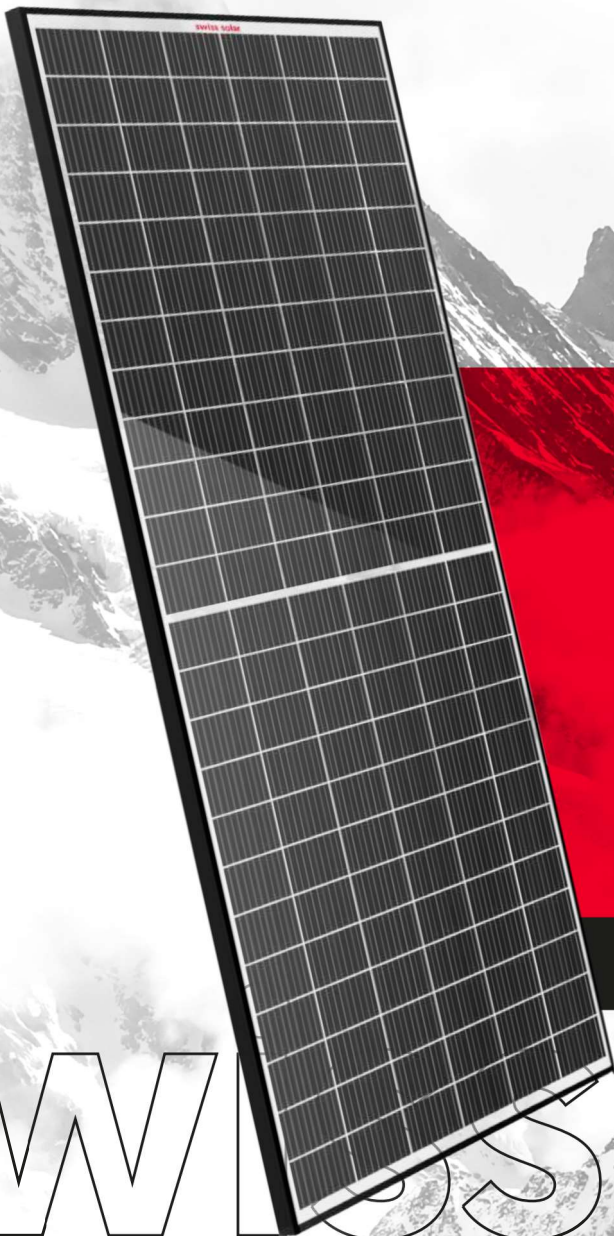


WARRANTY

20 YEARS
PRODUCT WARRANTY

30 YEARS
POWER WARRANTY

swiss solar



IBEX

HIGH TECHNOLOGY SOLAR MODULES

**IBEX 144MHC
EIGER BIFACIAL**

525/530/535/540/545/550

10BB HALF-CELL MONO PV MODULE

BIFACIAL HIGH TECHNOLOGY
GLASS SOLAR MODULES

SWISS SOLAR

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 21.2%)



EXTREME WEATHER RATING, High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (2400 Pa)



Reduced resistance between cells Less micro cracks, higher output power



Combines high efficiency PERC bifacial cells with a dual glass construction, which can convert light that hits the back of the module into electricity, generating up to 25% more energy

IBEX 54 MEGACELERIG 525-545 BIFACIAL 525-550

MONOCRYSTALLINE SOLAR MODULE

ELECTRICAL DATA AT STC

	525	530	535	540	545
Rated power P _{mpp} [Wp]	525	530	535	540	545
P _{mpp} range to	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Rated current I _{mpp} [A]	12.66A	12.73A	12.80A	12.87A	12.94A
Rated voltage V _{mpp} [V]	41.47V	41.63V	41.80V	41.96V	42.12V
Short-circuit current I _{sc} [A]	13.55A	13.62A	13.69A	13.76A	13.83A
Open-circuit voltage U _{oc} [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

Application Class Class A Class A Class A Class A Class A Class A

ELECTRICAL DATA AT NOCT

	525	530	535	540	545
Power at P _{mpp} [Wp]	397.00	401.00	405.00	408.00	413.00
Rated current I _{mpp} [A]	10.25	10.29	10.33	10.37	10.41
Rated voltage V _{mpp} [V]	38.73	38.97	39.21	39.44	39.67
Short-circuit I _{sc} [A]	10.87	10.91	10.95	10.99	11.03
Open-circuit voltage U _{oc} [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

Open-circuit voltage U_{oc} [V] 49.54 49.67 49.80 49.93 50.03 50.21

STC: 1000W/m² irradiance, 25°C cell temperature, AM1.5.

LIMITING VALUES

Max. system voltage [V]	1500V DC (IEC)
Max. return current [I]	30A
Operating Temperature	- 40 to +85°C
Max. tested pressure load [Pa] ²	5400
Max. tested tensile load [Pa] ²	2400

TEMPERATURE COEFFICIENT

I _{sc}	V _{oc}	P _{max}
-0.275% /°C	0.045 % /°C	-0.35% /°C

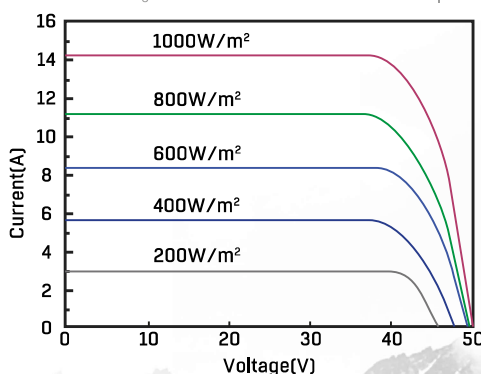
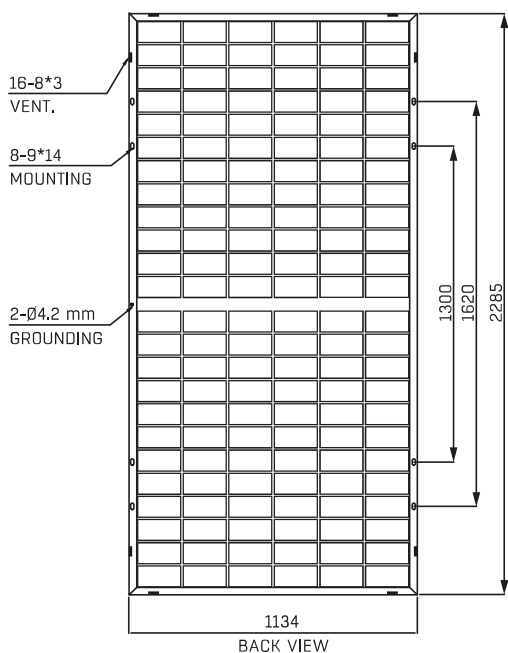
SPECIFICATIONS

Number of cells	144 (2 x 72) 182x91mm
Dimensions	2285 x 1134 x 35 mm
Weight	31.6 kg
Front-side glass	2.0/2.0 mm <small>tempered highly transp. anti-reflection solar glass</small>
Frame	Stable, anodised aluminium frame, black
Junction box	Split Junction Box (IP68)
Cable	4 mm ² , +500mm,-500mm 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	20	Pieces per Container	620

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

swiss solar