

0322.1549 High performance module

# M400-HC120-b RC GG NICER X

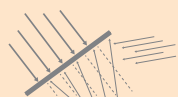
Bifacial glass-glass module / Totally Black / 400 Wp /  
HiR RearCon Half-cut / Black NICER X frame



HiR RearCon cell technology



Totally Black for highest aesthetic requirements



Additional yields through bifaciality



Best performance stability and maximum efficiency



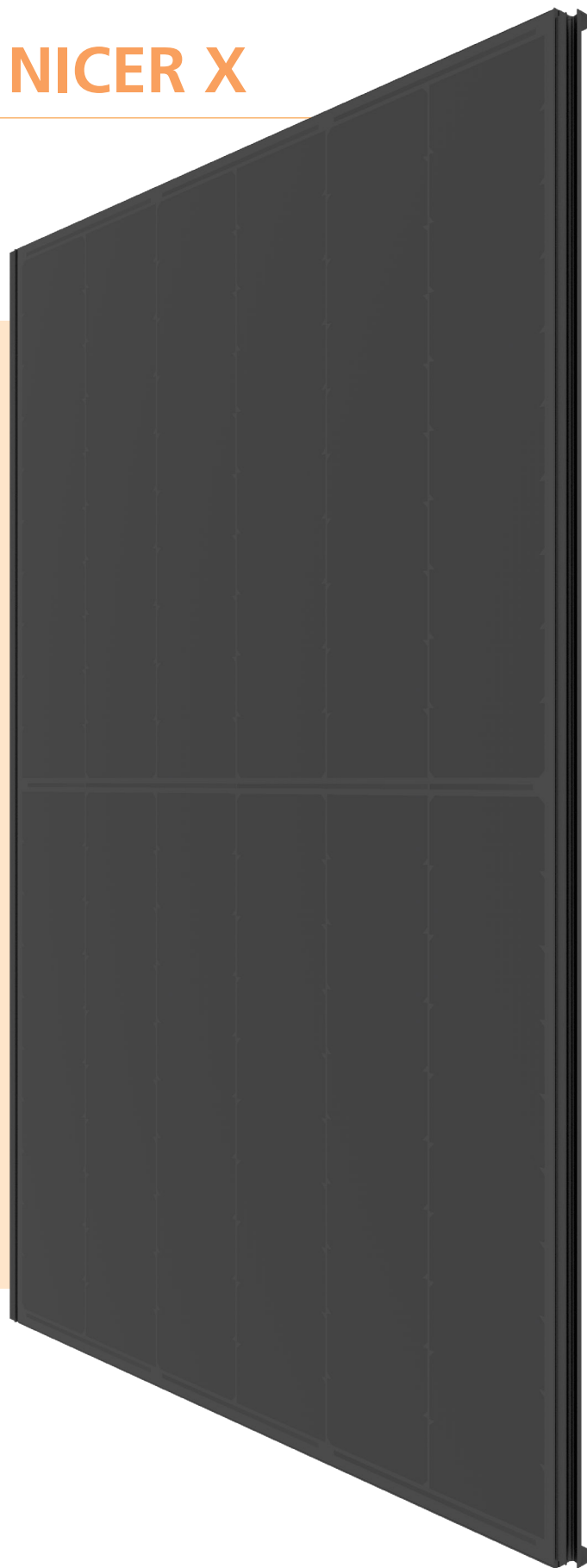
Very high durability due to glass-glass technology



Full traceability of all raw materials



Swiss development and warranty



## Bifacial gain<sup>1</sup>

Low reflecting surface	e.g. grass, brick	5 - 15 %
Well reflecting surface	e.g. sand, bright gravel or paint	15 - 25 %
Highly reflecting surface	e.g. ice, snow	25 - 35 %

## Electrical data STC

Nominal power (Pmpp)	400 Wp
Nominal voltage (Umpp)	36.3 V
Nominal current (Impp)	11.03 A
Open circuit voltage (Uoc)	42.3 V
Short circuit current (Isc)	11.56 A
Cell efficiency	25.0 %
Module efficiency	21.7 %
Power sorting	-0/+5 %

## With bifacial gain<sup>1</sup>

5 %	420 Wp
10 %	440 Wp
15 %	460 Wp
20 %	480 Wp
30 %	520 Wp

<sup>1</sup> Depending on installation situation, albedo of the substrate and external factors.

STC (Standard Test Conditions): irradiance 1000 W/m<sup>2</sup>, cell temperature 25°C, AM 1.5  
Measuring tolerances ±3 % (Pmpp); ±10 % (Umpp, Impp, %, Uoc, Isc)

## Electrical data at partial load

800 W/m<sup>2</sup>

Nominal power (Pmpp)	324 Wp
Nominal voltage (Umpp)	36.0 V
Nominal current (Impp)	9.02 A
Open circuit voltage (Uoc)	41.9 V
Short circuit current (Isc)	9.46 A

Measuring tolerances ±5 % (Pmpp); ±10 % (Umpp, Impp)

## Thermal properties

Nominal operating cell temperature (NOCT)	42 ± 2 °C
Temperature coefficient Uoc	-0.268 %/°C
Temperature coefficient Isc	+0.042 %/°C
Temperature coefficient Pmpp	-0.300 %/°C

## Operating conditions

Temperature range	-40 ... +85 °C
Max. system voltage	1500 V
Max. string fuse	25 A
Max. snow loads *	Up to 6'000 N/m <sup>2</sup>
Hail resistance	Ø30 mm at 23 m/s Hail protection class 3
Application class (acc. to IEC/EN61730)	A
Fire protection	Top and back layer are made of heat-resistant glass. The component is considered to be non-combustible material as defined by the Cantonal Fire Insurances.
Protection class	II
Standards	IEC/EN 61215, 61730
Salt spray test	IEC/EN 61701 I+II
Ammonium corrosion test	IEC/EN 62716

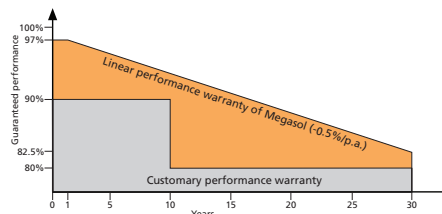
\* Max. possible forces acting on the module. The maximum values in mounted condition depend on the substructure as well as the installation situation. If the requirements are higher than IEC/EN 61215, a project-specific dimensioning of the mounting system is necessary.

## General data

Laminate structure	Glass-glass
Cell technology	Megasol Mono HiR RearCon
Cell format	M6 Half-cut 166x83 mm
Number of cells (matrix)	120 (6x20)
Design	Totally Black Black cell spacing, black cross connectors, hidden busbars (RearCon)
Frame	NICER X Aluminium, anodized black
Front side	2.0 mm TVG High-transmission, nano-finished/antireflective surface
Encapsulation material	Special EVA (UV+/IR+) with lowest yellowness index
Back side	2.0 mm TVG
Junction box	Split Box, IP67
Cable cross section	4 mm <sup>2</sup>
Connectors	Original Stäubli MC4-Evo 2
Dimensions (LxWxH) ±3.0 mm	1082x1734x50 mm
Grid dimensions (LxW)	1060x1740 mm
Weight	24 kg

## Warranty

Product warranty	15 years
Linear performance warranty	30 years



Relative efficiency level in relation to the minimal output (%). At least 97% of the minimum output during the first year. Afterwards, max. 0.5% degradation per annum. At least 92.5% of the minimum output after 10 years. At least 87.5% of the minimum output after 20 years. At least 82.5% of the minimum output after 30 years. All data within the measuring tolerances. Warranties according to the respective latest Megasol Warranty Conditions which can be found on [www.megasol.ch/warranty](http://www.megasol.ch/warranty).



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