

AXIbipremium XQ HC MT 650 - 670 Wp

High performance bifacial solar module
132 halfcell, monocrystalline

The advantages:








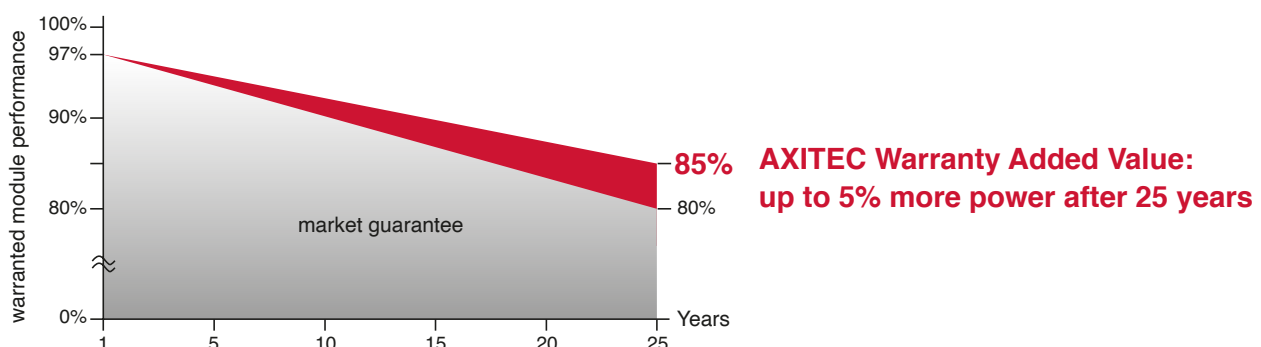
- 
15 Years
15 years Manufacturer's warranty
- 
+25%
Up to 25 % more power output by Bifacial-Technology
- 
Wp
Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- 
100%
100 % visual electroluminescence inspection in production
- 
Frame
High stability due to innovative frame design
- 
IP 68
High quality junction box and connector systems
- 
25 Years
25 years Manufacturer's guarantee



Fig. similar 132MBTEN220816A

Exclusive linear AXITEC high performance guarantee!



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Electrical data (at standard conditions (STC) irradiance 1000 watt/m², spectrum AM 1.5 at a cell temperature of 25°C)

Type	AC-650MBT/132V	AC-655MBT/132V	AC-660MBT/132V	AC-665MBT/132V	AC-670MBT/132V
Nominal output	650 Wp	655 Wp	660 Wp	665 Wp	670 Wp
Nominal voltage U _{mpp}	37.40 V	37.60 V	37.80 V	38.00 V	38.20 V
Nominal current I _{mpp}	17.38 A	17.43 A	17.47 A	17.50 A	17.55 A
Short circuit current I _{sc}	18.45 A	18.50 A	18.55 A	18.60 A	18.62 A
Open circuit voltag U _{oc}	45.20 V	45.40 V	45.60 V	45.80 V	46.10 V
Module conversion efficiency	20.93 %	21.10 %	21.26 %	21.41 %	21.58 %

Bifacial output - Backside Power gain

	AC-650MBT/132V	AC-655MBT/132V	AC-660MBT/132V	AC-665MBT/132V	AC-670MBT/132V
10% Power output	715.00 Wp	720.50 Wp	726.00 Wp	731.50 Wp	737.00 Wp
Module Efficiency	23.02 %	23.19 %	23.37 %	23.55 %	23.73 %
15% Power output	747.50 Wp	753.25 Wp	759.00 Wp	764.75 Wp	770.50 Wp
Module Efficiency	24.06 %	24.25 %	24.43 %	24.62 %	24.80 %
20% Power output	780.00 Wp	786.00 Wp	792.00 Wp	798.00 Wp	804.00 Wp
Module Efficiency	25.11 %	25.30 %	25.50 %	25.69 %	25.88 %
25% Power output	812.50 Wp	818.75 Wp	825.00 Wp	831.25 Wp	837.50 Wp
Module Efficiency	26.16 %	26.36 %	26.56 %	26.76 %	26.96 %

Design

Frontside	3.2 mm hardened, low-reflection white glass
Backside	Composite film, cell gaps transparent
Cells	132 bifacial-monocrystalline high efficiency cells
Frame	35 mm silver aluminium frame

Mechanical data

L x W x H	2384 x 1303 x 35 mm
Weight	34,0 kg with frame

Mechanical load

Design load (pressure/suction)	1600 Pa / 1600 Pa *
Test load (pressure/suction)	2400 Pa / 2400 Pa *

* depending on the type of installation according to the installation instructions

Power connection

Socket	Protection Class IP68
Wire	approx. 1.3 m, 4 mm ²
Plug-in system	Plug/socket IP68, Stäubli EVO2 / EVO2 pluggable

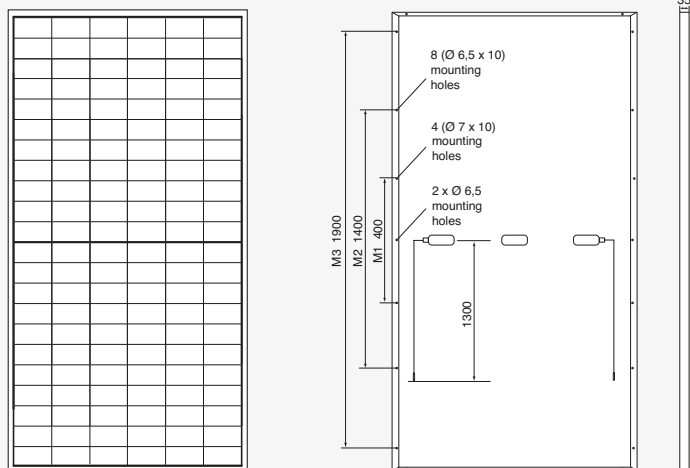


Fig. principle sketch

All dimensions in mm

Limit values

System voltage	1500 VDC
NOCT (nominal operating cell temperature)*	45°C +/-2K
Reverse current feed IR	30.0 A

Permissible operating temperature -40°C to 85°C / -40F to 185F

Bifaciality 70 % ± 10 %

(No external voltages greater than U_{oc} may be applied to the module)

* NOCT, irradiance 800 W/m²; AM 1.5; wind speed 1 m/s; Temperature 20°C

Temperature coefficients

Voltage U _{oc}	-0.28 %/K
Current I _{sc}	0.045 %/K
Output P _{mpp}	-0.34 %/K

Low-light performance without Bifacial-effect

(Example for AC-670MBT/132V)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	3.59 A	36.76 V
400 W/m ²	7.24 A	37.19 V
600 W/m ²	10.81 A	37.48 V
800 W/m ²	14.29 A	37.80 V
1000 W/m ²	17.55 A	38.20 V

Packaging

Module pieces per pallet	31
Module pieces per HC-container	527

