

AXIblackbipremium XXL HC 390 - 410 Wp

High performance bifacial solar module
108 halfcell, monocrystalline



German-American-Engineering

The advantages:



25 years Manufacturer's warranty



Up to 25 % more power output by Bifacial-Technology



Guaranteed positive power tolerance from 0-5 Wp by individual measurement



100% visual electroluminescence inspection in production



High stability due to innovative frame design



High quality junction box and connector systems

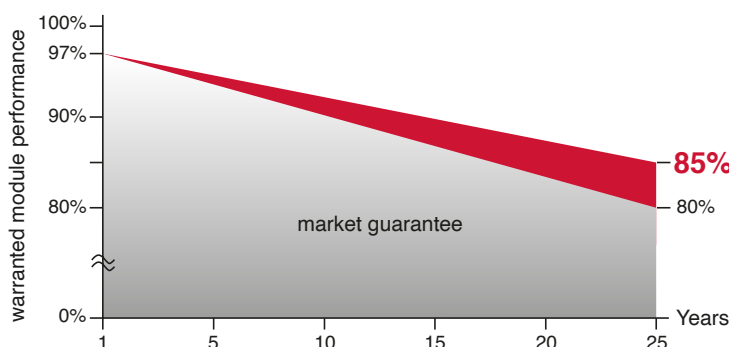


25 years Performance guarantee



Fig. similar 08MHE221208A

Exclusive linear AXITEC high performance guarantee!



85% AXITEC Warranty Added Value: up to 5% more power after 25 years



604457

Conforms to UL STD No.1703
Certified to ULC/ORD Std. C1703

AXIblackpremium XXL HC 390 - 410 Wp

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

Type	AC-390MBT/108V	AC-395MBT/108V	AC-400MBT/108V	AC-405MBT/108V	AC-410MBT/108V
Nominal output	390 Wp	395 Wp	400 Wp	405 Wp	410 Wp
Nominal voltage U _{mpp}	30.64 V	30.84 V	31.01 V	31.21 V	31.45 V
Nominal current I _{mpp}	12.73 A	12.81 A	12.90 A	12.98 A	13.04 A
Short circuit current I _{sc}	13.61 A	13.7 A	13.79 A	13.87 A	13.95 A
Open circuit voltag U _{oc}	36.85 V	36.98 V	37.07 V	37.23 V	37.32 V
Module conversion efficiency	19.97 %	20.23 %	20.48 %	20.74 %	21.00 %

Bifacial output - Backside Power gain

10% Power output	429.00 Wp	434.50 Wp	440.00 Wp	445.50 Wp	451.00 Wp
Module Efficiency	21.97 %	22.25 %	22.53 %	22.81 %	23.10 %
15% Power output	448.50 Wp	454.25 Wp	460.00 Wp	465.75 Wp	471.50 Wp
Module Efficiency	22.97 %	23.26 %	23.56 %	23.85 %	24.15 %
20% Power output	468.00 Wp	474.00 Wp	480.00 Wp	486.00 Wp	492.00 Wp
Module Efficiency	23.97 %	24.27 %	24.58 %	24.89 %	25.20 %
25% Power output	487.50 Wp	493.75 Wp	500.00 Wp	506.25 Wp	512.50 Wp
Module Efficiency	24.96 %	25.28 %	25.60 %	25.93 %	26.25 %

Design

Frontside	0.13 inch (3.2 mm) hardened, low-reflection white glass
Cells	108 bifacial monocrystalline high efficiency cells
Backside	Composite film, cell gaps black
Frame	1.18 inch (30 mm) black aluminium frame

Mechanical data

L x W x H	67.80 x 44.65 x 1.18 inch (1722 x 1134 x 30 mm)
Weight	47.40 lbs (21.5 kg) with frame

Mechanical load

Design load (pressure/suction)	75.3 PSF / 33.3 PSF
Test load (pressure/suction)	113 PSF / 50 PSF

Power connection

Socket	Protection Class IP68
Wire	47.25 inch, AWG 12
Plug-in system	Plug/socket IP68, Stäubli EVO2 / EVO2 pluggable

Limit values

System voltage	1500 VDC (UL) 1500 VDC (IEC)
Module Fire Performance	TYPE 1 (UL 1703) or CLASS C (IEC 61730)
NOCT (nominal operating cell temperature)*	45°C +/-2K
Reverse current feed IR	25.0 A

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

Bifaciality 70 % ± 10 %

(No external voltages greater than V_o 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}	-0.35 %/K

Low-light performance without Bifacial-effect

(Example for AC-410MBT/108V)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	2.66 A	30.27 V
400 W/m ²	5.38 A	30.62 V
600 W/m ²	8.03 A	30.86 V
800 W/m ²	10.62 A	31.12 V
1000 W/m ²	13.04 A	31.45 V

Packaging

Module pieces per pallet	36
Module pieces per HC-container	936

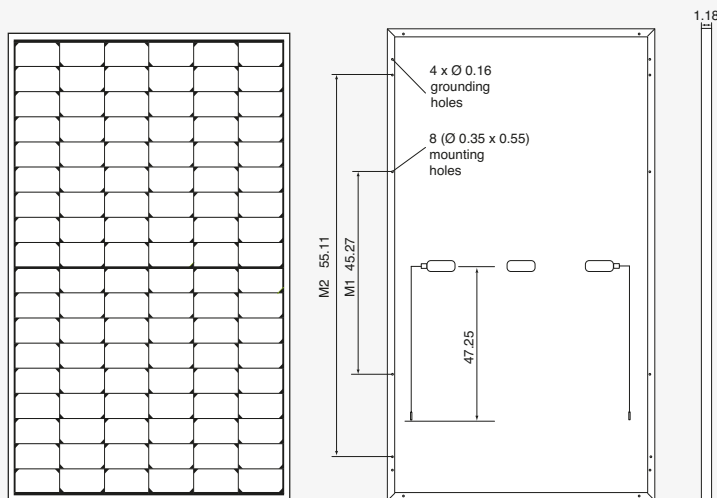


Fig. principle sketch

All dimensions in inch