

## AXIblackpremium 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

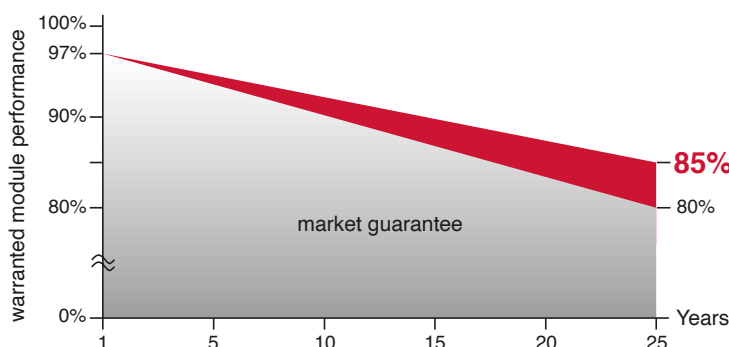


25 years Performance guarantee



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

# AXIblackbipremium XXL HC 390 - 410 Wp

**Electrical data** (at standard conditions (STC) irradiance 1000 watt/m<sup>2</sup>. 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	<b>390 Wp</b>	<b>395 Wp</b>	<b>400 Wp</b>	<b>405 Wp</b>	<b>410 Wp</b>
Nominal voltage U <sub>mpp</sub>	30.64 V	30.84 V	31.01 V	31.21 V	31.45 V
Nominal current I <sub>mpp</sub>	12.73 A	12.81 A	12.90 A	12.98 A	13.04 A
Short circuit current I <sub>sc</sub>	13.61 A	13.7 A	13.79 A	13.87 A	13.95 A
Open circuit voltag U <sub>oc</sub>	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**

<b>10% Power output</b>	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 %
<b>15% Power output</b>	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 %
<b>20% Power output</b>	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 %
<b>25% Power output</b>	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<sub>o</sub> may be applied to the module)

\* NOCT, irradiance 800 W/m<sup>2</sup>; AM 1.5; wind speed 1 m/s; Temperature 20°C

**Temperature coefficients**

Voltage U <sub>oc</sub>	-0.28 %/K
Current I <sub>sc</sub>	0.045 %/K
Output P <sub>mpp</sub>	-0.35 %/K

**Low-light performance** without Bifacial-effect  
(Example for AC-410MBT/108V)

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

**Packaging**

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

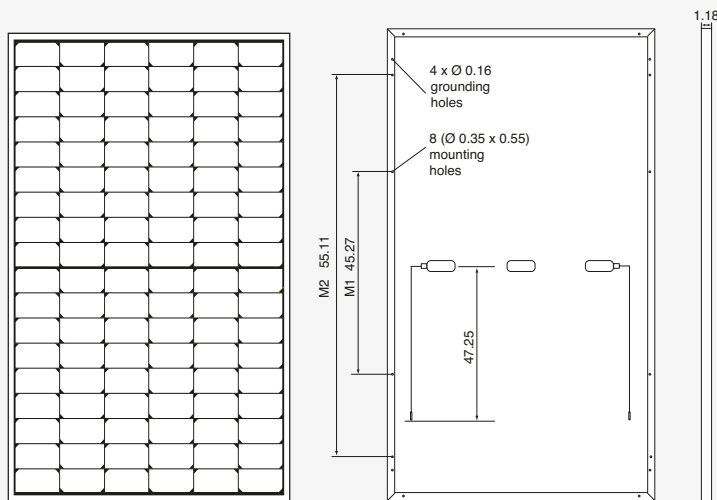


Fig. principle sketch

All dimensions in inch