AXIblackpremium XXL HC

400 - 420 Wp

High performance solar module

108 halfcell, monocrystalline

German-American-Engineering

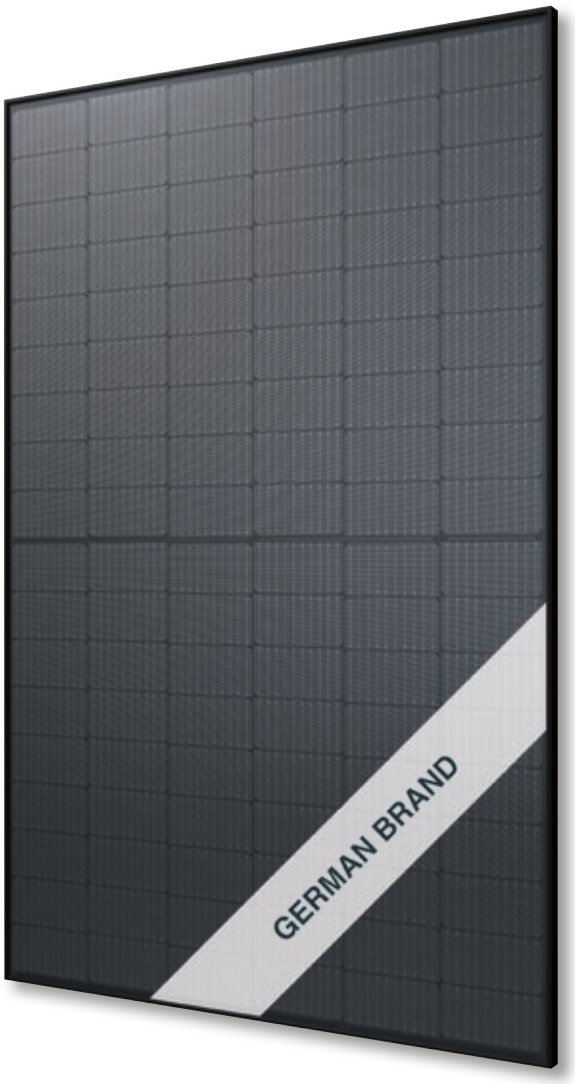
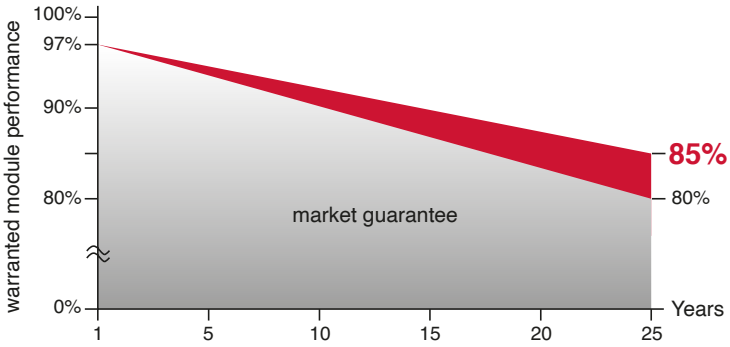


Fig. similar 108MHEN250521A

The advantages:

- 25 Years — 25 years Manufacturer‘s warranty
- HC — High module performance through Half-Cut-technology and selected materials
- 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 Performance guarantee

Exclusive linear AXITEC high performance guarantee!



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

Intertek

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

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AXIblackpremium XXL HC 400 - 420 Wp

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

Type	Nominal output Pmpp	Nominal voltage Umpp	Nominal current Impp	Short circuit current Isc	Open circuit voltage Uoc	Module conversion efficiency
AC-400MH/108VB	400 Wp	31.01 V	12.90 A	13.79 A	37.07 V	20.48 %
AC-405MH/108VB	405 Wp	31.21 V	12.98 A	13.87 A	37.23 V	20.74 %
AC-410MH/108VB	410 Wp	31.45 V	13.04 A	13.95 A	37.32 V	21.00 %
AC-415MH/108VB	415 Wp	31.61 V	13.13 A	14.02 A	37.45 V	21.25 %
AC-420MH/108VB	420 Wp	31.80 V	13.21 A	14.10 A	37.58 V	21.51 %

Design

Frontside	0.13 inch (3.2 mm) hardened, low-reflection white glass
Cells	108 monocrystalline high efficiency cells
Backside	Composite film
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 MC4 / Stäubli EVO2

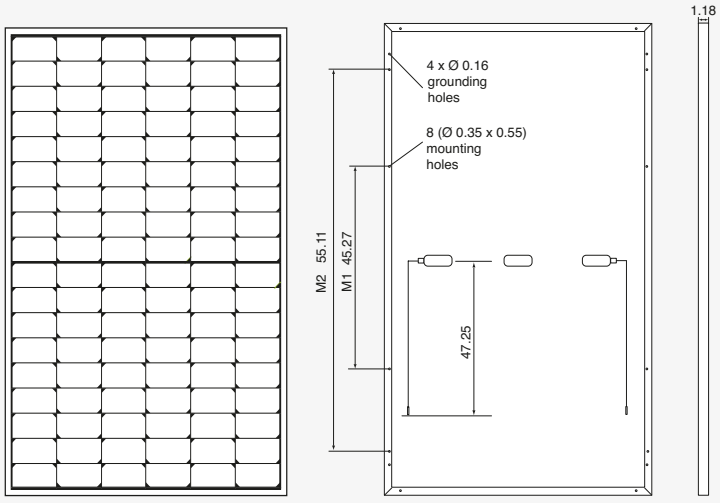

Fig. principle sketch

All dimensions in inch

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

(No external voltages greater than Vo 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 Uoc	-0.28 %/K
Current Isc	0.045 %/K
Output Pmpp	-0.35 %/K

Low-light performance (Example for AC-420MH/108VB)

I-U characteristic curve	Current Ipp	Voltage Upp
200 W/m²	2.70 A	30.60 V
400 W/m²	5.45 A	30.96 V
600 W/m²	8.14 A	31.20 V
800 W/m²	10.76 A	31.47 V
1000 W/m²	13.21 A	31.80 V

Packaging

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

Technical data are subject to change without prior notice, errors excepted. The measurement tolerances are +/-3%. Please be aware: All technical data provided in our data sheets are property of Axitec LLC and intended for information purposes for our customers only. We cannot accept any guarantee of completeness or accuracy. These data are prohibited for any kind of commercial use.