



530 - 555 Wp

AXIpremium XXL HC

High performance solar module
144 halfcell, monocrystalline



German-American-Engineering

The advantages:



15 years Manufacturer's warranty



High module performance through Half-Cut-technology and selected materials



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



100% visual electroluminescence inspection in production



High stability due to innovative frame design



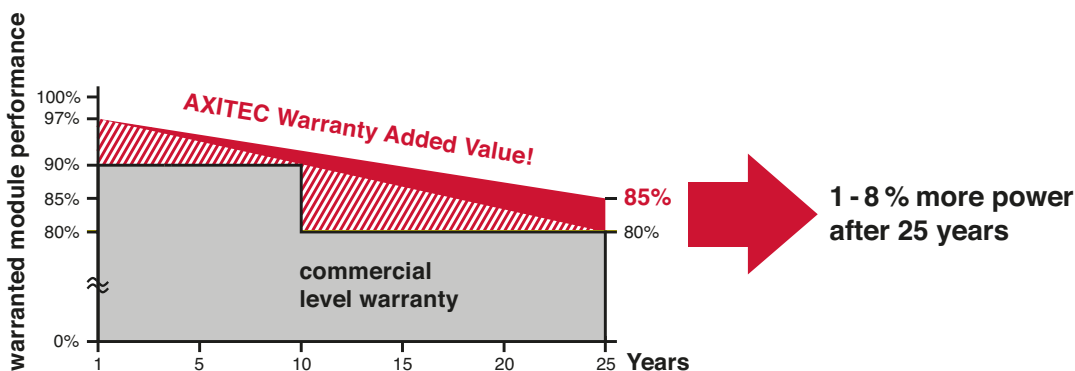
High quality junction box and connector systems



Fig. similar 144MHUSA220516A

Exclusive linear AXITEC high performance guarantee!

- 15 years manufacturer's guarantee on 90% of the nominal performance
- 25 years manufacturer's guarantee on 85% of the nominal performance



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

AXIpremium XXL HC 550 - 555 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-530MH/144V	530 Wp	41.31 V	12.83 A	13.72 A	49.30 V	20.52 %
AC-535MH/144V	535 Wp	41.47 V	12.91 A	13.79 A	49.45 V	20.71 %
AC-540MH/144V	540 Wp	41.64 V	12.97 A	13.86 A	49.60 V	20.90 %
AC-545MH/144V	545 Wp	41.80 V	13.04 A	13.93 A	49.75 V	21.10 %
AC-550MH/144V	550 Wp	41.96 V	13.11 A	14.00 A	49.90 V	21.29 %
AC-555MH/144V	555 Wp	42.11 V	13.18 A	14.07 A	50.05 V	21.48 %

Design

Frontside	0.13 inch (3.2 mm) hardened, low-reflection white glass
Cells	144 monocrystalline high efficiency cells
Backside	Composite film
Frame	1.38 inch (35 mm) silver aluminium frame

Mechanical data

L x W x H	89.68 x 44.64 x 1.38 inch (2278 x 1134 x 35mm)
Weight	61.73 lbs (28 kg) with frame

Mechanical load

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

Power connection

Socket	Protection Class IP68
Wire	51.18 inch, AWG 12
Plug-in system	Plug/socket IP68, Stäubli MC4 / Stäubli EVO2

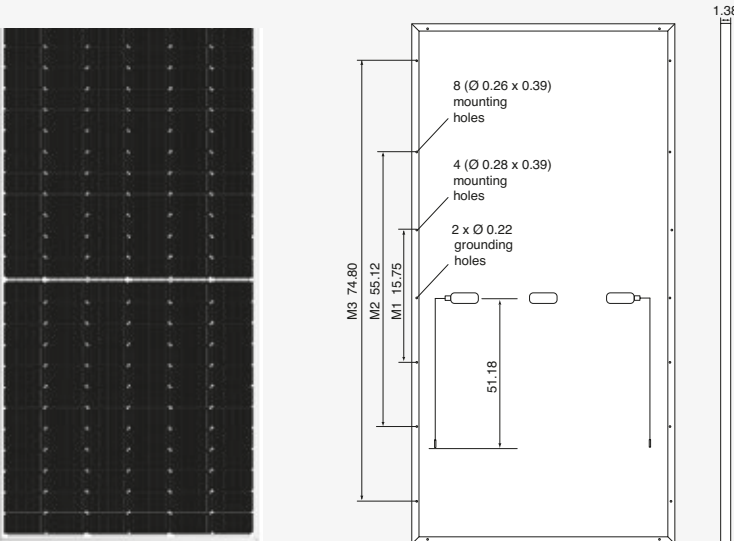
Limit values

System voltage	1500 VDC (UL) 1000 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
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(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



All dimensions in inch

Temperature coefficients

Voltage Uoc	-0.25 %/K
Current Isc	0.048 %/K
Output Pmpp	-0.35 %/K

Low-light performance

 (Example for AC-455MH/144V)

I-U characteristic curve	Current Ipp	Voltage Upp
200 W/m ²	2.69 A	40.53 V
400 W/m ²	5.43 A	40.99 V
600 W/m ²	8.12 A	41.31 V
800 W/m ²	10.73 A	41.67 V
1000 W/m ²	13.18 A	42.11 V

Packaging

Module pieces per pallet	31
Module pieces per HC-container	620