



310 - 320 Wp

www.axitecsolar.us

AXITEC[®]
high quality german solar brand

AXIblackpremium HC

120 cell monocrystalline
High performance solar module

German engineered – made for America

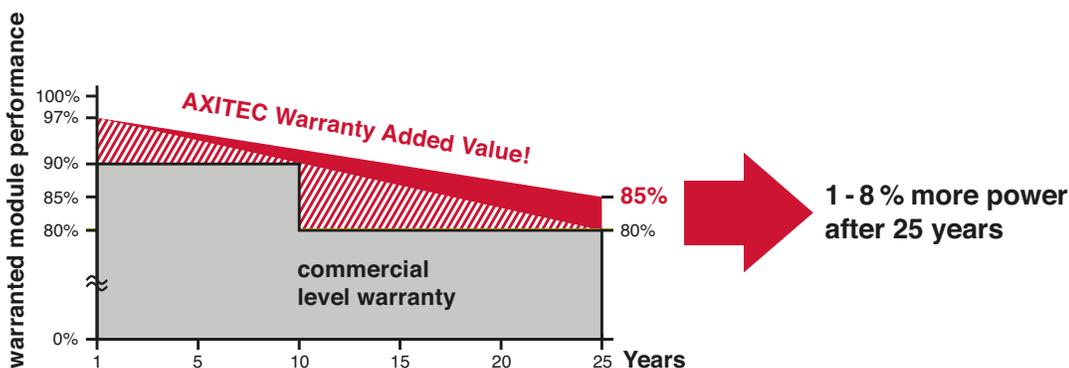
-  15 years manufacturer's warranty
Five more years than industry standard
-  Highest module performance through
Half-Cut-technology and tested materials
-  Positive power tolerance from 0-5 Wp
Higher guaranteed yield
-  Snow load of up to 113 psf
Stable module for a long life in extreme conditions
-  100 % electroluminescence inspection
Micro crack and hotspot free modules
-  Axitec-Soft-Grip-Seam aluminum frame
Higher stability and easier handling
-  High quality junction box and connector
system for a longer life time



Fig. similar 120MHUSA190704A

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



(PHOTOVOLTAIC MODULE
OVER 600 VOLTS) 5JK4
E487509

AXIblackpremium HC 310 - 320 W

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

Type	Nominal output P _{mpp}	Nominal voltage U _{mpp}	Nominal current I _{mpp}	Short circuit current I _{sc}	Open circuit voltage U _{oc}	Module conversion efficiency
AC-310MH/120S	310 Wp	32.74 V	9.47 A	9.96 A	40.01 V	18.66 %
AC-315MH/120S	315 Wp	32.97 V	9.56 A	10.03 A	40.13 V	18.96 %
AC-320MH/120S	320 Wp	33.21 V	9.64 A	10.11 A	40.25 V	19.26 %

Design

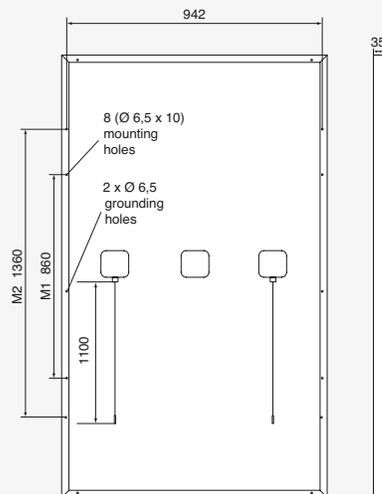
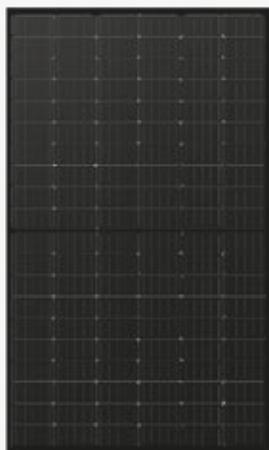
Frontside	0.13 inch (3.2 mm) hardened, low-reflection white glass
Cells	120 monocrystalline high efficiency cells
Backside	Composite film
Frame	1.38 inch (35 mm) black aluminium frame

Mechanical data

L x W x H	65,94 x 39,06 x 1,38 inch (1675 x 992 x 35 mm)
Weight	40.79 lbs (18.5 kg) with frame

Power connection

Socket	Protection Class IP67
Wire	43.3 inch, AWG 11
Plug-in system	Plug/socket IP67, MC4



All dimensions in inch

Limit values

System voltage	1000 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
Max. load-carrying capacity	113 PSF
Reverse current feed IR	20.0 A
Permissible operating temperature	-40°C to 85°C / -40F to 185F

(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}	-0.29 %/K
Current I _{sc}	0.04 %/K
Output P _{mpp}	-0.39 %/K

Low-light performance (Example for AC-310M/120S)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	1.90 A	32.15 V
400 W/m ²	3.81 A	32.39 V
600 W/m ²	5.68 A	32.50 V
800 W/m ²	7.57 A	32.68 V
1000 W/m ²	9.47 A	32.74 V

Packaging

Module pieces per pallet	30
Module pieces per HC-container	780