



310 - 320 Wp

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**AXITEC**<sup>®</sup>  
high quality german solar brand

## AXIblackpremium HC

120 cell monocrystalline  
High performance solar module

German engineered – made for America

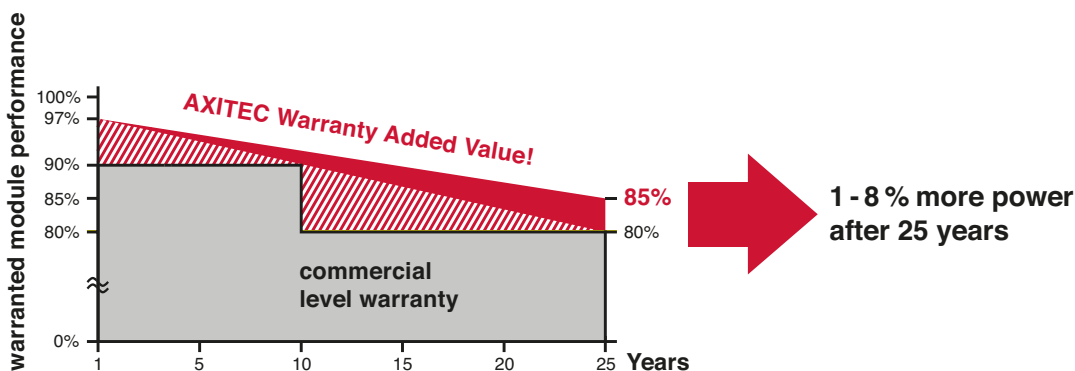
- 15**  
Years 15 years manufacturer's warranty  
Five more years than industry standard
- HC** Highest module performance through  
Half-Cut-technology and tested materials
- Wp** Positive power tolerance from 0-5 Wp  
Higher guaranteed yield
- 113 PSF** Snow load of up to 113 psf  
Stable module for a long life in extreme conditions
- 100%** 100 % electroluminescence inspection  
Micro crack and hotspot free modules
- Soft Grip** Axitec-Soft-Grip-Seam aluminum frame  
Higher stability and easier handling
- IP 67** High quality junction box and connector  
system for a longer life time



Fig. similar 120MHUSA190409A

### 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



## AXIblackpremium HC 310 - 320 W

**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	Nominal output P <sub>mpp</sub>	Nominal voltage U <sub>mpp</sub>	Nominal current I <sub>mpp</sub>	Short circuit current I <sub>sc</sub>	Open circuit voltage U <sub>oc</sub>	Module conversion efficiency
AC-310MH/120SB	310 Wp	32.74 V	9.47 A	9.96 A	40.01 V	18.66 %
AC-315MH/120SB	315 Wp	32.97 V	9.56 A	10.03 A	40.13 V	18.96 %
AC-320MH/120SB	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

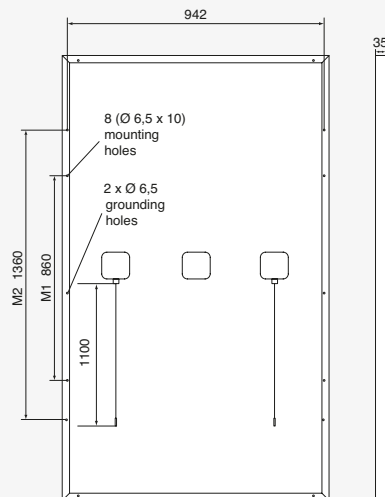
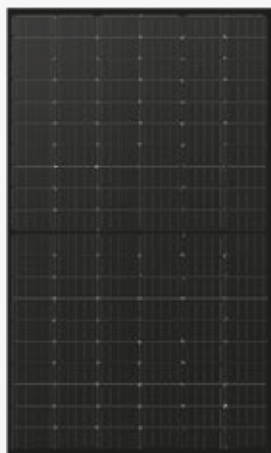
Socket	Protection Class IP67
Wire	43.3 inch, AWG 11
Plug-in system	Plug/socket IP67, MC4

### 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<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



All dimensions in inch

### Temperature coefficients

Voltage U <sub>oc</sub>	-0.29 %/K
Current I <sub>sc</sub>	0.04 %/K
Output P <sub>mpp</sub>	-0.39 %/K

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

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

### Packaging

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