



310 - 320 Wp

AXIblackpremium HC

120 halfcell monocrystalline
High performance solar module

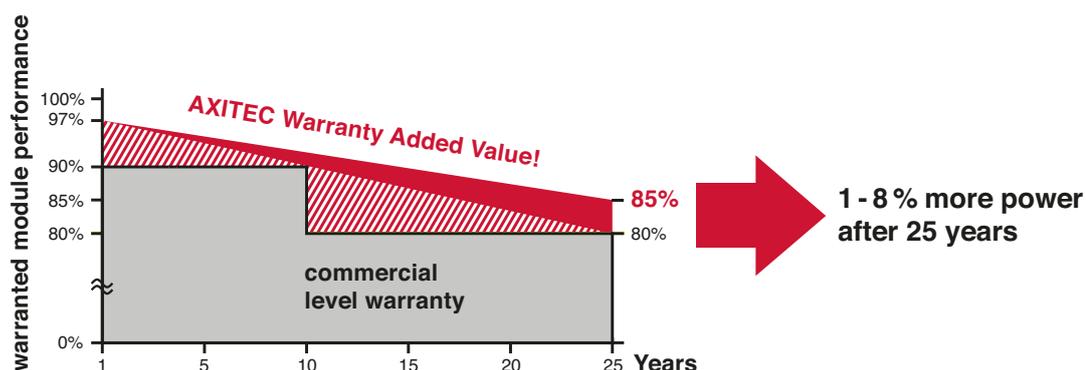
The advantages:

- 15** Years 15 years manufacturer's warranty
- HC** Highest module performance through Half-Cut-technology and tested materials
- Wp** Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- 5.400 Pa** Maximum 5400 Pa snow load
- 100%** 100% electroluminescence inspection
- Soft Grip** High stability due to AXITEC-Soft-Grip-Seam aluminium frame construction
- IP 67** High quality junction box and connector systems



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



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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/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 | 3,2 mm hardened, low-reflection white glass |
| Cells | 120 monocrystalline high efficiency cells |
| | 156,75 mm x 78,38 mm |
| Backside | Composite film |
| Frame | 35 mm black aluminium frame |

Mechanical data

| | |
|-----------|--------------------|
| L x W x H | 1675 x 992 x 35 mm |
| Weight | 18,5 kg with frame |

Power connection

| | |
|----------------|----------------------------------|
| Socket | Protection Class IP67 |
| Wire | approx. 1,1 m, 4 mm ² |
| Plug-in system | Plug/socket IP67 |

Limit values

| | |
|--|------------------------------|
| System voltage | 1000 VDC |
| NOCT (nominal operating cell temperature)* | 45°C +/-2K |
| Max. load-carrying capacity | 5400 N/m ² |
| Reverse current feed IR | 20,0 A |
| Permissible operating temperature | -40°C to 85°C / -40F to 185F |

(No external voltages greater than U_{oc} 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 |

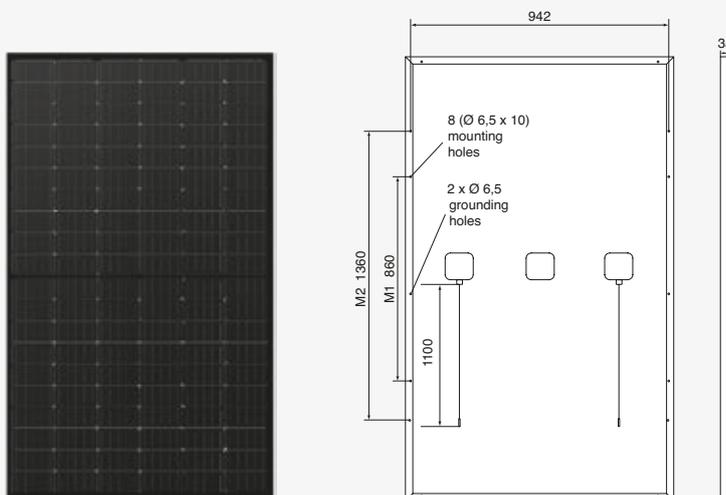
Low-light performance

 (Example for AC-310MH/120SB)

| 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 |



All dimensions in mm