

AXIblackbiperfect GXXL 470 Wp

High performance bifacial solar module
120 halfcell, glass/glass, N-Type TOPCon



German-Australian-Engineering

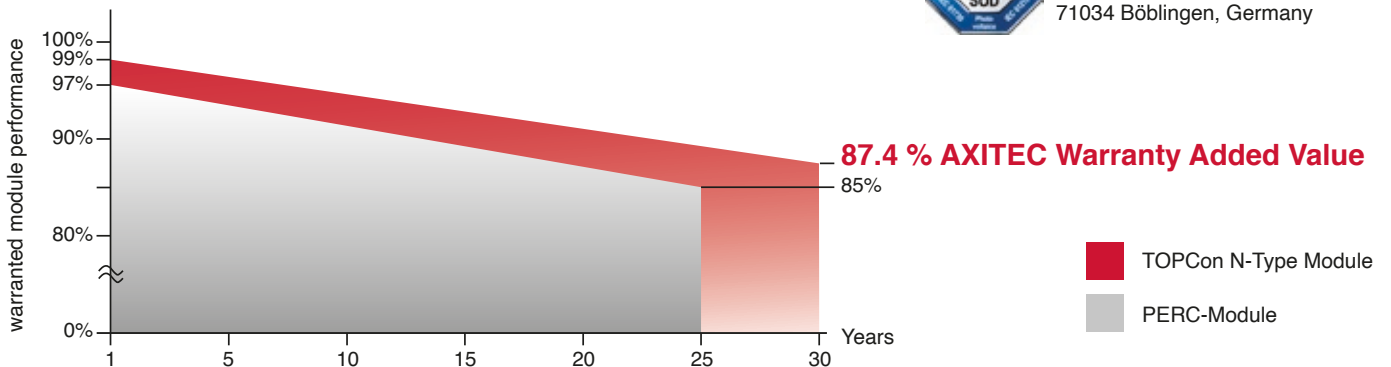
The advantages:

- 30 Years** 30 years Manufacturer's Product Warranty
- 30 Years** 30 years Performance guarantee
- +30%** Up to 30 % more power output by Bifacial-Technology
- TOP** More performance through innovative N-Type TOPCon-Technology
- Safe** Increased safety through improved fire protection
- Wp** Guaranteed positive power tolerance from 0-5 Wp by individual measurement



Fig. similar 120TGBAUS231016A

Exclusive linear AXITEC high performance guarantee!



Lisence holder:
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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	AC-470TGB/120BBA			
Nominal output (± 3 %)	470 Wp			
Nominal voltage U _{mp}	36.21 V			
Nominal current I _{mp}	12.98 A			
Short circuit current I _{sc} (± 3 %)	13.57 A			
Open circuit voltag U _{oc} (± 3 %)	43.17 V			
Module conversion efficiency	21.70 %			

Bifacial output - Backside Power gain

10% Power output	517.00 Wp			
Module Efficiency	26.48 %			
20% Power output	564.00 Wp			
Module Efficiency	28.88 %			
30% Power output	611.00 Wp			
Module Efficiency	31.29 %			

Design

Frontside	2.0 mm hardened, low-reflection white glass
Backside	2.0 mm hardened, low-reflection white glass
Cells	120 N-Type TOPCon bifacial high efficiency cells
Film	Composite film, intercellular spaces black
Frame	30 mm black aluminium frame

Mechanical data

L x W x H	1910 x 1134 x 30 mm
Weight	27.3 kg with frame

Mechanical load

Design load (pressure/suction)	3600 Pa / 1600 Pa
Test load (pressure/suction)	5400 Pa / 2400 Pa

Power connection

Socket	Protection Class IP68
Wire	approx. 1.2 m, 4 mm ²
Plug-in system	Stäubli MC4 PV-KST4-EVO 2 / PV-KBT4-EVO 2

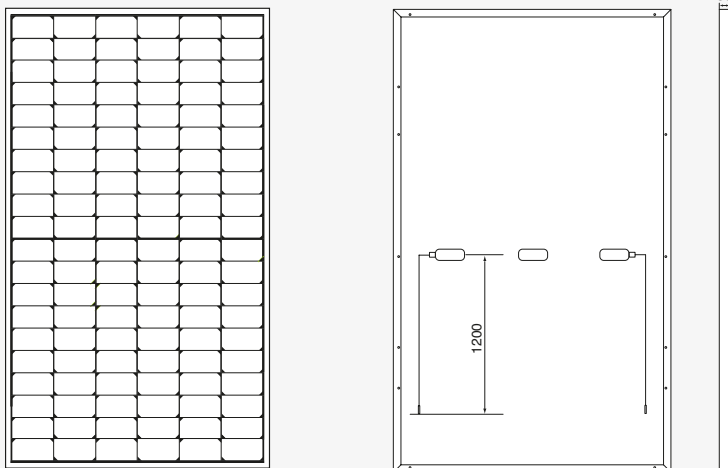


Fig. principle sketch

All dimensions in mm

Limit values

System voltage	1500 VDC
Module Fire Performance	CLASS C
NOCT (nominal operating cell temperature)*	45°C +/-2K
Reverse current feed IR	30.0 A

Permissible operating temperature -40°C to 85°C / -40F to 185F

Bifaciality 80 % ± 5 %

(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}	-0.26 %/K
Current I _{sc}	0.046 %/K
Output P _{mp}	-0.31 %/K

Low-light performance without Bifacial-effect
(Example for 470TGB/120BBA)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	2.65 A	34.85 V
400 W/m ²	5.35 A	35.25 V
600 W/m ²	8.00 A	35.53 V
800 W/m ²	10.57 A	35.83 V
1000 W/m ²	12.98 A	36.21 V

Packaging

Module pieces per pallet	36
Module pieces per HC-container	864

country of origin:
made in People's Republic of China

