


## AXIbiperfect GL WB 430 - 450 Wp

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

### The advantages:

-  30 years Manufacturer's warranty
-  30 years Performance guarantee
-  Up to 30 % more power output by Bifacial-Technology
-  More performance through innovative N-Type TOPCon-Technology
-  PID reduced through glass/glass-Technology
-  Increased safety through improved fire protection
-  Guaranteed positive power tolerance from 0-5 Wp by individual measurement

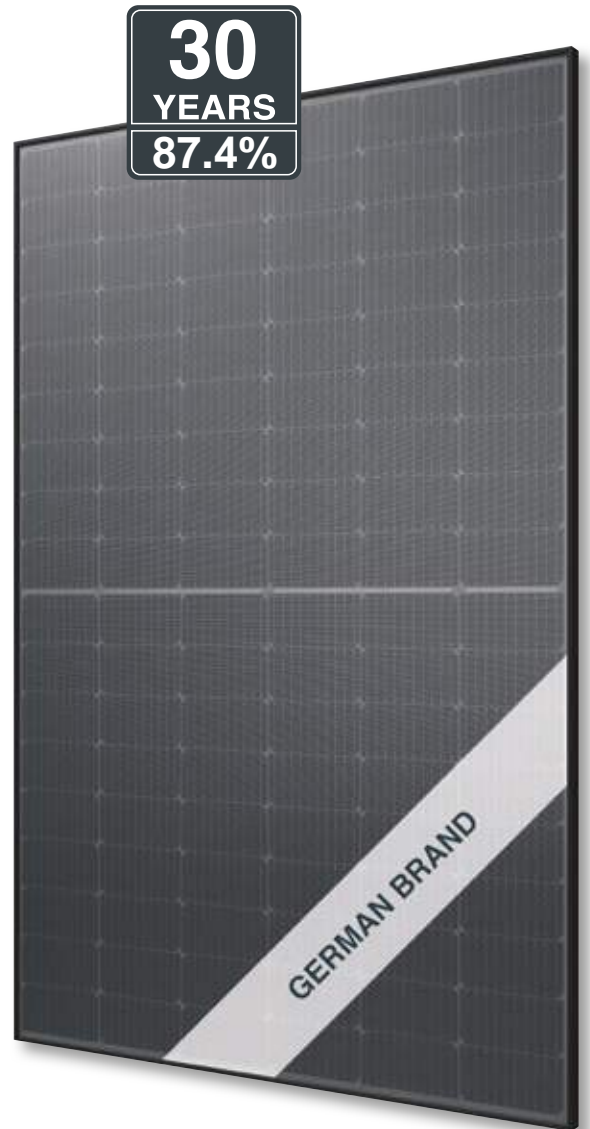
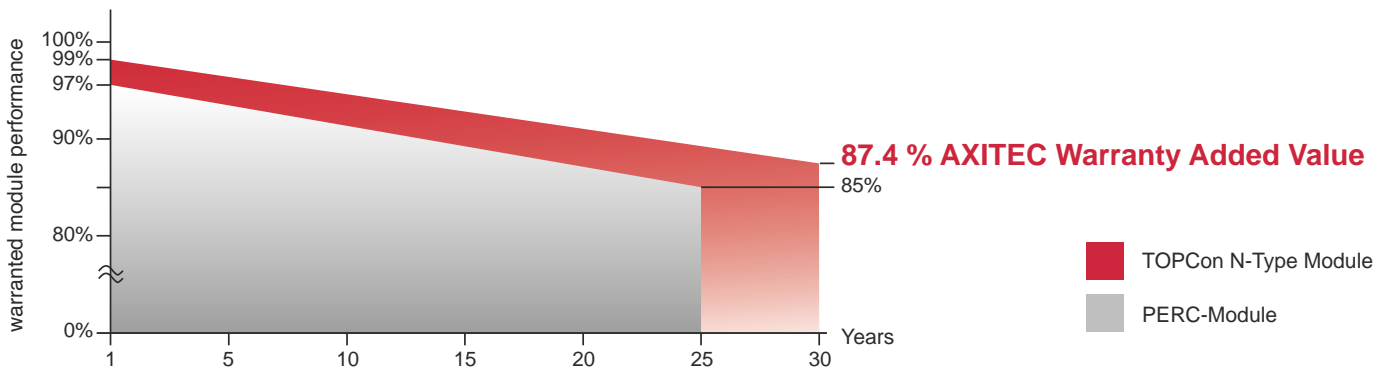


Fig. similar 108TGBEN231018A

### Exclusive linear AXITEC high performance guarantee!



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**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	AC-430TGB/108WB	AC-435TGB/108WB	AC-440TGB/108WB	AC-445TGB/108WB	AC-450TGB/108WB
Nominal output	<b>430 Wp</b>	<b>435 Wp</b>	<b>440 Wp</b>	<b>445 Wp</b>	<b>450 Wp</b>
Nominal voltage U <sub>mpp</sub>	32.85 V	33.14 V	33.44 V	33.75 V	34.05 V
Nominal current I <sub>mpp</sub>	13.09 A	13.13 A	13.16 A	13.19 A	13.22 A
Short circuit current I <sub>sc</sub>	13.57 A	13.58 A	13.59 A	13.6 A	13.61 A
Open circuit voltag U <sub>oc</sub>	39.53 V	40.02 V	40.31 V	40.60 V	41.90 V
Module conversion efficiency	21.52 %	21.77 %	22.02 %	22.27 %	22.52 %

### Bifacial output - Backside Power gain

10% Power output	473 Wp	479 Wp	484 Wp	490 Wp	495 Wp
Module Efficiency	23.67 %	23.95 %	24.22 %	24.50 %	24.77 %
20% Power output	516 Wp	522 Wp	528 Wp	534 Wp	540 Wp
Module Efficiency	25.82 %	26.12 %	26.42 %	26.73 %	27.03 %
30% Power output	559 Wp	566 Wp	572 Wp	579 Wp	585 Wp
Module Efficiency	27.98 %	28.30 %	28.63 %	28.95 %	29.28 %

### Design

Frontside	1.6 mm hardened, low-reflection white glass
Backside	1.6 mm hardened glass, cell spaces white
Cells	108 N-Type TOPCon bifacial high efficiency cells
Frame	30 mm black aluminium frame

### Mechanical data

L x W x H	1762 x 1134 x 30 mm
Weight	21.7 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, 3 bypass diodes
Wire	approx. 1.2 m, 4 mm <sup>2</sup>
Plug-in system	IP68, MC4-EVO 2, MC4-EVO 2A, JM608

### Limit values

System voltage	1500 VDC
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
Bifaciality	80 % ± 5 %
Fire class / Protection class	C (UL790) / II

(No external voltages greater than U<sub>oc</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

### Temperature coefficients

Voltage U <sub>oc</sub>	-0.26 %/K
Current I <sub>sc</sub>	0.046 %/K
Output P <sub>mpp</sub>	-0.31 %/K

### Low-light performance without Bifacial-effect

(Example for 450TGB/108WB)

I-U characteristic curve	Current I <sub>pp</sub>	Voltage U <sub>pp</sub>
200 W/m <sup>2</sup>	2.70 A	32.77 V
400 W/m <sup>2</sup>	5.45 A	33.15 V
600 W/m <sup>2</sup>	8.14 A	33.41 V
800 W/m <sup>2</sup>	10.77 A	33.69 V
1000 W/m <sup>2</sup>	13.22 A	34.05 V

### Packaging

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

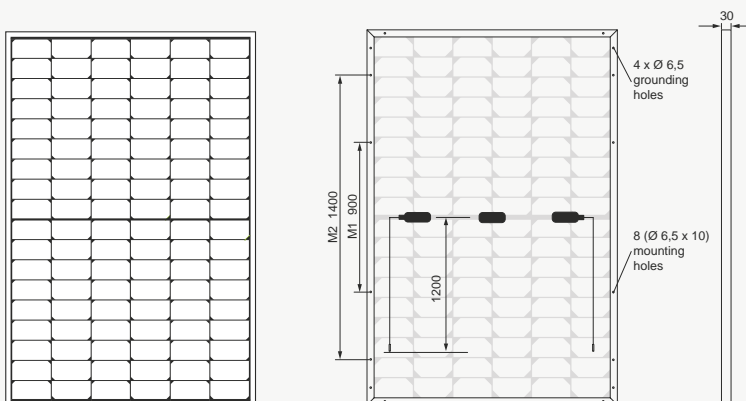


Fig. principle sketch

All dimensions in mm

