

AXIworldbiperfect GL TB 430 - 445 Wp

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

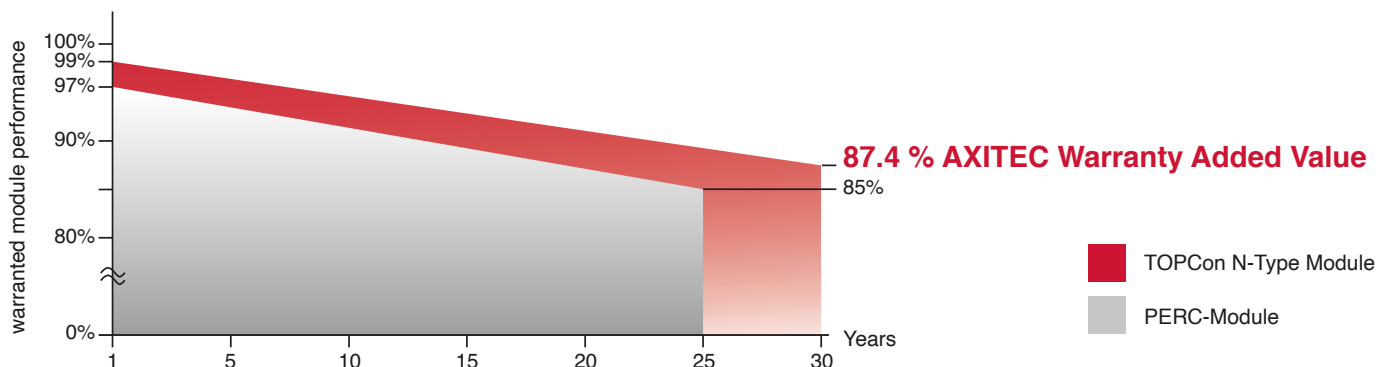
The advantages:

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



Fig. similar 108TGBLEN231030A-141/1

Exclusive linear AXITEC high performance guarantee!



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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-435TGBL/108TB	AC-440TGBL/108TB	AC-445TGBL/108TB	AC-450TGBL/108TB
Nominal output	430 Wp	435 Wp	440 Wp	445 Wp
Nominal voltage U _{mpp}	32.45 V	32.67 V	32.89 V	33.11 V
Nominal current I _{mpp}	13.27 A	13.33 A	13.39 A	13.45 A
Short circuit current I _{sc}	13.81 A	13.87 A	13.93 A	13.99 A
Open circuit voltage U _{oc}	38.82 V	39.02 V	39.22 V	39.42 V
Module conversion efficiency	21.77 %	22.02 %	22.27 %	22.52 %

Bifacial output - Backside Power gain

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

Design

Frontside	2.0 mm hardened, low-reflection white glass
Backside	2.0 mm hardened glass, cell spaces transparent
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	24.1 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 ²
Plug-in system	IP68, MC4-EVO 2A

Limit values

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

Permissible operating temperature	-40°C to 85°C / -40°F to 185°F
Bifaciality	80 % ± 5 %
Fire class / Protection class	C (UL790) / II

(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}	0.038 %/K
Output P _{mpp}	-0.31 %/K

Low-light performance without Bifacial-effect

(Example for 445TGBL/108TB)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	2.75 A	31.86 V
400 W/m ²	5.55 A	32.22 V
600 W/m ²	8.29 A	32.47 V
800 W/m ²	10.95 A	32.75 V
1000 W/m ²	13.45 A	33.10 V

Packaging

Module pieces per pallet	36
Module pieces per HC-container	936

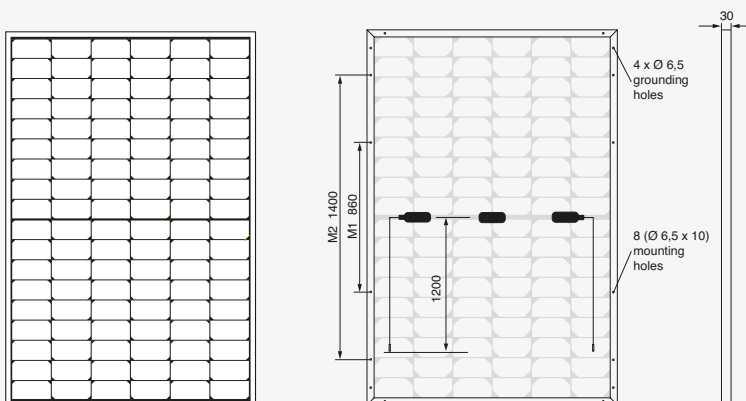


Fig. principle sketch

All dimensions in mm

