

AXIbiperfect GXXL TB Extreme 440 - 445 Wp

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

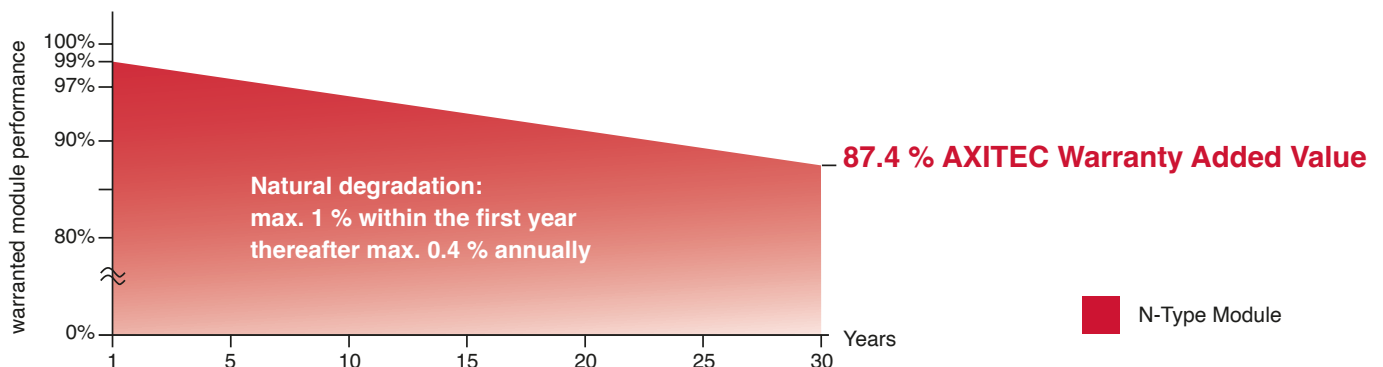
The advantages:

- 30 Years** 30 years Manufacturer's warranty and Performance guarantee
- +30%** Up to 30 % more power output by Bifacial-Technology
- PID less** PID reduced through glass/glass-Technology
- + Wp** Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- 3000 m** Suitable for extreme weather conditions and alpine applications up to 3000 m
- 35 mm** High stability thanks to reinforced frame design



Fig. similar (Photo: Shutterstock/KI) 108TGBEN260305A

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-440TGB/108TB-ALP	AC-445TGB/108TB-ALP		
Nominal output	440 Wp	445 Wp		
Nominal voltage U _{mpp}	33.49 V	33.74 V		
Nominal current I _{mpp}	13.14 A	13.19 A		
Short circuit current I _{sc}	13.83 A	13.89 A		
Open circuit voltage U _{oc}	40.28 V	40.39 V		
Module conversion efficiency	21.59 %	22.58 %		

at BNPI test conditions: irradiance frontside 1000W/m², backside 135W/m², with spectrum AM 1.5 at a cell temperature of 25°C

Nominal output P _{mpp}	485 Wp	491 Wp		
Short circuit current I _{sc}	15.25 A	15.31 A		
Open circuit voltage U _{oc}	40.28 V	40.39 V		

Bifacial coefficients: ϕU_{oc} 0.98±5%; ϕI_{sc} 0.80±10%; ϕP_{mpp} 0.80±10%

Design

Frontside	2,8 mm tempered AR Solar glass
Backside	2,8 mm tempered Solar glass, cell spaces transparent
Cells	108 N-Type bifacial high efficiency cells
Frame	35 mm black aluminium frame

Mechanical data

L x W x H	1766 x 1154 x 35 mm
Weight	33.0 kg with frame

Mechanical load

Design load (pressure/suction)	5600 Pa / 4400 Pa *
Test load (pressure/suction)	8400 Pa / 6600 Pa *

* depending on the type of installation according to the installation instructions

Power connection

Socket	Protection Class IP68, 3 bypass diodes
Wire	approx. 1.2 m, 4 mm ²
Plug-in system	IP68, MC4-EVO 2A

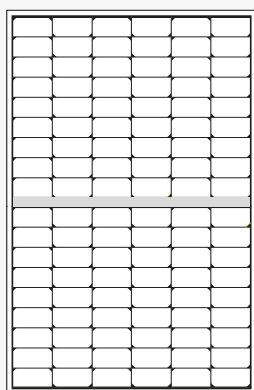
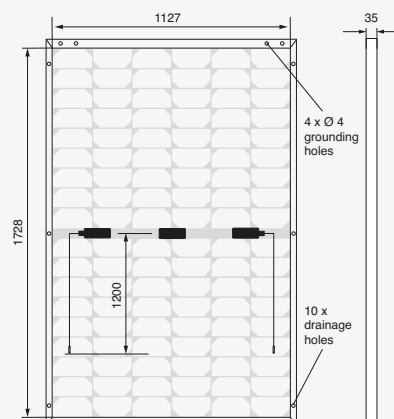


Fig. principle sketch



All dimensions in mm

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
Fire class / Protection class	C (UL790) / II
Hail resistance	HW4 (Ø 40 mm, 27,5 m/s)
Maximum installation height	3000 m

(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 _{mpp}	-0.31 %/K

Low-light performance without Bifacial-effect

(Example for AC-445TGB/108TB-ALP)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	2.69 A	32.47 V
400 W/m ²	5.44 A	32.85 V
600 W/m ²	8.13 A	33.10 V
800 W/m ²	10.74 A	33.39 V
1000 W/m ²	13.19 A	33.74 V

Packaging

Module pieces per pallet	31
Module pieces per HC-container	558

