

AXIblackbiperfect GXXL 440 Wp

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



German-Australian-Engineering

The advantages:



30 years Manufacturer's warranty
and 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

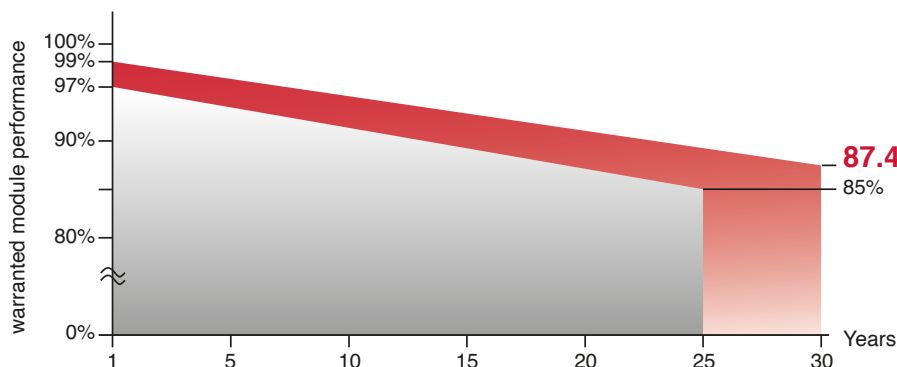


Increased safety through improved
fire protection



Fig. similar 108TGBAUS231219A

Exclusive linear AXITEC high performance guarantee!



87.4 % AXITEC Warranty Added Value

TOPCon N-Type Module
PERC-Module



Lisence holder:
AXITEC Energy GmbH & Co. KG
Otto-Lilienthal-Str. 5
71034 Böblingen, Germany

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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/108BBA			
Nominal output (± 3 %)	440 Wp			
Nominal voltage U _{mpp}	33.44 V			
Nominal current I _{mpp}	13.16 A			
Short circuit current I _{sc} (± 3 %)	13.59 A			
Open circuit voltage U _{oc} (± 3 %)	40.31 V			
Module conversion efficiency	22.53 %			

Bifacial output - Backside Power gain

10% Power output	484.00 Wp			
Module Efficiency	24.79 %			
20% Power output	528.00 Wp			
Module Efficiency	27.04 %			
30% Power output	572.00 Wp			
Module Efficiency	29.29 %			

Design

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

Mechanical data

L x W x H	1722 x 1134 x 30 mm
Weight	21.3 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

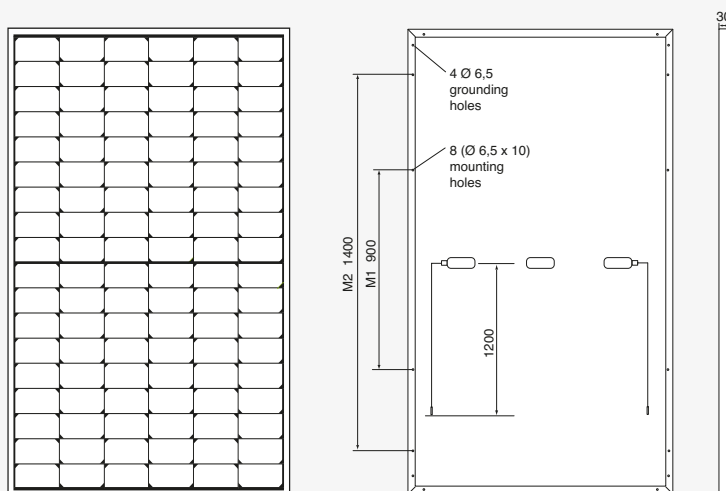


Fig. principle sketch

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 / -40°F to 185°F
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Bifaciality	80 % ± 5 %
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(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 440TGB/108BBA)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	2.69 A	32.18 V
400 W/m ²	5.43 A	32.55 V
600 W/m ²	8.11 A	32.81 V
800 W/m ²	10.72 A	33.09 V
1000 W/m ²	13.16 A	33.44 V

Packaging

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

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

