

AXIbiperfect GQ WB 490 - 505 Wp

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

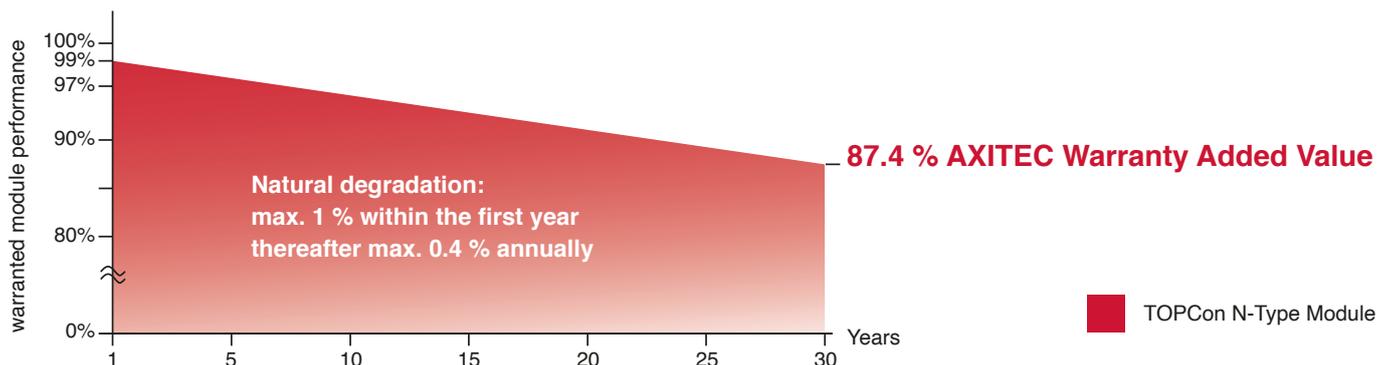
The advantages:

-  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
-  Positive power sorting from 0-5 Wp



Fig. similar 108TGBEN250306A

Exclusive linear AXITEC high performance guarantee!



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Electrical data

at standard conditions (STC): irradiance 1000 Wt/m². spectrum AM 1.5 at a cell temperature of 25°C

Type	AC-490TGB/108WB	AC-495TGB/108WB	AC-500TGB/108WB	AC-505TGB/108WB
Nominal output	490 Wp	495 Wp	500 Wp	505 Wp
Nominal voltage U _{mpp}	32.61 V	32.83 V	33.05 V	33.27 V
Nominal current I _{mpp}	15.03 A	15.08 A	15.13 A	15.18 A
Short circuit current I _{sc}	15.80 A	15.86 A	15.91 A	15.97 A
Open circuit voltag U _{oc}	39.26 V	39.51 V	39.77 V	40.02 V
Module conversion efficiency	22.03 %	22.26 %	22.48 %	22.48 %

at BNPI test conditions: irradiance frontside 1000 W/m², backside 135 W/m², with spectrum AM 1,5 at a cell temperature of 25°C

Nominal output P _{mpp}	540 Wp	546 Wp	551 Wp	557 Wp
Short circuit current I _{sc}	17.42 A	17.48 A	17.55 A	17.61 A
Open circuit voltag U _{oc}	39.26 V	39.51 V	39.77 V	40.02 V

Bifacial coefficients: φU_{oc} 0,98±5%; φI_{sc} 0,80±10%; φP_{mpp} 0,80±10%

Design

Frontside	2.0 mm low-reflection white glass
Backside	2.0 mm 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	1961 x 1134 x 30 mm
Weight	27.5 kg with frame

Mechanical load

Design load (pressure/suction) 3600 Pa / 1600 Pa *

Test load (pressure/suction) 5400 Pa / 2400 Pa *

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

Power connection

Socket	Protection Class IP68, 3 bypass diodes
Wire	approx. 1.3 m, 4 mm ²
Plug-in system	IP68, MC4-EVO 2, 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 temp. -40°C to 85°C / -40F to 185F

Fire class / Protection class C (UL790) / II

Hail resistance HW3 (Ø 30 mm, 23.6 m/s)

(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-505TGB/108WB)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	3.10 A	32.02 V
400 W/m ²	6.26 A	32.39 V
600 W/m ²	9.35 A	32.64 V
800 W/m ²	12.36 A	32.92 V
1000 W/m ²	15.18 A	33.27 V

Packaging

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

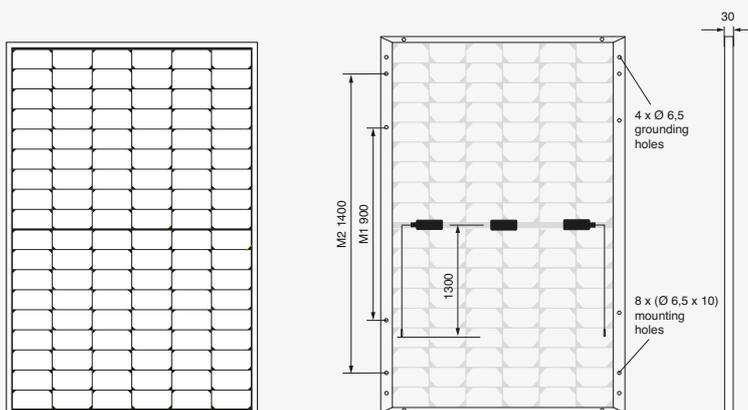


Fig. principle sketch

All dimensions in mm

