

## AXIworldbiperfect GQ WB 460 - 470 Wp

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

### The advantages:






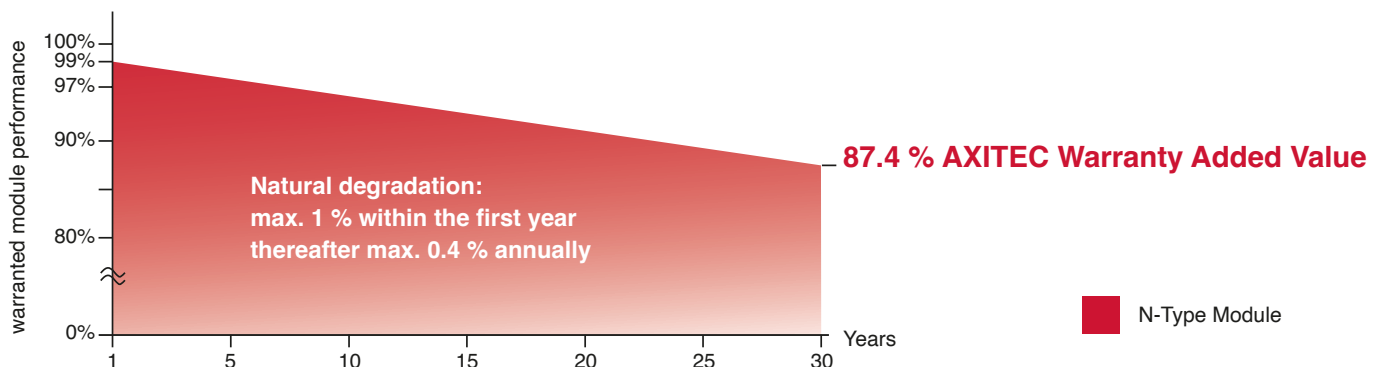
-  30 years Manufacturer's warranty and Performance guarantee
-  Up to 30 % more power output by Bifacial-Technology
-  More performance through innovative N-Type-Technology
-  PID reduced through glass/glass-Technology
-  Increased safety through improved fire protection
-  Positive power sorting from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



Fig. similar 96TGBEN2630A-139/1

### Exclusive linear AXITEC high performance guarantee!



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### Electrical data

at standard conditions (STC): irradiance 1000 W/m<sup>2</sup>, spectrum AM 1.5 at a cell temperature of 25°C

Type	AC-460TGB/96WB	AC-465TGB/96WB	AC-470TGB/96WB
Nominal output	460 Wp	465 Wp	470 Wp
Nominal voltage U <sub>mpp</sub>	30.61 V	30.74 V	30.76 V
Nominal current I <sub>mpp</sub>	15.03 A	15.13 A	15.28 A
Short circuit current I <sub>sc</sub>	15.88 A	15.98 A	15.99 A
Open circuit voltag U <sub>oc</sub>	36.74 V	36.90V	36.92 V
Module conversion efficiency	23.02 %	23.27 %	23.52 %

at BNPI test conditions: irradiance frontside 1000 W/m<sup>2</sup>, backside 135 W/m<sup>2</sup>, with spectrum AM 1,5 at a cell temperature of 25°C

Nominal output P <sub>mpp</sub>	507 Wp	513 Wp	518 Wp
Short circuit current I <sub>sc</sub>	17.58 A	17.69 A	17.70 A
Open circuit voltag U <sub>oc</sub>	36.75 V	36.91 V	36.93 V

Bifacial coefficients: φU<sub>oc</sub> 0,98±5%; φI<sub>sc</sub> 0,80±10%; φP<sub>mpp</sub> 0,80±10%

### Design

Frontside	2.0 mm semi tempered AR Solar glass
Backside	2.0 mm glass, cell spaces white
Cells	96 N-Type bifacial high efficiency cells
Frame	30 mm black aluminium frame

### Mechanical data

L x W x H	1762 x 1134 x 30 mm
Weight	24.5 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. 1.2 m, 4 mm <sup>2</sup>
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 / -40F to 185F
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 470TGB/96WB)

I-U characteristic curve	Current I <sub>pp</sub>	Voltage U <sub>pp</sub>
200 W/m <sup>2</sup>	3.12 A	29.60 V
400 W/m <sup>2</sup>	6.30 A	29.94 V
600 W/m <sup>2</sup>	9.41 A	30.18 V
800 W/m <sup>2</sup>	12.44 A	30.44 V
1000 W/m <sup>2</sup>	15.28 A	30.76 V

### Packaging

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

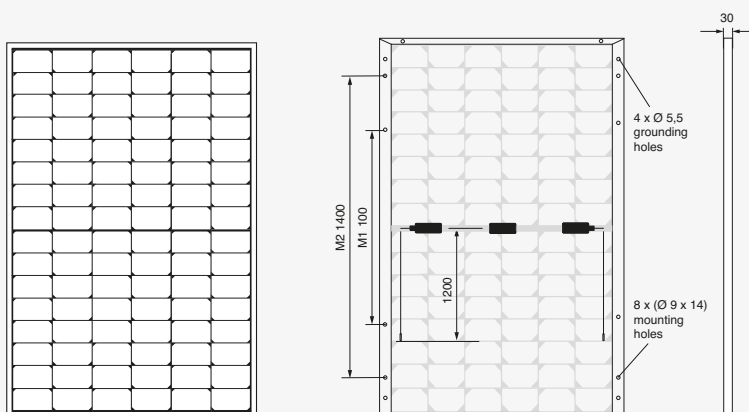


Fig. principle sketch

All dimensions in mm

