AXIblackperfect GQ

455 - 470 Wp

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

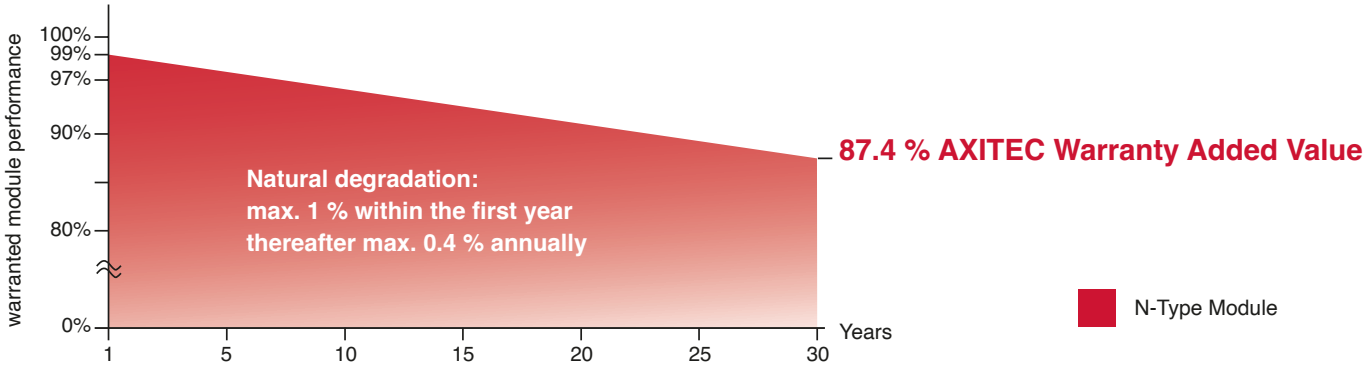
The advantages:

- 30 Years — 30 years Manufacturer‘s warranty and Performance guarantee
- TOP — More performance through innovative N-Type Technology
- PID less — PID reduced through glass/glass-Technology
- Safe — Increased safety through improved fire protection
- Wp — Positive power sorting from 0-5 Wp



Fig. similar 96TGMEN2611103A-167/1

Exclusive linear AXITEC high performance guarantee!



AXITEC Energy GmbH & Co. KG, Otto-Lilienthal-Str. 5, 71034 Böblingen, Germany, energy@axitecsolar.com, www.axitecsolar.com

AXIblackperfect GQ 455 - 470 Wp

Electrical data

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

Type	AC-455TGM/96BB	AC-460TGM/96BB	AC-465TGM/96BB	AC-470TGM/96BB	
Nominal output	**455 Wp**	**460 Wp**	**465 Wp**	**470 Wp**	
Nominal voltage Umpp	30.06 V	30.31 V	30.56 V	30.80 V	
Nominal current Impp	15.14 A	15.18 A	15.22 A	15.26A	
Short circuit current Isc	15.85 A	15.89 A	15.92 A	15.95 A	
Open circuit voltag Uoc	36.10 V	36.25 V	36.40 V	36.55 V	
Module conversion efficiency	22.77 %	23.02 %	23.27 %	23.50 %	

Design

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

Mechanical data

L x W x H	1762 x 1134 x 30 mm
Weight	24.3 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 mm²
Plug-in system	IP68, MC4-EVO 2A

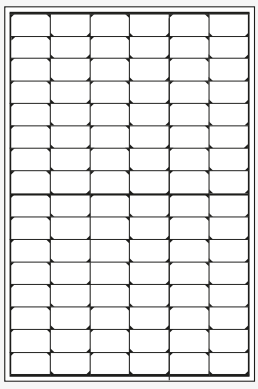
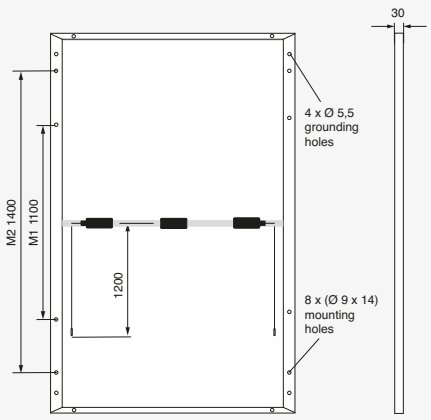


Fig. principle sketch



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 / -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 Uoc 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 Uoc	-0.24 %/K
Current Isc	0.046 %/K
Output Pmpp	-0.28 %/K

Low-light performance (Example for AC-470TGM/96BB)

I-U characteristic curve	Current Ipp	Voltage Upp
200 W/m²	3.12 A	29.64 V
400 W/m²	6.29 A	29.98 V
600 W/m²	9.40 A	30.22 V
800 W/m²	12.43 A	30.48 V
1000 W/m²	15.26 A	30.80 V

Packaging

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

Technical data are subject to change without prior notice, errors excepted. The measurement tolerances are +/-3%. Please be aware: All technical data provided in our data sheets are property of Axitec Energy GmbH & Co. KG and intended for information purposes for our customers only. We cannot accept any guarantee of completeness or accuracy. These data are prohibited for any kind of commercial use.