

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

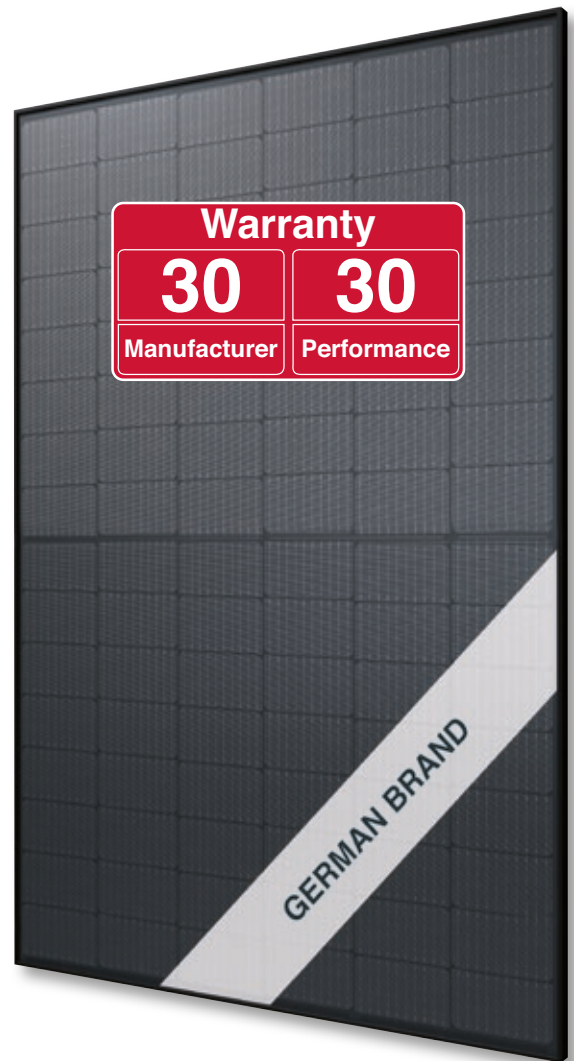
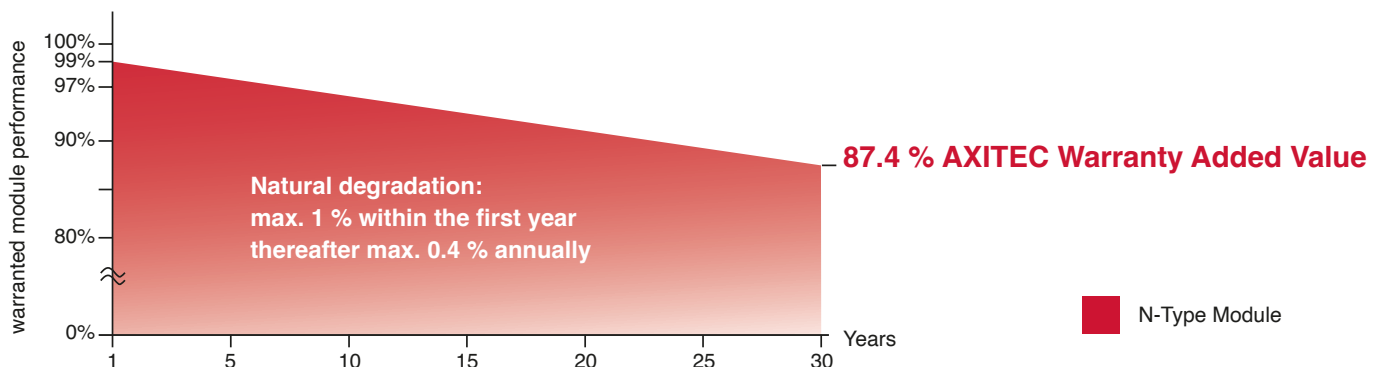


Fig. similar 96TGMEN260817A

Exclusive linear AXITEC high performance guarantee!



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 U _{mp}	30.06 V	30.31 V	30.56 V	30.80 V	
Nominal current I _{mp}	15.14 A	15.18 A	15.22 A	15.26 A	
Short circuit current I _{sc}	15.85 A	15.89 A	15.92 A	15.95 A	
Open circuit voltage U _{oc}	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 glass, cell spaces black
Cells	96 N-Type high efficiency cells
Frame	30 mm black aluminium frame

Mechanical data

L x W x H	1762 x 1134 x 30 mm
Weight	25.0 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 ²
Plug-in system	IP68, MC4-EVO 2A

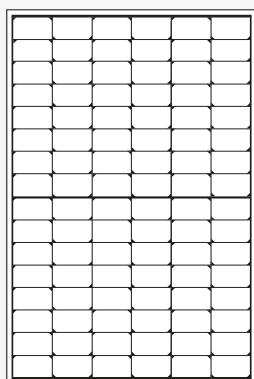
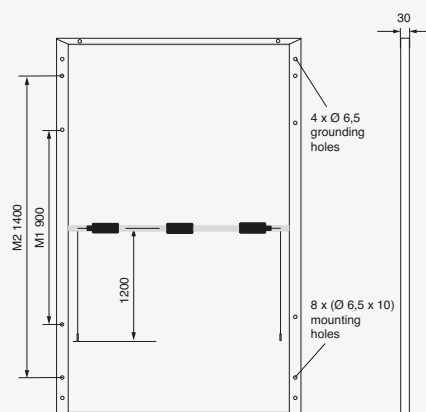


Fig. principle sketch



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	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}	-0.24 %/K
Current I _{sc}	0.046 %/K
Output P _{mp}	-0.28 %/K

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

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	3.12 A	29.64 V
400 W/m ²	6.29 A	29.98 V
600 W/m ²	9.40 A	30.22 V
800 W/m ²	12.43 A	30.48 V
1000 W/m ²	15.26 A	30.80 V

Packaging

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

