AXIbiperfect GQ WS

625 - 640 Wp

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

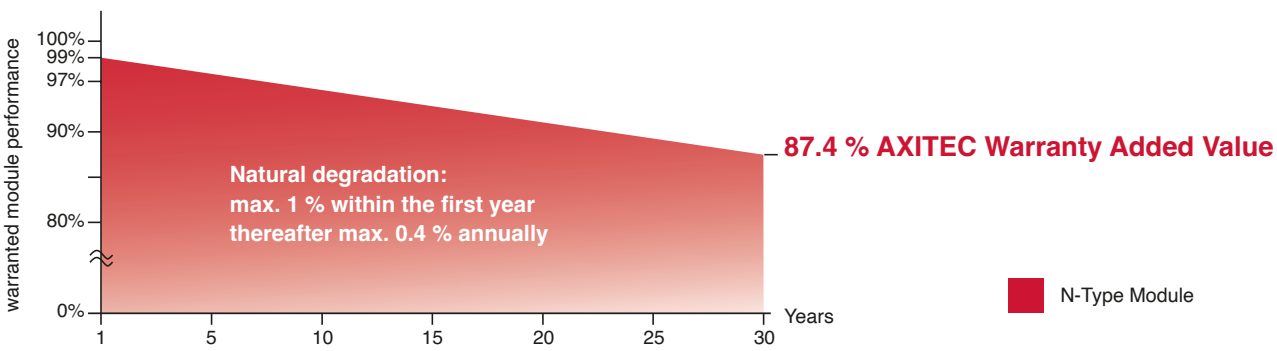


Fig. similar 132TGBEN260304A

The advantages:

- 30 Years — 30 years Manufacturer's warranty and Performance guarantee
- +30% — Up to 30 % more power output by Bifacial-Technology
- 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

Exclusive linear AXITEC high performance guarantee!



AXITEC

AXIbiperfect GQ WS 625 - 640 Wp

Electrical data

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

Type	AC-625TGB/132TWS	AC-630TGB/132WS	AC-635TGB/132WS	AC-640TGB/132WS
Nominal output Pmpp	**625 Wp**	**630 Wp**	**635 Wp**	**640 Wp**
Nominal voltage Umpp	41.26 V	41.45 V	41.65 V	41.84 V
Nominal current Impp	15.15 A	15.20 A	15.25 A	15.30 A
Short circuit current Isc	16.00 A	16.05 A	16.10 A	16.15 A
Open circuit voltag Uoc	49.63 V	49.87 V	50.11 V	50.35 V
Module conversion efficiency	23.14 %	23.32 %	23.51 %	23.69 %

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

Nominal output Pmpp	688 Wp	693 Wp	699 Wp	704 Wp
Short circuit current Isc	17.60 A	17.66 A	17.71 A	17.77 A
Open circuit voltag Uoc	49.63 V	49.87 V	50.11 V	50.35 V

Bifacial coefficients: φUoc 0,98±5%; φIsc 0,80±10%; φPmpp 0,80±10%

Design

Frontside	2.0 mm semi tempered AR Solar glass
Backside	2.0 mm glass, cell spaces white
Cells	132 N-Type bifacial high efficiency cells
Frame	30 mm silver aluminium frame

Mechanical data

L x W x H	2382 x 1134 x 30 mm
Weight	32.5 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 mm²
Plug-in system	IP68, MC4-EVO 2A, JM608

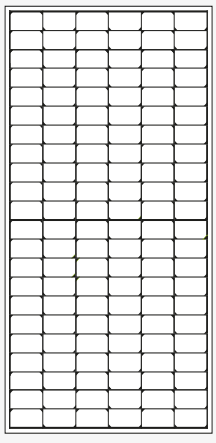
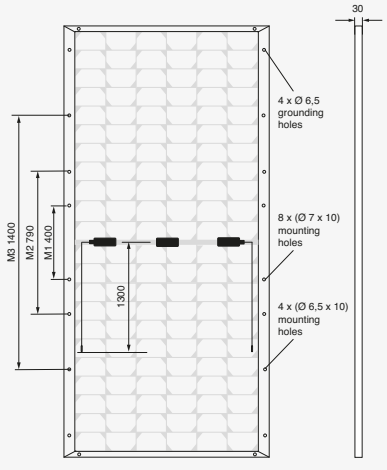


Fig. principle sketch



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	-0.26 %/K
Current Isc	0.046 %/K
Output Pmpp	-0.31 %/K

Low-light performance without Bifacial-effect

(Example for AC-640TGB/132WS)

I-U characteristic curve	Current Ipp	Voltage Upp
200 W/m²	3.13 A	40.27 V
400 W/m²	6.31 A	40.73 V
600 W/m²	9.42 A	41.05 V
800 W/m²	12.46 A	41.40 V
1000 W/m²	15.30 A	41.84 V

Packaging

Module pieces per pallet	36
Module pieces per HC-container	648

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.