

## AXIbiperfect GQ WS 625 - 640 Wp

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

### The advantages:







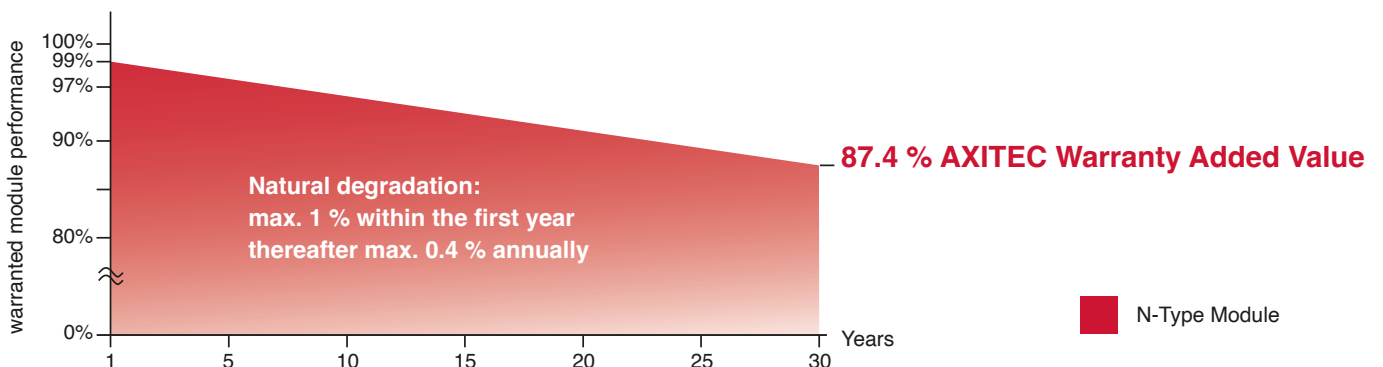
- 
**30** Years  
 30 years Manufacturer's warranty and Performance guarantee
- 
**+30%**  
 Up to 30 % more power output by Bifacial-Technology
- 
**TOP**  
 More performance through innovative N-Type-Technology
- 
**PID less**  
 PID reduced through glass/glass-Technology
- 
**Safe**  
 Increased safety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



Fig. similar 132TGBEN260304A

### Exclusive linear AXITEC high performance guarantee!



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### Electrical data

at standard conditions (STC): irradiance 1000 watt/m<sup>2</sup>, 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 P <sub>mpp</sub>	<b>625 Wp</b>	<b>630 Wp</b>	<b>635 Wp</b>	<b>640 Wp</b>
Nominal voltage U <sub>mpp</sub>	41.26 V	41.45 V	41.65 V	41.84 V
Nominal current I <sub>mpp</sub>	15.15 A	15.20 A	15.25 A	15.30 A
Short circuit current I <sub>sc</sub>	16.00 A	16.05 A	16.10 A	16.15 A
Open circuit voltag U <sub>oc</sub>	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/m<sup>2</sup>, backside 135W/m<sup>2</sup>, with spectrum AM 1,5 at a cell temperature of 25°C

Nominal output P <sub>mpp</sub>	688 Wp	693 Wp	699 Wp	704 Wp
Short circuit current I <sub>sc</sub>	17.60 A	17.66 A	17.71 A	17.77 A
Open circuit voltag U <sub>oc</sub>	49.63 V	49.87 V	50.11 V	50.35 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	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 mm <sup>2</sup>
Plug-in system	IP68, MC4-EVO 2A, JM608

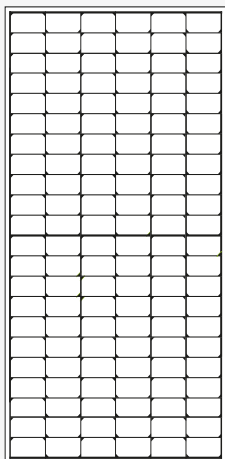
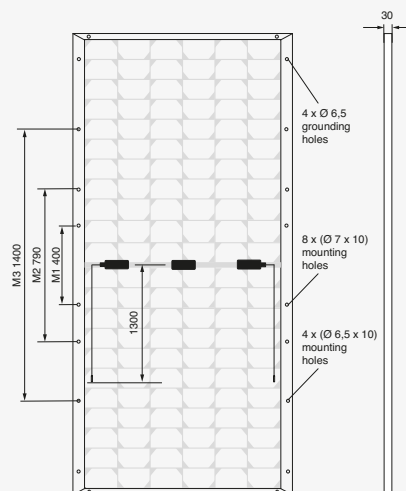


Fig. principle sketch



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 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 AC-640TGB/132WS)

I-U characteristic curve	Current I <sub>pp</sub>	Voltage U <sub>pp</sub>
200 W/m <sup>2</sup>	3.13 A	40.27 V
400 W/m <sup>2</sup>	6.31 A	40.73 V
600 W/m <sup>2</sup>	9.42 A	41.05 V
800 W/m <sup>2</sup>	12.46 A	41.40 V
1000 W/m <sup>2</sup>	15.30 A	41.84 V

### Packaging

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

