

## AXIbiperfect GQ TS 550 Wp

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



German-Australian-Engineering

### 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 TOPCon-Technology



Increased safety through improved fire protection

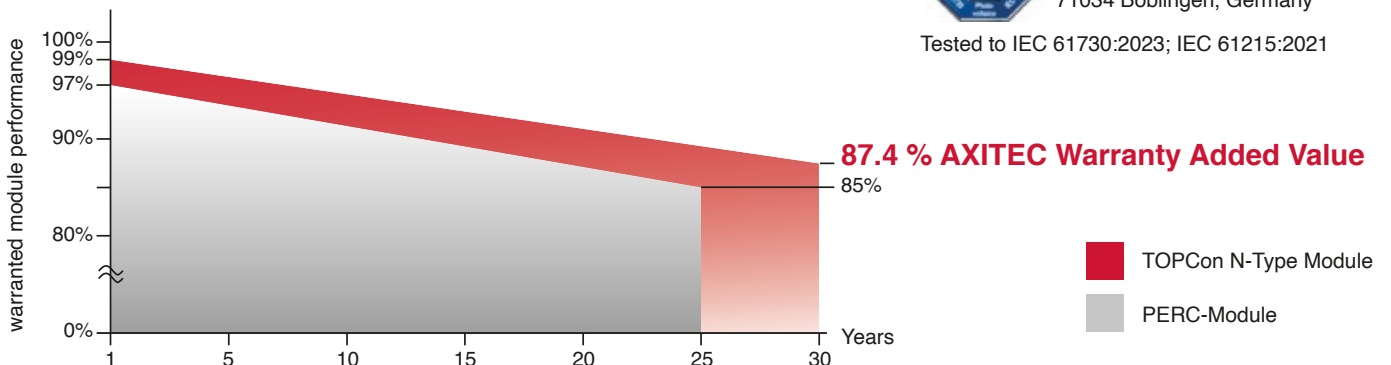


Guaranteed positive power tolerance from 0-5 Wp by individual measurement



Fig. similar 120TGBLAUS240521A

### Exclusive linear AXITEC high performance guarantee!



Lisence holder:  
AXITEC Energy GmbH & Co. KG  
Otto-Lilienthal-Str. 5  
71034 Böblingen, Germany

Tested to IEC 61730:2023; IEC 61215:2021

## AXIbiperfect GQ TS 550 Wp

### 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-550TGB/120TSA			
Nominal output	<b>550 Wp</b>			
Nominal voltage U <sub>mp</sub>	36,42 V			
Nominal current I <sub>mp</sub>	15,10 A			
Short circuit current I <sub>sc</sub>	15,96 A			
Open circuit voltag U <sub>oc</sub>	43,61 V			
Module conversion efficiency	22,33 %			

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>mp</sub>	606 Wp			
Short circuit current I <sub>sc</sub>	17,60 A			
Open circuit voltag U <sub>oc</sub>	43,61 V			

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

### Design

Frontside	2.0 mm low-reflection white glass
Backside	2.0 mm glass, cell spaces transparent
Cells	120 N-Type TOPCon bifacial high efficiency cells
Frame	30 mm silver aluminium frame

### Mechanical data

L x W x H	2172 x 1134 x 30 mm
Weight	30.6 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, Stäubli MC4 PV-KST4-EVO 2 / PV-KBT4-EVO 2

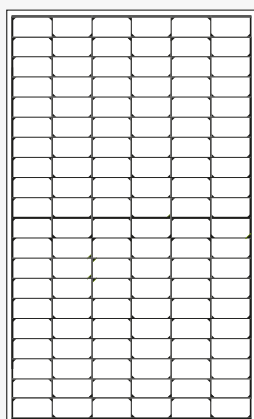
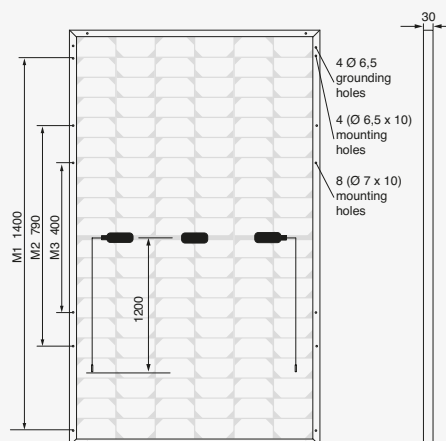


Fig. principle sketch



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

(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>mp</sub>	-0.31 %/K

### Low-light performance without Bifacial-effect

(Example for 550TGB/120STA)

I-U characteristic curve	Current I <sub>pp</sub>	Voltage U <sub>pp</sub>
200 W/m <sup>2</sup>	3.08 A	35.06 V
400 W/m <sup>2</sup>	6.23 A	35.46 V
600 W/m <sup>2</sup>	9.30 A	35.74 V
800 W/m <sup>2</sup>	12.30 A	36.05 V
1000 W/m <sup>2</sup>	15.10 A	36.42 V

### Packaging

Module pieces per pallet	36
Module pieces per HC-container	720

country of origin:  
made in People's Republic of China

