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
- PID reduced through glass/glass-Technology
- Increased safety through improved fire protection
- Guaranteed positive power tolerance from 0-5 Wp by individual measurement

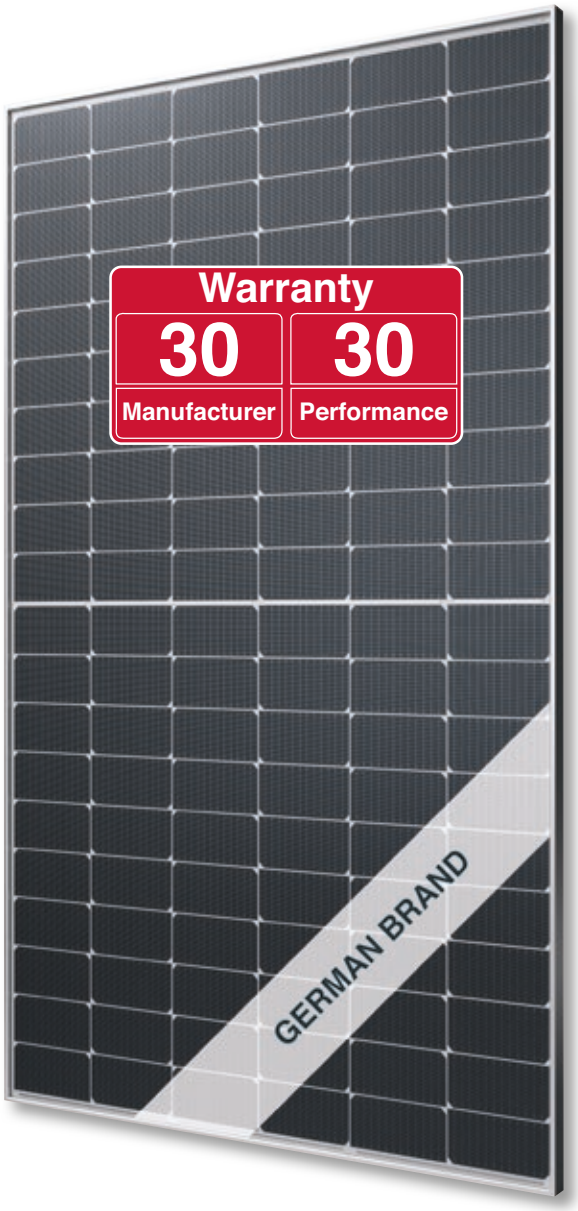
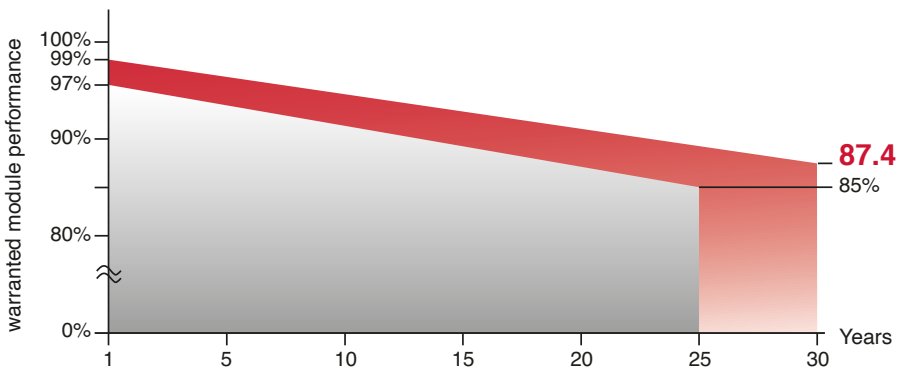


Fig. similar 120TGBLAUS240909A

Exclusive linear AXITEC high performance guarantee!



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Tested to IEC 61730:2023; IEC 61215:2021

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Electrical data

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

Type	AC-550TGB/120TSA				
Nominal output	**550 Wp**				
Nominal voltage Umpp	36,42 V				
Nominal current Impp	15,10 A				
Short circuit current Isc	15,96 A				
Open circuit voltag Uoc	43,61 V				
Module conversion efficiency	22,33 %				

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

Nominal output Pmpp	606 Wp				
Short circuit current Isc	17,60 A				
Open circuit voltag Uoc	43,61 V				

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

with 5 % bifacial gain:

Nominal output Pmpp	577 Wp				
Nominal voltage Umpp	36.42 V				
Nominal current Impp	15.86 A				
Short circuit current Isc	16.76 A				
Open circuit voltag Uoc	43.61 V				

*The bifacial gain is the additional gain from the back side of PV. It depends on the mounting method, orientation, tilt angle of the PV module and the albedo of the ground.

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 mm²
Plug-in system	IP68, PV-KST4-EVO2A/xy,PV-KBT4-EVO2A/xy

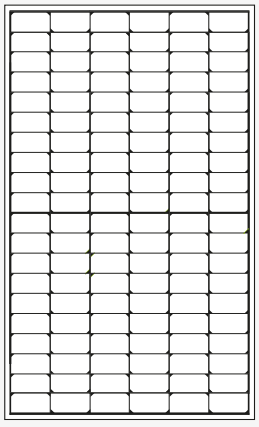
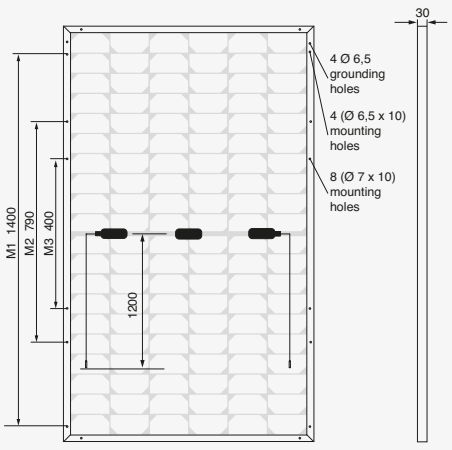


Fig. principle sketch



All dimensions in mm

Limit values

System voltage	1500 VDC
NOCT (nominal operating cell temperature)*	45°C +/-2°C
Max Series Fuse Current	30.0 A
Permissible operating temp.	-40°C to 85°C / -40F to 185F
Fire class / Protection class	C (UL790) / II

(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 %/°C
Current Isc	0.046 %/°C
Output Pmpp	-0.31 %/°C

Low-light performance without Bifacial-effect
(Example for AC-550TGB/120STA)

I-U characteristic curve	Current Ipp	Voltage Upp
200 W/m²	3.08 A	35.06 V
400 W/m²	6.23 A	35.46 V
600 W/m²	9.30 A	35.74 V
800 W/m²	12.30 A	36.05 V
1000 W/m²	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