

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

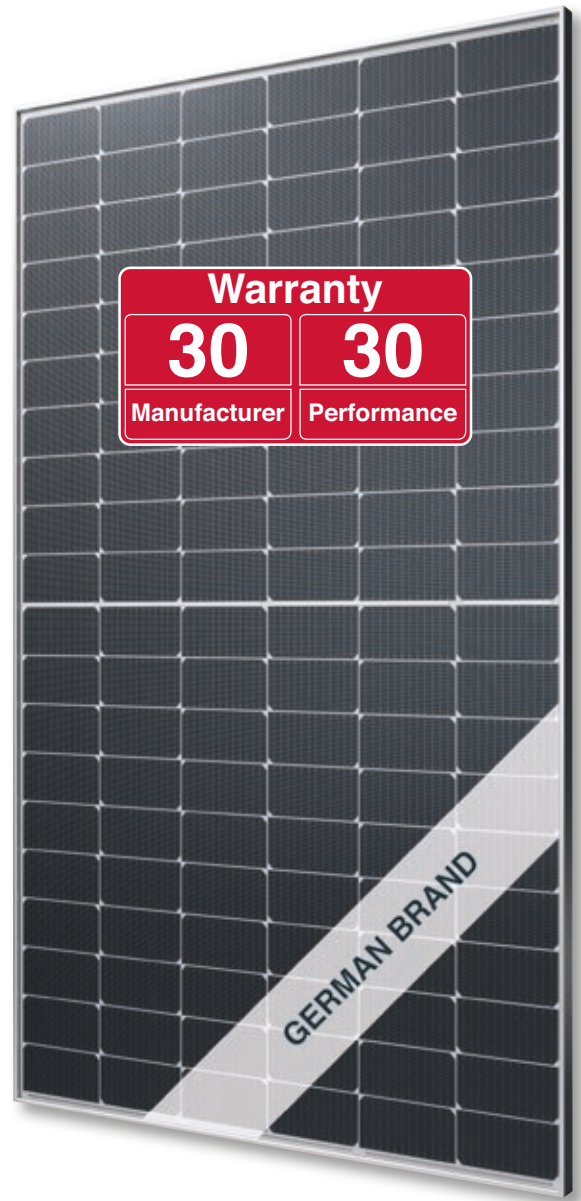
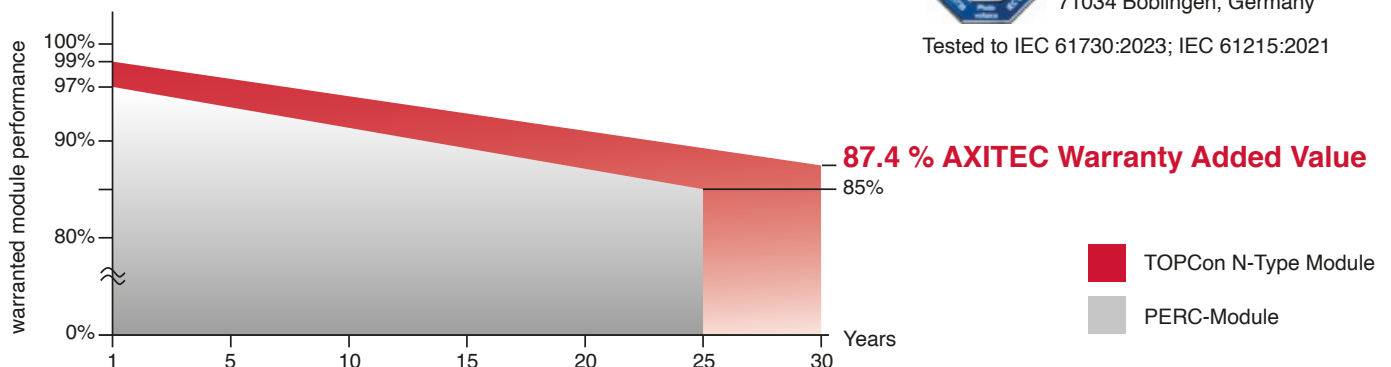


Fig. similar 120TGBLAUS240808A

Exclusive linear AXITEC high performance guarantee!



Lisence holder:
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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 U _{mpp}	36,42 V			
Nominal current I _{mpp}	15,10 A			
Short circuit current I _{sc}	15,96 A			
Open circuit voltage U _{oc}	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 P _{mpp}	606 Wp			
Short circuit current I _{sc}	17,60 A			
Open circuit voltage U _{oc}	43,61 V			

Bifacial coefficients: ϕU_{oc} 0,98±5%; ϕI_{sc} 0,80±10%; ϕP_{mpp} 0,80±10%

with 5 % bifacial gain:

Nominal output P _{mpp}	577 Wp			
Nominal voltage U _{mpp}	36.42 V			
Nominal current I _{mpp}	15.86 A			
Short circuit current I _{sc}	16.76 A			
Open circuit voltage U _{oc}	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 mm ²
Plug-in system	IP68, Stäubli MC4 PV-KST4-EVO 2 / PV-KBT4-EVO 2

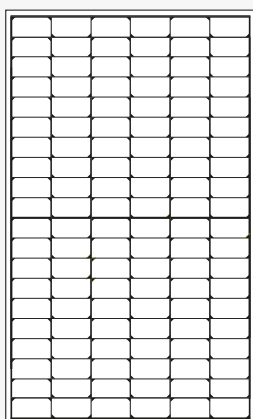
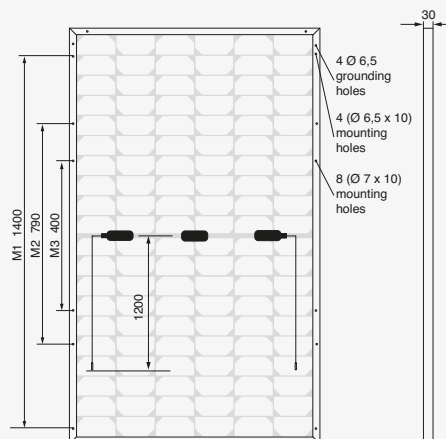


Fig. principle sketch



All dimensions in mm

Limit values

System voltage	1500 VDC
NOCT (nominal operating cell temperature)*	45°C +/-2°C
Max Series Fuse Current	30.0 A

Permissible operating temp.	-40°C to 85°C / -40°F to 185°F
Fire class / Protection class	C (UL790) / II

(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}	-0.26 %/°C
Current I _{sc}	0.046 %/°C
Output P _{mpp}	-0.31 %/°C

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

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	3.08 A	35.06 V
400 W/m ²	6.23 A	35.46 V
600 W/m ²	9.30 A	35.74 V
800 W/m ²	12.30 A	36.05 V
1000 W/m ²	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

