

AXIbiperfect GXQ TS 690 - 710 Wp

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

The advantages:







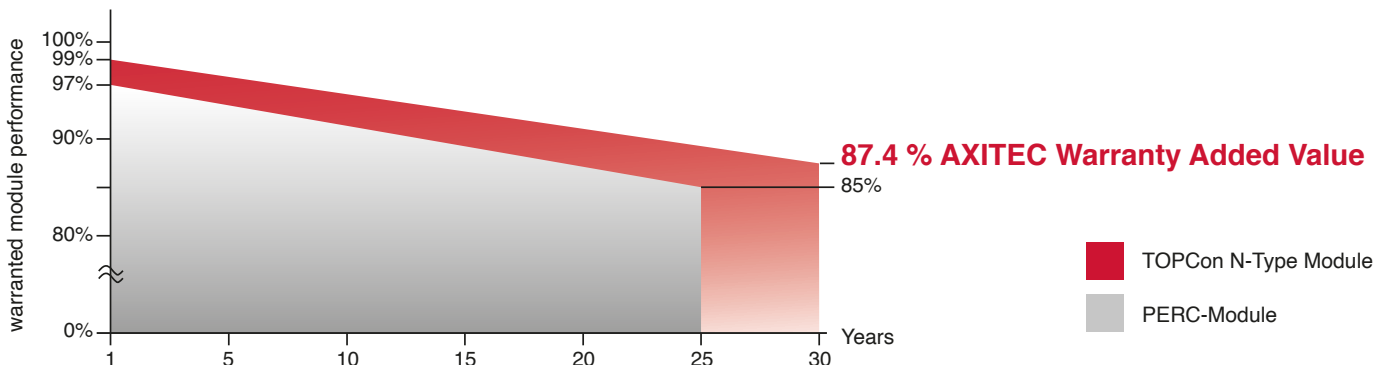
-  30 years Manufacturer's warranty and Performance guarantee
-  Up to 30 % more power output by Bifacial-Technology
-  More performance through innovative N-Type TOPCon-Technology
-  PID reduced through glass/glass-Technology
-  Increased safety through improved fire protection
-  Guaranteed positive power tolerance from 0-5 Wp by individual measurement



Fig. similar 132TGBEN240514A

Exclusive linear AXITEC high performance guarantee!



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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-690TGB/132TS	AC-695TGB/132TS	AC-700TGB/132TS	AC-705TGB/132TS	AC-710TGB/132TS
Nominal output P _{mpp}	690 Wp	695 Wp	700 Wp	705 Wp	710 Wp
Nominal voltage U _{mpp}	40.10 V	40.27 V	40.44 V	40.62 V	40.79 V
Nominal current I _{mpp}	17.21 A	17.26 A	17.31 A	17.36 A	17.41 A
Short circuit current I _{sc}	18.29 A	18.35 A	18.41 A	18.47 A	18.52 A
Open circuit voltag U _{oc}	47.74 V	47.94 V	48.13 V	48.32 V	48.51 V
Module conversion efficiency	22.21 %	22.37 %	22.53 %	22.70 %	22.86 %

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}	761 Wp	766 Wp	772 Wp	777 Wp	783 Wp
Short circuit current I _{sc}	20.17 A	20.23 A	20.30 A	20.36 A	20.43 A
Open circuit voltag U _{oc}	47.74 V	47.94 V	48.13 V	48.32 V	48.51 V

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

Design

Frontside	2.0 mm low-reflection white glass
Backside	2.0 mm glass, cell spaces transparent
Cells	132 N-Type TOPCon bifacial high efficiency cells
Frame	35 mm silver aluminium frame

Mechanical data

L x W x H	2384 x 1303 x 35 mm
Weight	38 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 ²
Plug-in system	IP68, JM608

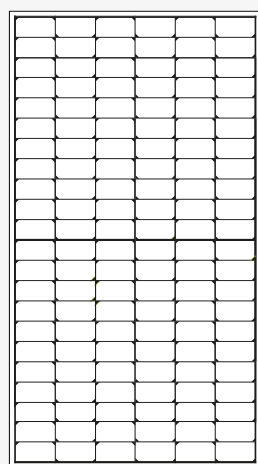
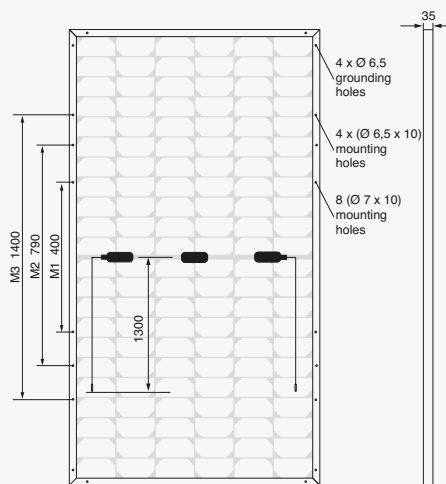


Fig. principle sketch



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

(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 %/K
Current I _{sc}	0.046 %/K
Output P _{mpp}	-0.31 %/K

Low-light performance without Bifacial-effect

(Example for AC-710TGB/132TS)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	3.56 A	39.26 V
400 W/m ²	7.18 A	39.71 V
600 W/m ²	10.72 A	40.02 V
800 W/m ²	14.18 A	40.36 V
1000 W/m ²	17.41 A	40.79 V

Packaging

Module pieces per pallet	31
Module pieces per HC-container	527

