AXIbiperfect GXXL TB Alpine

570 - 585 Wp

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

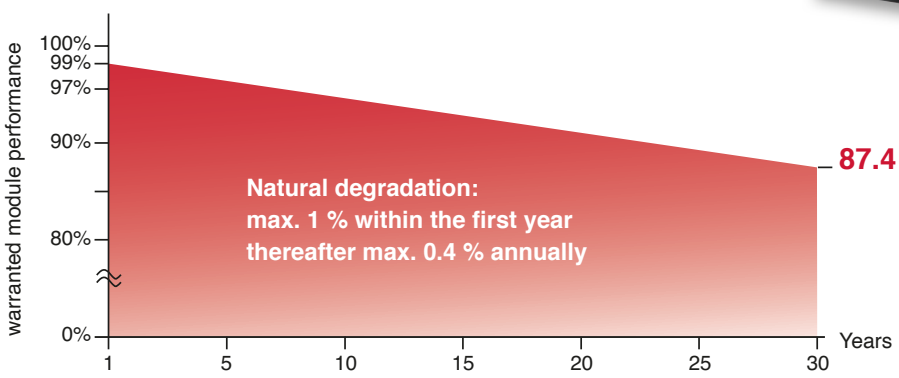


Fig. similar (Photo: Shutterstock/KI) 144TGBEN250313A

The advantages:

- 30 Years — 30 years Manufacturer‘s warranty and Performance guarantee
- +30% — Up to 30 % more power output by Bifacial-Technology
- PID less — PID reduced through glass/glass-Technology
- Safe — Increased safety through improved fire protection
- Wp — Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- 3000 m — Suitable for alpine applications up to 3000 m
- 35 mm — High stability thanks to reinforced frame design

Exclusive linear AXITEC high performance guarantee!



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Electrical data

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

Type	AC-570TGB/144TB-ALP	AC-575TGB/144TB-ALP	AC-580TGB/144TB-ALP	AC-585TGB/144TB-ALP
Nominal output	**570 Wp**	**575 Wp**	**580 Wp**	**585 Wp**
Nominal voltage Umpp	43.51 V	43.73 V	43.94 V	44.15 V
Nominal current Impp	13.10 A	13.15 A	13.20 A	13.25 A
Short circuit current Isc	13.99 A	14.05 A	14.11 A	14.17 A
Open circuit voltag Uoc	51.41 V	51.63 V	52.03 V	52.10 V
Module conversion efficiency	21.25 %	21.44 %	21.63 %	21.81 %

at BNPI test conditions: irradiance frontside 1000W/m². backside 135W/m². with spectrum AM 1.5 at a cell temperature of 25°C

Nominal output Pmpp	628 Wp	634 Wp	640 Wp	645 Wp
Short circuit current Isc	15.43 A	15.49 A	15.56 A	52.10 V
Open circuit voltag Uoc	51.41 V	51.63 V	52.03 V	15.62 A

Bifacial coefficients: φUoc 0.98±5%; φIsc 0.80±10%; φPmpp 0.80±10%

Design

Frontside	2,8 mm tempered AR Solar glass
Backside	2,8 mm tempered Solar glass, cell spaces transparent
Cells	144 N-Type TOPCon bifacial high efficiency cells
Frame	35 mm black aluminium frame

Mechanical data

L x W x H	2324 x 1154 x 35 mm
Weight	43.0 kg with frame

Mechanical load

Design load (pressure/suction)	5600 Pa / 4400 Pa *
Test load (pressure/suction)	8400 Pa / 6600 Pa *

* depending on the type of installation according to the installation instructions

Power connection

Socket	Protection Class IP68, 3 bypass diodes
Wire	approx. 1,65 m, 4 mm²
Plug-in system	IP68, MC4-EVO 2, MC4-EVO 2A

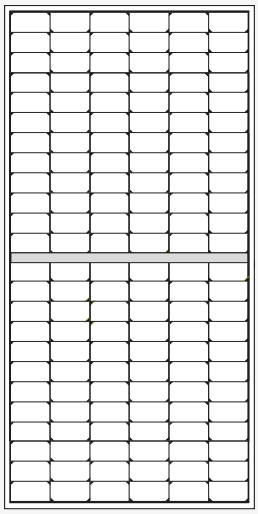
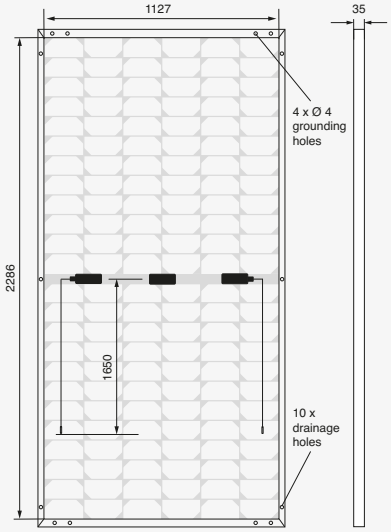


Fig. principle sketch



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	HW4 (Ø 40 mm, 27,5 m/s)
Maximum installation height	3000 m

(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 %/K
Current Isc	0.046 %/K
Output Pmpp	-0.31 %/K

Low-light performance without Bifacial-effect

(Example for AC-585TGB/144TB-ALP)

I-U characteristic curve	Current Ipp	Voltage Upp
200 W/m²	2.71 A	42.50 V
400 W/m²	5.46 A	42.99 V
600 W/m²	8.16 A	43.33 V
800 W/m²	10.79 A	43.70 V
1000 W/m²	13.25 A	44.15 V

Packaging

Module pieces per pallet	31
Module pieces per HC-container	496

Technical data are subject to change without prior notice. errors excepted. The measurement tolerances are +/-3%. Please be aware: All technical data provided in our data sheets are property of Axitec Energy GmbH & Co. KG and intended for information purposes for our customers only. We cannot accept any guarantee of completeness or accuracy. These data are prohibited for any kind of commercial use.