AXIbiperfect GXXL WS

590 - 595 Wp

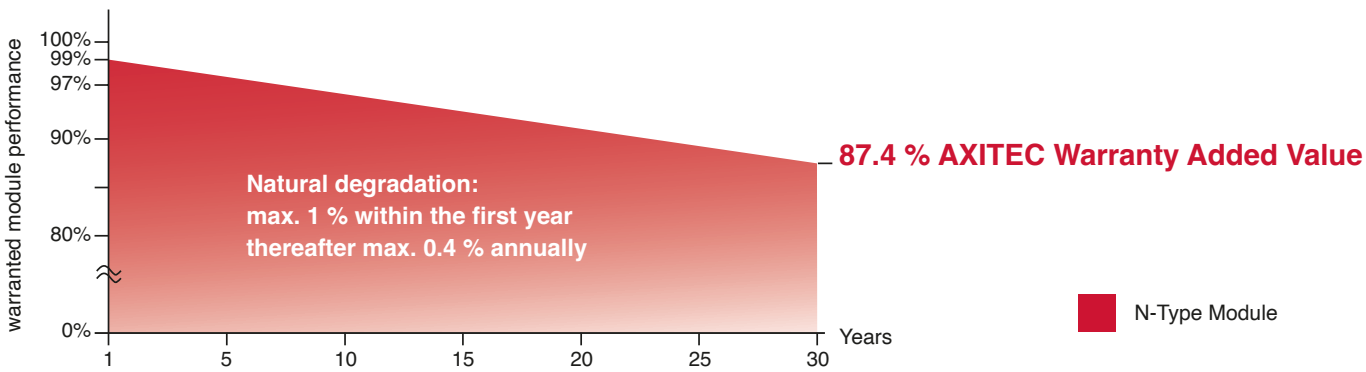
High performance bifacial solar module
144 halfcell, glass/glass, N-Type

Fig. similar 144TGBEN260330A

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-Technology
- PID reduced through glass/glass-Technology
- Increased safety through improved fire protection
- Positive power sorting from 0-5 Wp

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-590TGB/144WS	AC-595TGB/144WS
Nominal output	**590 Wp**	**595 Wp**
Nominal voltage Umpp	44.37 V	44.57 V
Nominal current Impp	13.30 A	13.35 A
Short circuit current Isc	14.23 A	14.28 A
Open circuit voltag Uoc	52.31 V	52.40 V
Module conversion efficiency	22.84 %	23.03 %

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	651 Wp	656 Wp
Short circuit current Isc	15.69 A	15.75 A
Open circuit voltag Uoc	52.31 V	52.40 V

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

Design

Frontside	2.0 mm semi tempered AR Solar glass
Backside	2.0 mm glass, cell spaces white
Cells	144 N-Type bifacial high efficiency cells
Frame	30 mm silver aluminium frame

Mechanical data

L x W x H	2278 x 1134 x 30 mm
Weight	31.2 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 mm²
Plug-in system	IP68, MC4-EVO 2A, JM608

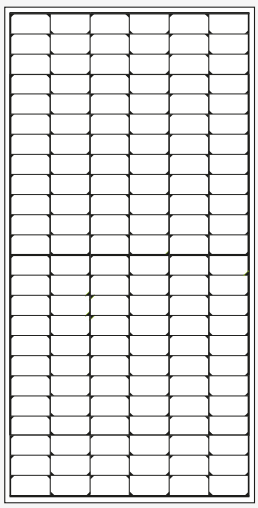
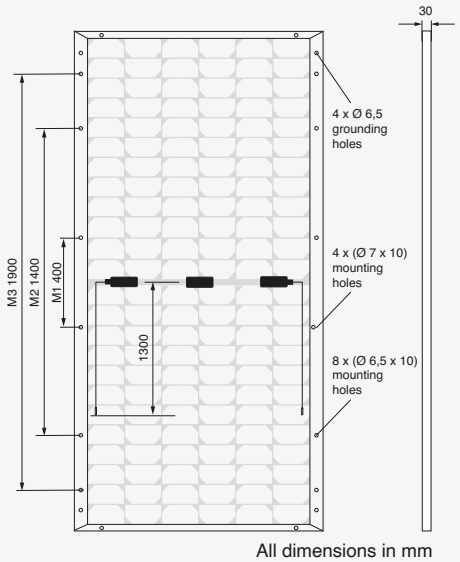


Fig. principle sketch



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 temp.	-40°C to 85°C / -40F to 185F
Fire class / Protection class	C (UL790) / II
Hail resistance	HW3 (Ø 30 mm, 23.6 m/s)

(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-595TGB/144WS)

I-U characteristic curve	Current Ipp	Voltage Upp
200 W/m²	2.73 A	42.89 V
400 W/m²	5.50 A	43.39 V
600 W/m²	8.22 A	43.73 V
800 W/m²	10.87 A	44.10 V
1000 W/m²	13.35 A	44.57 V

Packaging

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