

## AXIbiperfect GXXL TS

### 565 - 580 Wp

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



German-Australian-Engineering

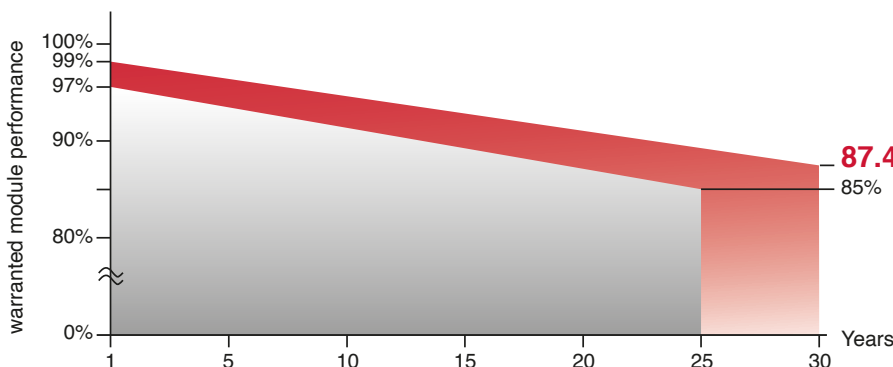
#### The advantages:

- 30 Years** 30 years Manufacturer's Product Warranty
- 30 Years** 30 years Performance guarantee
- +30%** Up to 30 % more power output by Bifacial-Technology
- TOP** More performance through innovative N-Type TOPCon-Technology
- Safe** Increased safety through improved fire protection
- Wp** Guaranteed positive power tolerance from 0-5 Wp by individual measurement



Fig. similar 144TGBAUS231016A

#### Exclusive linear AXITEC high performance guarantee!



Lisence holder:  
AXITEC Energy GmbH & Co. KG  
Otto-Lilienthal-Str. 5  
71034 Böblingen, Germany

**87.4 % AXITEC Warranty Added Value**

- TOPCon N-Type Module
- PERC-Module

## AXIbiperfect GXXL TS 565 - 580 Wp

**Electrical data** (at standard conditions (STC) irradiance 1000 watt/m<sup>2</sup>, spectrum AM 1.5 at a cell temperature of 25°C)

Type	AC-565TGB/144TSA	AC-570TGB/144TSA	AC-575TGB/144TSA	AC-580TGB/144TSA
Nominal output (± 3 %)	<b>565 Wp</b>	<b>570 Wp</b>	<b>575 Wp</b>	<b>580 Wp</b>
Nominal voltage U <sub>mpp</sub>	43,58 V	43,87 V	44,17 V	44,47 V
Nominal current I <sub>mpp</sub>	12,97 A	12,99 A	13,02 A	13,04 A
Short circuit current I <sub>sc</sub> (± 3 %)	13,58 A	13,59 A	13,61 A	13,62 A
Open circuit voltag U <sub>oc</sub> (± 3 %)	51,63 V	51,91 V	52,18 V	52,82 V
Module conversion efficiency	21,87 %	22,07 %	22,26 %	22,45 %

### Bifacial output - Backside Power gain

10% Power output	621.50 Wp	627.00 Wp	632.50 Wp	638.00 Wp
Module Efficiency	24.05 %	24.26 %	24.47 %	24.69 %
20% Power output	678.00 Wp	684.00 Wp	690.00 Wp	696.00 Wp
Module Efficiency	26.23 %	26.47 %	26.70 %	26.93 %
30% Power output	734.50 Wp	741.00 Wp	747.50 Wp	754.00 Wp
Module Efficiency	28.42 %	28.67 %	28.92 %	29.18 %

### Design

Frontside	2.0 mm hardened, low-reflection white glass
Backside	2.0 mm hardened glass, intercellular spaces transparent
Cells	144 N-Type TOPCon 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
Wire	approx. 1.3 m, 4 mm <sup>2</sup>
Plug-in system	Stäubli MC4 PV-KST4-EVO 2 / PV-KBT4-EVO 2

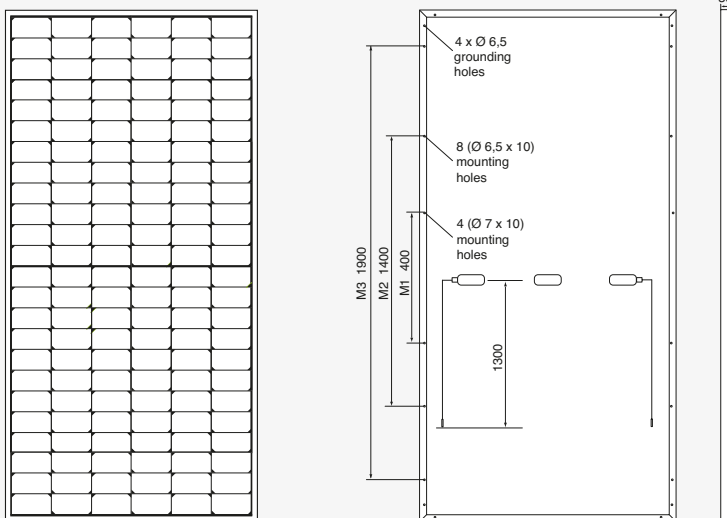


Fig. principle sketch

All dimensions in mm

### Limit values

System voltage	1500 VDC
Module Fire Performance	CLASS C
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

Bifaciality 80 % ± 5 %

(No external voltages greater than U<sub>oc</sub> may be applied to the module)

\* NOCT. irradiance 800 W/m<sup>2</sup>; AM 1.5; wind speed 1 m/s; Temperature 20°C

### Temperature coefficients

Voltage U <sub>oc</sub>	-0.26 %/K
Current I <sub>sc</sub>	0.046 %/K
Output P <sub>mpp</sub>	-0.31 %/K

### Low-light performance (Example for AC-580TGB/144TSA)

I-U characteristic curve	Current I <sub>pp</sub>	Voltage U <sub>pp</sub>
200 W/m <sup>2</sup>	2.66 A	42.80 V
400 W/m <sup>2</sup>	5.38 A	43.29 V
600 W/m <sup>2</sup>	8.03 A	43.63 V
800 W/m <sup>2</sup>	10.62 A	44.00 V
1000 W/m <sup>2</sup>	13.04 A	44.47 V

### Packaging

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

country of origin:  
made in People's Republic of China

