

## AXIworldblackperfect FXXL 410 - 430 Wp

High performance solar module  
108 halfcell. N-Type TOPCon

### The advantages:








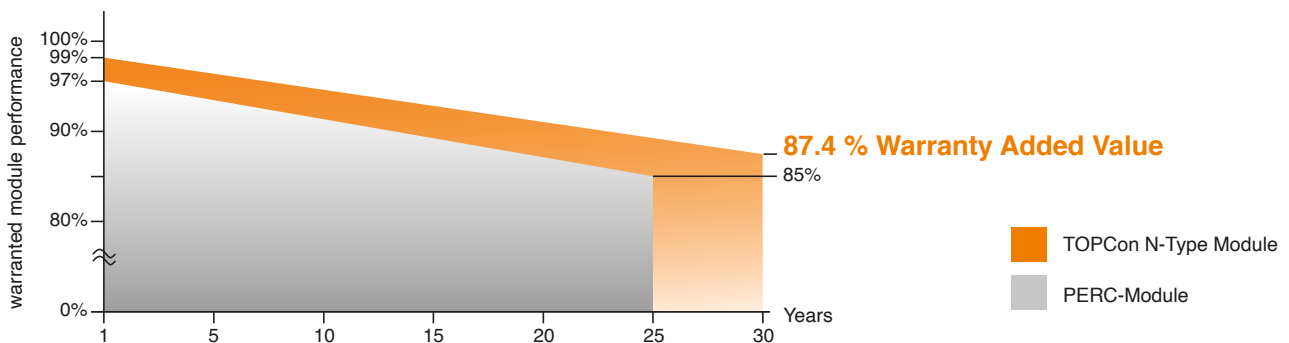
-  15 years Manufacturer's warranty
-  30 years Performance guarantee
-  High module performance through Half-Cut-technology and selected materials
-  Guaranteed positive power tolerance from 0-5 Wp by individual measurement
-  100% visual electroluminescence inspection in production
-  High quality junction box and connector systems
-  More performance through innovative N-Type TOPCon-Technology



Fig. similar 108TFMDEN231017G-1202

### Exclusive linear AXITEC high performance guarantee!



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**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	Nominal output P <sub>mpp</sub>	Nominal voltage U <sub>mpp</sub>	Nominal current I <sub>mpp</sub>	Short circuit current I <sub>sc</sub>	Open circuit voltage U <sub>oc</sub>	Module conversion efficiency
AC-410TFM/108BB	410 Wp	31.13 V	13.18 A	13.91 A	37.73 V	21.01 %
AC-415TFM/108BB	415 Wp	31.32 V	13.26 A	13.99 A	37.92 V	21.27 %
AC-420TFM/108BB	420 Wp	31.51 V	13.33 A	14.07 A	38.11 V	21.53 %
AC-425TFM/108BB	425 Wp	31.70 V	13.41 A	14.15 A	38.30 V	21.76 %
AC-430TFM/108BB	430 Wp	31.88 V	13.49 A	14.23 A	38.49 V	22.04 %

### Design

Frontside	3.2 mm hardened. low-reflection white glass
Cells	108 N-Type TOPCon high efficiency cells
Backside	Composite film
Frame	30 mm black aluminium frame

### Mechanical data

L x W x H	1722 x 1133 x 30 mm
Weight	21.5 kg with frame

### Mechanical load

Design load (pressure/suction)	3600 Pa / 1600 Pa
Test load (pressure/suction)	5400 Pa / 2400 Pa

### Power connection

Socket	Protection Class IP68, 3 bypass diodes
Wire	approx. 1.2 m. 4 mm <sup>2</sup>
Plug-in system	IP68. MC4-EVO 2. MC4-EVO 2A

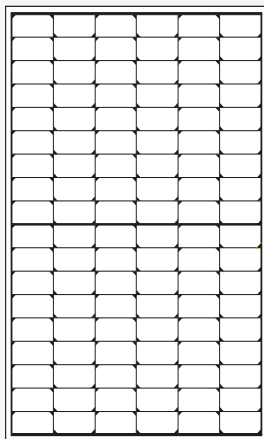
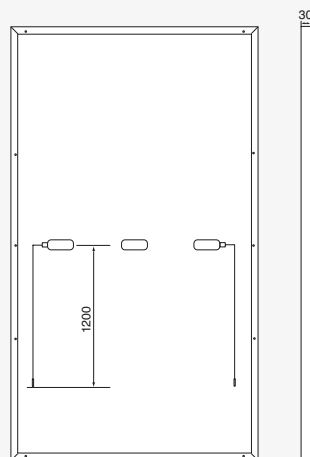


Fig. principle sketch



All dimensions in mm

### Limit values

System voltage	1500 VDC
NOCT (nominal operating cell temperature)*	45°C +/-2K
Reverse current feed IR	25.0 A

Permissible operating temperature -40°C to 85°C / -40F to 185F

(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>	0.047 %/K
Output P <sub>mpp</sub>	-0.31 %/K

### Low-light performance (Example for AC-430TFM/108BB)

I-U characteristic curve	Current I <sub>pp</sub>	Voltage U <sub>pp</sub>
200 W/m <sup>2</sup>	2.76 A	30.68 V
400 W/m <sup>2</sup>	5.56 A	31.04 V
600 W/m <sup>2</sup>	8.31 A	31.28 V
800 W/m <sup>2</sup>	10.99 A	31.55 V
1000 W/m <sup>2</sup>	13.49 A	31.88 V

