

AXIworldblackperfect FXXL 410 - 420 Wp

High performance solar module
108 halfcell. N-Type TOPCon

30
YEARS
87.4%

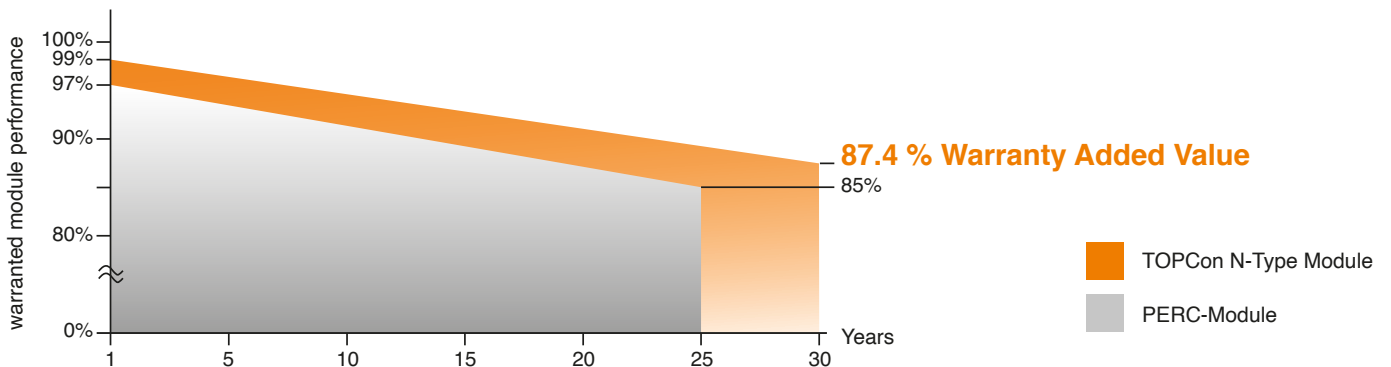
The advantages:

- 15** Years 15 years Manufacturer's warranty
- 30** Years 30 years Performance guarantee
- HC** High module performance through Half-Cut-technology and selected materials
- Wp** Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- 100%** 100% visual electroluminescence inspection in production
- IP 68** High quality junction box and connector systems
- TOP** More performance through innovative N-Type TOPCon-Technology



Fig. similar 108TFMEN230413G-120/1

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	Nominal output P _{mpp}	Nominal voltage U _{mpp}	Nominal current I _{mpp}	Short circuit current I _{sc}	Open circuit voltage U _{oc}	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 %

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
Wire	approx. 1.2 m. 4 mm ²
Plug-in system	Plug/socket IP68. Stäubli EVO2

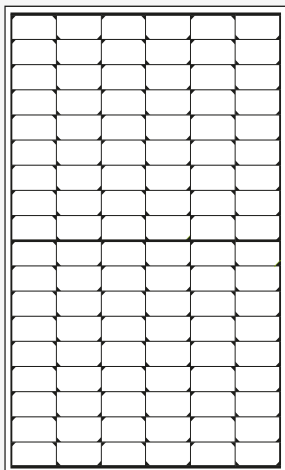
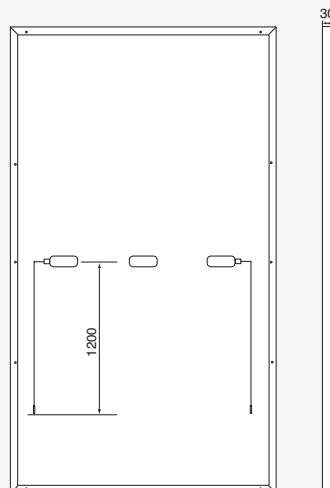


Fig. principle sketch



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_{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}	0.047 %/K
Output P _{mpp}	-0.31 %/K

Low-light performance (Example for AC-420TFM/108BB)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	2.72 A	30.33 V
400 W/m ²	5.50 A	30.67 V
600 W/m ²	8.21 A	30.91 V
800 W/m ²	10.86 A	31.18 V
1000 W/m ²	13.33 A	31.51 V