

AXIworldblackperfect FXXL 410 - 425 Wp

High performance solar module
108 halfcell. N-Type TOPCon

30
YEARS
87.4%

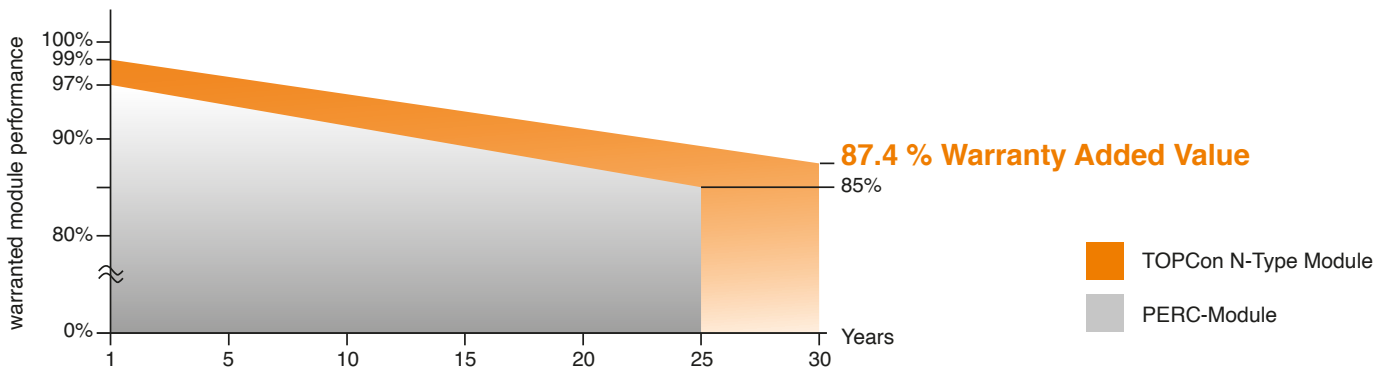
The advantages:

- 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 108TFMEN2306273G-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 % |
| AC-425TFM/108BB | 425 Wp | 31.70 V | 13.41 A | 14.15 A | 38.30 V | 21.76 % |

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 |

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-425TFM/108BB)

| I-U characteristic curve | Current I _{pp} | Voltage U _{pp} |
|--------------------------|-------------------------|-------------------------|
| 200 W/m ² | 2.74 A | 30.51 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 | 10.92 A | 31.37 V |
| 1000 W/m ² | 13.41 A | 31.70 V |

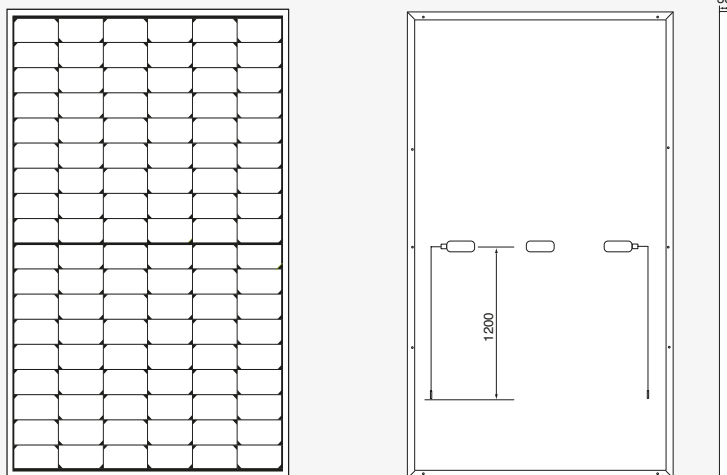


Fig. principle sketch

All dimensions in mm

