

X-HALF CUT N-TYPE serie TOPCon

420/430_{Wp}
Power

TOPCon Cells

Bifacial

Class 1
Fire reaction

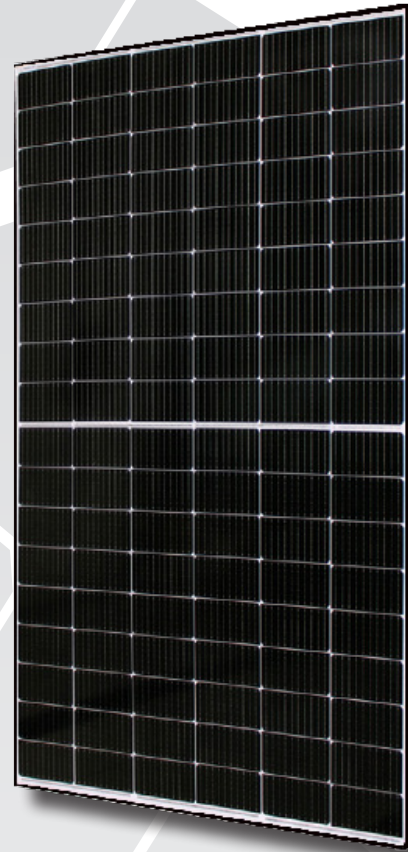
5400 PA
Mechanical Load

182x91_{mm}
Cell Size

22.02%
Module Efficiency

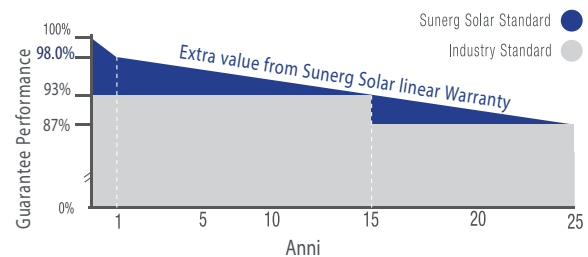
15 years
product warranty

25 years
linear warranty



X-HALF CUT N-Type serie TOPCON+ involves the introduction of a thin oxide layer between the metal contacts and the silicon wafer, which brings significant improvements in cell conversion efficiency and power generation performance.

LINEAR WARRANTY



- look warranty terms -

CONFORM TO:

| UNI9177 | PV CYCLE | CE |

UNI EN ISO 9001:2008
UNI EN ISO 14001:2004
UNI EN BS OHSAS 18001:2007

| Quality management system
| Standards for environmental management system
| International standards for occupational health and safety

ELECTRICAL DATA (STC)		XMHCTO420BFDG(B)+H	XMHCTO425BFDG(B)+H	XMHCTO430BFDG(B)+H
Open circuit Voltage	(Voc)	37.89 V	38.07 V	38.25 V
Voltage a Pmax.	(Vmp)	31.36 V	31.55 V	31.73 V
Short-circuit current	(Isc)	14.15 A	14.67 A	14.31 A
Current at Pmax.	(Imp)	13.40 A	13.48 A	13.56 A
Nominal Peak Power (Pmax)		420 Wp	425 Wp	430 Wp
Cell Efficiency		24.70%	24.90%	25.20%
Module Efficiency		21.51%	21.76%	22.02%
Power output tolerance			-0/+5 W	
Maximum voltage			1500 V	
Maximum series fuse rating			30 A	
Limiting reverse current			25 A	
Operating Temperature			- 40°C to 85°C	

Irradiance 1000 w/m², temperature 25°C, AM= 1.5

Tolerance electric measurement and Power Output ±3%

ELECTRICAL PARAMETERS AT NOMINAL MODULE OPERATING TEMPERATURE (NMOT)

Peak Power	(Pmax)	318.0 W	321.8 W	325.6 W
Open Circuit Voltage	(Voc)	36.00 V	36.20 V	36.30 V
Short Circuit Current	(Isc)	11.43 A	11.50 A	11.56 A
MPP Voltage	(Vmp)	29.80 V	30.00 V	30.20 V
MPP Current	(Imp)	10.67 A	10.73 A	10.78 A

* Irradiance 800 w/m², ambient temperature 20°C, WS= 1 m/s

ELECTRICAL PARAMETERS AT BIFACIAL NAME PLATE IRRADIANCE (BNPI)

Peak Power	(Pmax)	462 W	468 W	473 W
Open Circuit Voltage	(Voc)	37.89 V	38.07 V	38.25 V
Short Circuit Current	(Isc)	15.68 A	16.25 A	15.86 A
MPP Voltage	(Vmp)	31.36 V	31.55 V	31.73 V
MPP Current	(Imp)	14.73 A	14.83 A	14.91 A

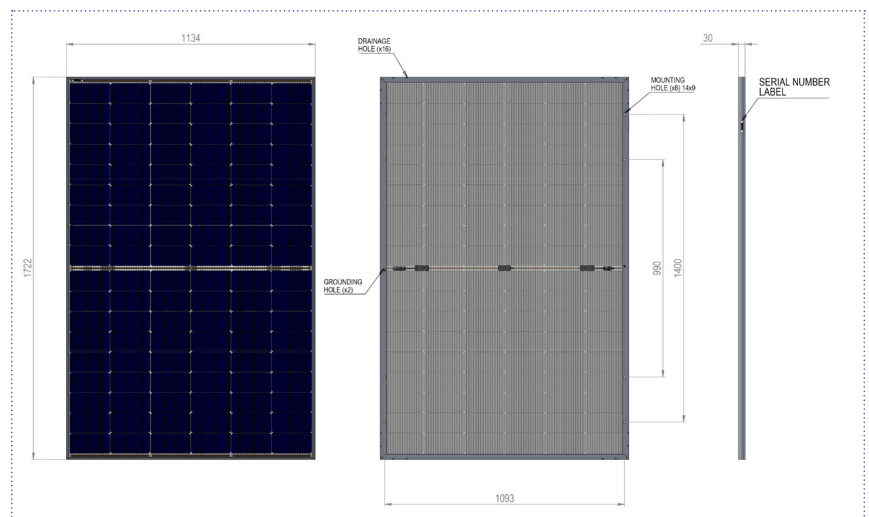
* Irradiance 1000 w/m², 135W/m² e 20°C, WS= 1 m/s

TEMPERATURE COEFFICIENT

Pmax Temperature Coefficient	-0.289% / °C
Voc Temperature Coefficient	-0.244% / °C
Isc Temperature Coefficient	0.045% / °C

MECHANICAL DATA

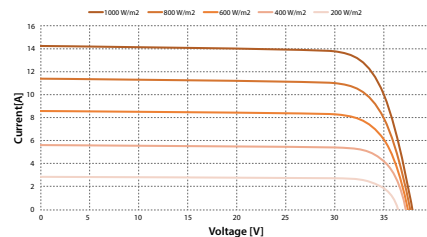
Maximum Load	5400 Pa
Dimensions (mm)	1722 x 1134 x 30
Weight (Kg)	24.3
Solar cells type	N type Mono
No. solar cells	108 (6x18)
Dim. solar cells	182x91mm +/-1mm



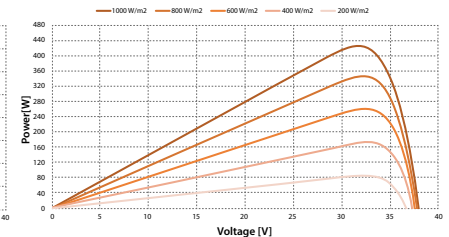
GENERAL INFORMATION

Front Glass	Tempered solar glass 2.0 mm
Back Glass	Semi-tempered glass 2.0 mm
Frame	Anodized aluminum alloy, with twin-wall profile and drainage holes
Junction Box	IP68 Rated with 3 Bypass diodes
Output Cable	4.0mm², 1100mm length, MC4 compatible connectors

I-V Curves of PV module (425 W)



P-V Curves of PV module (425 W)



PACKING CONFIGURATION

Module per Pallet	36 pcs.
Modules per container 40'HQ	936 pcs.

Product properties not specified are at the sole discretion of Sunerg Solar S.r.l.

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