

X-HALF CUT N-TYPE serie TOPCon + single glass

410/440_{Wp}
Power

TOPCon +
Technology Innovation

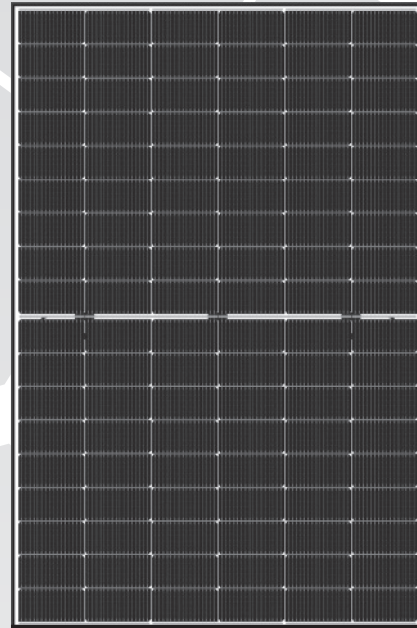
Class 1
Fire Reaction

22.54%
Efficiency

2400Pa
wind load

5400Pa
snow load

-0.300%/°C
Temperatura coefficiente



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:

- **30 years linear power Warranty**
- **99%** at the end of the **1st** year
- **89,4%** at the end of the **30th** year

Product Warranty:

- **15 years product Warranty**

CORRESPOND TO

| UNI 9177 | PV CYCLE | CE |

UNI EN ISO 9001:2015
UNI EN ISO 14001:2015
UNI EN BS OHSAS 45001:2018

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

ELECTRICAL DATA (STC)*

		XMHCTO410KBW+H	XMHCTO415KBW+H	XMHCTO420KBW+H	XMHCTO425KBW+H	XMHCTO430KBW+H	XMHCTO435KBW+H	XMHCTO440KBW+H
Open circuit Voltage	(Voc)	37.73 V ±3%	37.92 V ±3%	38.11 V ±3%	38.30 V ±3%	38.49 V ±3%	38.68 V ±3%	38.87 V ±3%
Voltage at Pmax.	(Vmp)	31.13 V	31.32 V	31.51 V	31.70 V	31.88 V	32.06 V	32.24 V
Short-circuit current	(Isc)	13.91 A ±3%	13.99 A ±3%	14.07 A ±3%	14.15 A ±3%	14.23 A ±3%	14.31 A ±3%	14.39 A ±3%
Current at Pmax.	(Imp)	13.17 A	13.25 A	13.33 A	13.41 A	13.49 A	13.57 A	13.65 A
Nominal Peak Power (Pmax)		410 Wp	415 Wp	420 Wp	425 Wp	430 Wp	435 Wp	440 Wp
Module Efficiency		21.00%	21.25%	21.51%	21.76%	22.02%	22.28%	22.54%
Power output tolerance		0 + 3W						
Maximum voltage		1500 V						
Maximum series fuse rating		25 A						
Operating Temperature		- 40°C ~ 85°C						

Tolerance electric measurement and Power output ±3%

ELECTRICAL DATA (NMOT)**

Peak Power (Pmax/W)	308.0	312.0	316.0	320.0	323.0	326.0	329.0
Maximum Power Voltage (Vmp)	29.06	29.21	29.34	29.50	29.63	29.76	29.89
Maximum Power Current(Imp)	10.61	10.68	10.76	10.83	10.91	10.99	11.07
Open Circuit Voltage (Voc)	35.84 ±3%	36.02 ±3%	36.20 ±3%	36.38 ±3%	36.56 ±3%	36.74 ±3%	36.92 ±3%
Short Circuit Current (Isc)	11.23 ±3%	11.29 ±3%	11.36 ±3%	11.42 ±3%	11.49 ±3%	11.56 ±3%	11.63 ±3%

* STC (Standard test conditions)

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

**NMOT (Standard test conditions)

Irradiance 800 w/m², temperature 20°C, AM= 1.5
wind speed 1 m/s

TEMPERATURE COEFFICIENT

NOCT	45°C±2°C
Pmax Temperature Coefficient	-0.300%/ °C
Voc Temperature Coefficient	-0.250%/ °C
Isc Temperature Coefficient	0.046% / °C

MECHANICAL CHARACTERISTIC

Maximum Load	5400 Pa / 2400 Pa
Dimensions (mm)	1722 x 1134 x 30
Weight (Kg)	21.5
Solar cells type	N type Mono
No. solar cells	108

PACKING CONFIGURATION

Module per Pallet	36/37 pcs.
Modules per container 40'HQ	936/962 pcs.

GENERAL INFORMATION

Glass	Tempered, 3.2 mm high transmission, low iron
Frame	Anodized aluminum alloy, black coating
Junction Box	IP68
Output Cable	4.0mm ² , 300mm/customized

Sunerg Solar S.r.l. reserves the right to make changes to the technical data of the product without prior notice.

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