

Presentation

A premium photovoltaic solar panel, certified for its quality and with high efficiency.

This innovative technology, TOPCon N type solar cells, cell dimensions 182*182 mm

TOPCon cells offer improved efficiency, better low light performance and increased durability compared to other types of solar cells.

The perfect solution for customers looking for a return on investment.

Product Advantages

MBB half-cut cell technology
A new circuit design, with lower internal current and lower Rs loss, Ga-doped wafer, attenuation <2% (1st year) / ≤0.55% (linear)

Significantly lower the risk of hot spot
Special circuit design with much lower hot spot temperature

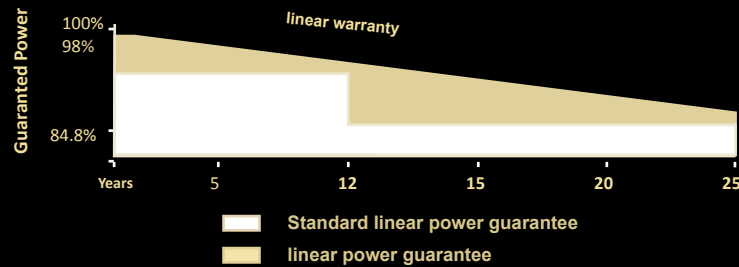
Lower LCOE
2% more power generation, lower LCOE

Anti PID
Excellent Anti-PID performance
2 times of industry standard Anti-PID test by TUV SUD

IP68 junction box
High waterproof level



Performance Warranty



- 2.00%
First year power degradation

- 0.55%
Annual degradation

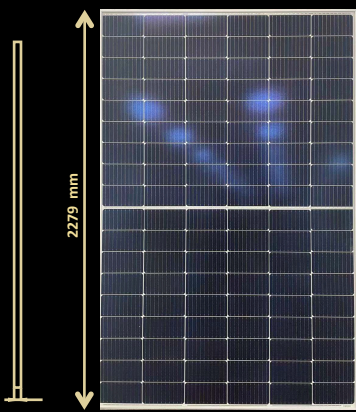
Product Certification

Certification IEC	IEC 61215 & IEC 61730
Certification ISO	ISO 9001 & ISO 14001
Certification	CE
Certification ETN	K2 System SingleRail / SolidRail Renusol MS+ / VS+ Approval pending Approval pending
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Power Tolerance(W)	+0/+5
Garanties	15 years Materials and workmanship warranty 25 years Linear power warranty
Certification TUV	No. Z2 118390 0001 Rev. 00



CERTIFICATE N° Z2 118390 0001 Rév. 01

TECHNICAL DRAWINGS



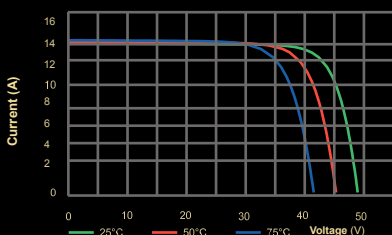
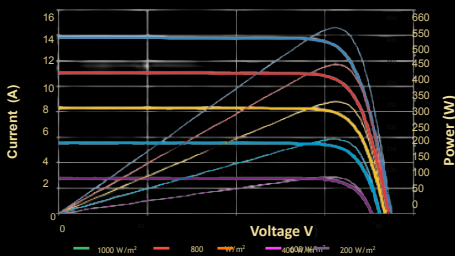
Section A-A Section B-B



Note mm (inch)

I-V CURVE

Current-Voltage & Power-Voltage Curve



ELECTRICAL PARAMETERS

Maximum Power (Pmax/W)*	555 W	560 W	565 W	570 W	575 W
Operating Voltage (Vmp/V)	42.5	42.7	42.9	43.1	43.3
Operating Current (Imp/A)	13.06	13.12	13.18	13.23	13.28
Open-Circuit Voltage (Voc/V)	51.2	51.4	51.6	51.8	52.0
Short-Circuit Current (Isc/A)	13.81	13.87	13.94	14.01	14.08
Module Efficiency ηm(%)	21.2	21.7	21.9	22.1	22.2
Power Tolerance(W)	0~+5				

STC: Irradiance 1000W/m², module temperature 25 °C, AM=1.5; *Measuring tolerance: ±3%

Performance at NMOT

Maximum Power (Pmax/W)	422 W	426 W	430 W	434W	438 W
Open-Circuit Voltage (Voc/V)	40.0	40.2	40.4	40.6	40.8
Operating Current (Imp/A)	10.55	10.6	10.65	10.69	10.74
Open-Circuit Voltage (Voc/V)	48.5	48.7	48.9	49.1	49.3
Short-Circuit Current (Isc/A)	11.09	11.15	11.21	11.26	11.32

NMOT : Irradiance 800W/m², température ambiante 20°C, AM=1.5 , vitesse du vent 1m/s

MECHANICAL SPECIFICATION

Cell Type	N-Type TOPCon Monocrystalline
Cell Dimensions	182*182mm
Cell Arrangement	144 (6*24)
Weight	29kg
Module Dimensions	2279*1134*35mm
Cable Length	Cable length 350mm or customized length
Cable Cross Section Size	TÜV: 4mm ²
Front Glass	3.2mm AR Coating Tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration	31pcs/Carton, 620 pcs/40HQ
Frame	Anodized Aluminium Alloy
Junction Box	IP68

OPERATING CONDITIONS

Maximum System Voltage	1000V/1500V/DC (IEC)
Operating Temperature	-40°C to +85°C
Maximum Series Fuse	25A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	MC4 compatible

TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.30%/°C
Temperature Coefficient Voc	-0.25%/°C
Coefficient de température Isc	+0.046%/°C
NMOT	42±2°C