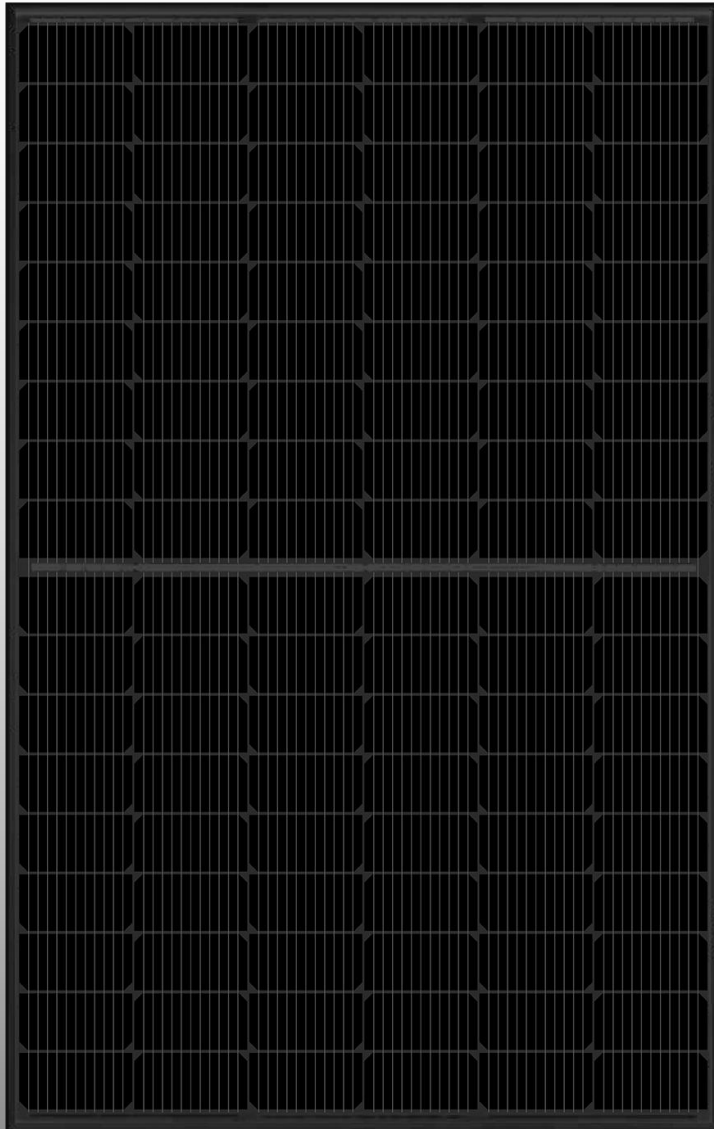


N-TOPCon Cell 108 Half-Cell Layout



Advantages

High Power Output

- Better light trapping and current collection to improve module power output and reliability

Outstanding Low Light Performance

- Higher power output even under low-light environments like on cloudy or foggy days

Zero LID (Light Induced Degradation)

- N-type solar cell has no LID naturally which can increase power generation

Withstanding Harsh Environment

- Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline

Better Temperature Coefficient

- Higher power generation under working conditions, thanks to passivating contact cell technology

PID Resistance

- Excellent Anti-PID performance guarantee via optimized mass-production process and materials control

435W

Max Power output

22.28%

Max Panel Efficiency

Zero LID

can increase power generation

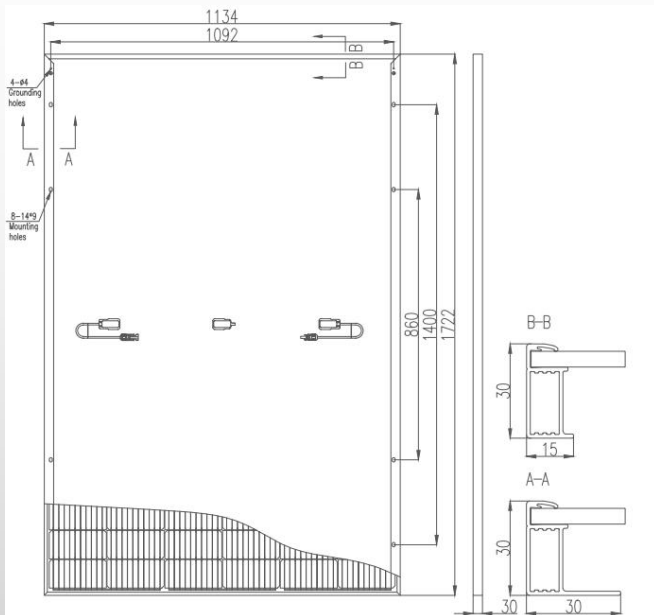
0~+5W

Power Output Tolerance

TOPCon

UP-N410-430MB

Maximum power of the TOPCon series : 700W



Mechanical Characteristics

Number of cells	108pcs
Size of cell(mm)	182*91
Type of cell	N-type Mono
Thickness of glass(mm)	3.2
Type of frame	Anodized aluminum alloy
Junction box	IP68
Size of module(mm)	1722*1134*30
Weight(kg)	20.2
Cables/ connectors	4mm ² , MC4 compatible
Length of Cabel	Portrait : +300mm/-300mm

Electrical Characteristics

Power level	410	415	420	425	430
Pmax(W)	410	415	420	425	430
Vmp(V)	31.14	31.33	31.51	31.70	31.88
Imp(A)	13.17	13.25	13.33	13.41	13.49
Voc(V)	37.70	37.89	38.08	38.26	38.44
Isc(A)	13.92	14.00	14.08	14.16	14.24
Module efficiency(%)	20.99	21.25	21.50	21.76	22.02
Maximum system voltage(V)	1500				
Fuse Rating(A)	25				
Temperature coefficient Pmax(% / °C)	-0.30				
Temperature coefficient Isc (% / °C)	0.046				
Temperature coefficient Voc (% / °C)	-0.25				
STC:Irradiance 1000W/m ² ,module temperature 25°C, AM=1.5					

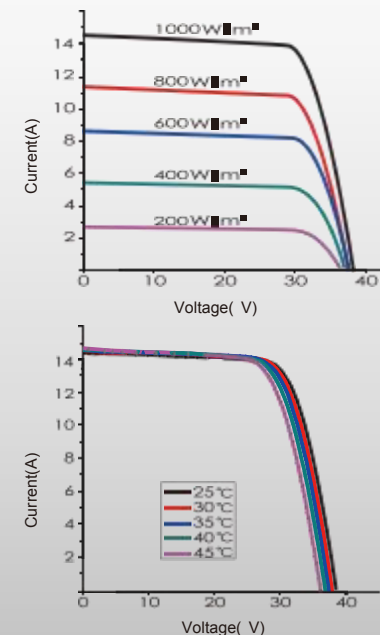
Working Characteristics

Power level	410	415	420	425	430
Pmax(W)	308	312	316	320	323
Vmp(V)	29.03	29.22	29.37	29.55	29.61
Imp(A)	10.61	10.68	10.76	10.83	10.91
Voc(V)	35.81	36.00	36.17	36.35	36.53
Isc(A)	11.24	11.30	11.37	11.43	11.50
Power tolerance(%)	0~+3				
NOCT(°C)	44±2				
NOCT:Conditions:Irradiance 800W/m ² ,ambient temperature 20°C, wind speed 1m/s					

Maximum Ratings

Operating Temperature(°C)	-40~85
Operating humidity(°C)	5~85
Allowable Hail Load	25mm ice-ball with velocity of 23m/s

I-V Curv



Packing Configuration

Pieces per pallet	36
Size of packing (mm)	1750*1135*1255
Weight of packing (kg)	772
Pieces per container	936
Size of container	40'HC



TOPCon