

410-430N-54/B

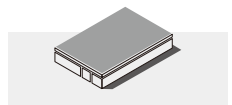
Adopting N-type TOPCon technology on M10 wafer, achieves high efficiency and ultra-low degradation, and perfectly matches mainstream system design and mature logistics scheme.

Advanced module technologies are adopted like multi-busbar, half cell, non-destructive cutting, and intelligent soldering.

All-black module perfectly combines with the building.



Residential



Commercial



High Efficiency



Low LCOE



Low Degradation



Better Temperature Coefficients

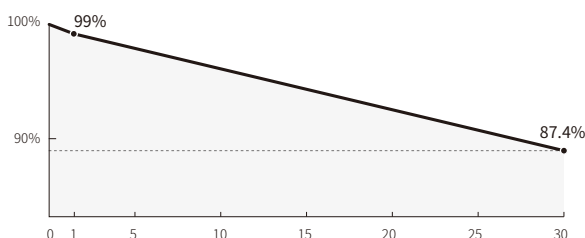
Warranty

Product warranty 12 Years

1st year degradation $\leq 1\%$

Linear power warranty 30 Years

Annual degradation $\leq 0.40\%$



Certificates

IEC 61215, IEC 61730

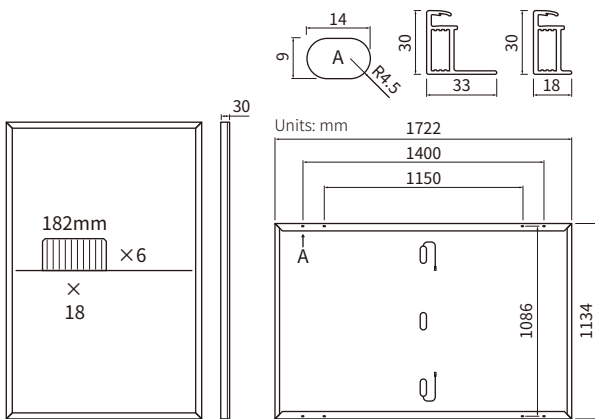
ISO 9001:2015 Quality management systems

ISO 14001:2015 Environmental management systems

ISO 45001:2018 Occupational health and safety management systems



410-430N-54/B



Mechanical Parameters

Cell type	Mono TOPCon
No. of cells	108 (6*18)
Junction box	IP68, 3 diodes
Cable	4mm ² ; 300mm(+)/400mm(-) or customized
Glass	Single glass, 3.2mm
Frame	Anodized aluminum alloy frame
Weight	21.4kg±3%
Dimensions	1722mm x 1134mm x 30mm
Packaging	36 pcs/pallet, 936 pcs/40HQ container

Electrical Parameters

STC: AM1.5 1000W/m² 25°C NMOT: AM1.5 800W/m² 20°C 1m/s

Module type	410N-54/B		415N-54/B		420N-54/B		425N-54/B		430N-54/B	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Rated maximum power Pmax (W)	410	308	415	312	420	316	425	320	430	324
Open circuit voltage Voc (V)	37.80	35.85	38.00	36.04	38.19	36.22	38.38	36.40	38.57	36.58
Short circuit current Isc (A)	13.88	11.24	13.96	11.30	14.04	11.38	14.12	11.44	14.20	11.51
Maximum power voltage Vmp (V)	31.16	29.01	31.37	29.19	31.56	29.35	31.74	29.53	31.93	29.67
Maximum power current Imp (A)	13.16	10.62	13.23	10.69	13.31	10.77	13.39	10.84	13.47	10.92
Module efficiency (%)	21.0		21.3		21.5		21.8		22.0	

Temperature Coefficients

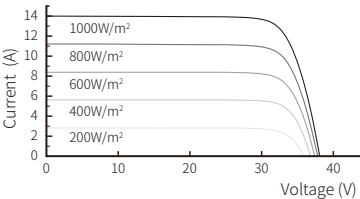
Temperature coefficient α _{Isc}	+0.046%/°C
Temperature coefficient β _{Voc}	-0.250%/°C
Temperature coefficient γ _{Pmax}	-0.300%/°C

Operating Conditions

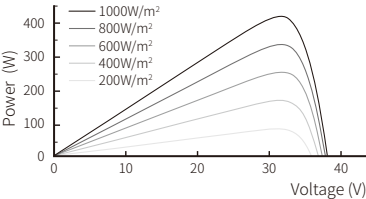
Operating temperature	-40°C~+70°C	Nominal operating cell temperature	45±2°C
Pmax, Voc, Isc tolerance	±3%	Front side Max. static test loading	5400 Pa
Power selection	0~+5W	Rear side Max. static test loading	2400 Pa
Maximum system voltage	1500V DC		
Maximum series fuse rating	25A		

Graphs (420N-54/B)

Current - Voltage Curve



Power - Voltage Curve



Current - Voltage Curve

