



YTM410-430N-54/D

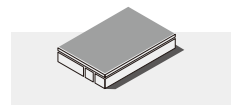
Adopting N-type TOPCon technology on M10 wafer, achieves high efficiency and ultra-low degradation, and perfectly matches mainstream system design and mature logistics scheme.

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

Bifacial modules bring additional power generation gain to the system.



Residential



Commercial



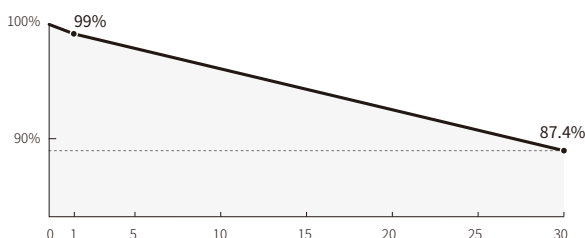
Warranty

Product warranty 12 Years

1st year degradation $\leq 1\%$

Linear power warranty 30 Years

Annual degradation $\leq 0.40\%$



Certificates

IEC 61215, IEC 61730

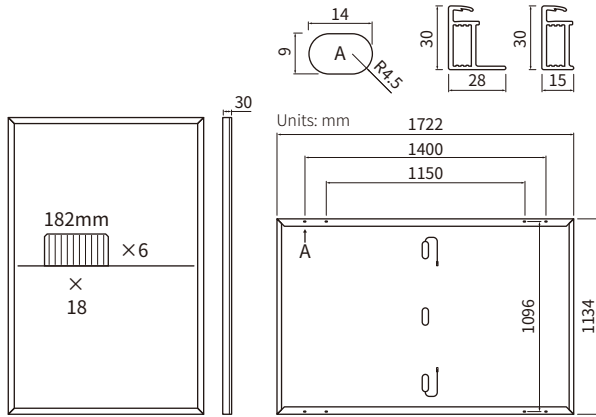
ISO 9001:2015 Quality management systems

ISO 14001:2015 Environmental management systems

ISO 45001:2018 Occupational health and safety management systems



YTM410-430N-54/D



Mechanical Parameters

Cell type	Mono TOPCon
No. of cells	108 (6*18)
Junction box	IP68, 3 diodes
Cable	4mm ² ; (±)1200mm or customized
Glass	Dual glass, 2.0mm/2.0mm
Frame	Anodized aluminum alloy frame
Weight	23.7kg ±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	YTM410N-54/D		YTM415N-54/D		YTM420N-54/D		YTM425N-54/D		YTM430N-54/D	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Rated maximum power P _{max} (W)	410	308	415	312	420	316	425	320	430	324
Open circuit voltage Voc (V)	37.69	35.82	37.88	36.00	38.09	36.24	38.28	36.44	38.50	36.56
Short circuit current I _{sc} (A)	13.72	11.22	13.78	11.28	13.82	11.36	13.89	11.42	13.97	11.52
Maximum power voltage V _{mp} (V)	31.56	28.98	31.76	29.16	31.94	29.32	32.18	29.50	32.38	29.62
Maximum power current I _{mp} (A)	12.99	10.63	13.07	10.70	13.15	10.78	13.21	10.85	13.28	10.94
Module efficiency (%)	21.0		21.3		21.5		21.8		22.0	

Bifacial gain 10%	YTM410N-54/D		YTM415N-54/D		YTM420N-54/D		YTM425N-54/D		YTM430N-54/D	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Rated maximum power P _{max} (W)	451		457		462		468		473	
Open circuit voltage Voc (V)	37.69		37.88		38.09		38.28		38.50	
Short circuit current I _{sc} (A)	15.09		15.16		15.20		15.28		15.37	
Maximum power voltage V _{mp} (V)	31.56		31.76		31.94		32.18		32.38	
Maximum power current I _{mp} (A)	14.29		14.38		14.47		14.53		14.61	

Temperature Coefficients

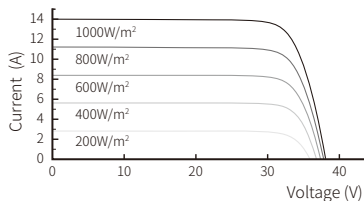
Temperature coefficient α _{Isc}	+0.046%/°C
Temperature coefficient β _{Voc}	-0.250%/°C
Temperature coefficient γ _{Pmax}	-0.300%/°C

Operating Conditions

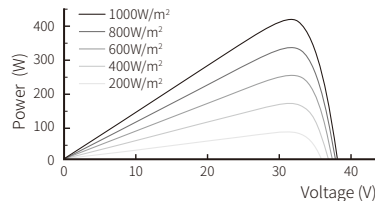
Operating temperature	-40°C~+70°C	Nominal operating cell temperature	45±2°C
P _{max} , Voc, I _{sc} tolerance	±3%	Front side Max. static test loading	5400 Pa
Power selection	0~+5W	Rear side Max. static test loading	2400 Pa
Maximum system voltage	1500V DC	Bifaciality	80±5%
Maximum series fuse rating	30A		

Graphs (YTM420N-54/D)

Current - Voltage Curve



Power - Voltage Curve



Current - Voltage Curve

