

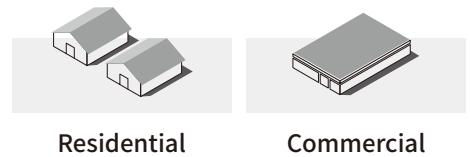


YTM455-475N-60/D

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.

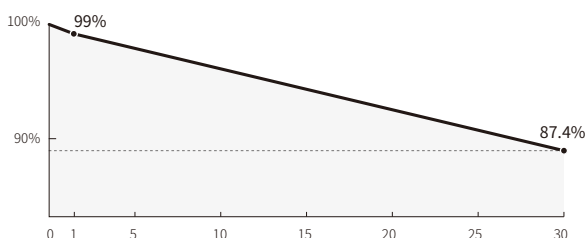
Advanced module technologies are adopted like multi-busbar, half cell, non-destructive cutting, and intelligent soldering.

Bifacial modules bring additional power generation gain to the system.



Warranty

Product warranty 12 Years 1st year degradation $\leq 1\%$
Linear power warranty 30 Years Annual degradation $\leq 0.40\%$

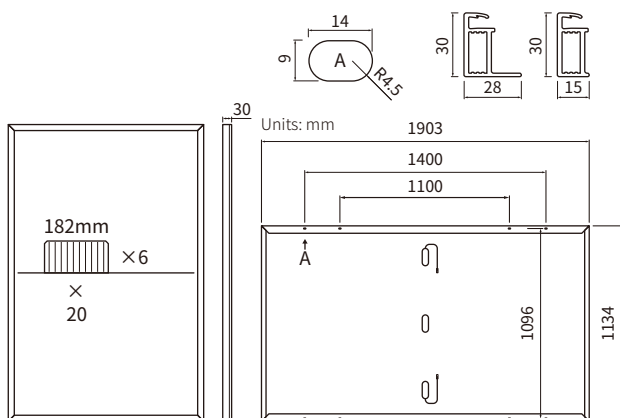


Certificates

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



YTM455-475N-60/D



Mechanical Parameters

Cell type	Mono TOPCon
No. of cells	120 (6*20)
Junction box	IP68, 3 diodes
Cable	4mm ² ; 300mm(+)/400mm(-) or customized
Glass	Dual glass, 2.0mm/2.0mm
Frame	Anodized aluminum alloy frame
Weight	26.3kg ±3%
Dimensions	1903mm x 1134mm x 30mm
Packaging	36 pcs/pallet, 864 pcs/40HQ container

Electrical Parameters

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

Module type	YTM455N-60/D		YTM460N-60/D		YTM465N-60/D		YTM470N-60/D		YTM475N-60/D	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Rated maximum power P _{max} (W)	455	342	460	346	465	350	470	354	475	358
Open circuit voltage Voc (V)	41.78	39.78	41.98	39.9	42.16	40.08	42.34	40.24	42.52	40.4
Short circuit current I _{sc} (A)	13.94	11.22	14.02	11.28	14.1	11.34	14.18	11.42	14.26	11.48
Maximum power voltage V _{mp} (V)	34.55	32.52	34.78	32.7	34.89	32.9	35.05	33.08	35.21	33.28
Maximum power current I _{mp} (A)	13.17	10.52	13.23	10.58	13.33	10.64	13.41	10.7	13.49	10.76
Module efficiency (%)	21.1		21.3		21.5		21.8		22.0	

Bifacial gain 10%	YTM455N-60/D		YTM460N-60/D		YTM465N-60/D		YTM470N-60/D		YTM475N-60/D	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Rated maximum power P _{max} (W)	501		506		512		517		523	
Open circuit voltage Voc (V)	41.78		41.98		42.16		42.34		42.52	
Short circuit current I _{sc} (A)	15.33		15.42		15.51		15.60		15.69	
Maximum power voltage V _{mp} (V)	34.55		34.78		34.89		35.05		35.21	
Maximum power current I _{mp} (A)	14.49		14.55		14.66		14.75		14.84	

Temperature Coefficients

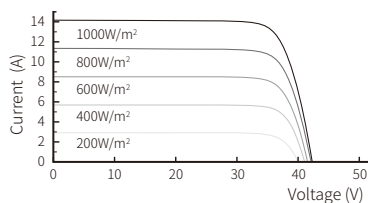
Temperature coefficient α _{Isc}	+0.046%/°C
Temperature coefficient β _{Voc}	-0.250%/°C
Temperature coefficient γ _{Pmax}	-0.300%/°C

Operating Conditions

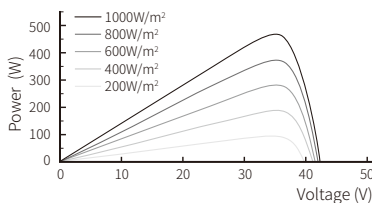
Operating temperature	-40°C~+70°C	Nominal operating cell temperature	45±2°C
P _{max} , Voc, I _{sc} tolerance	±3%	Front side Max. static test loading	5400 Pa
Power selection	0~+5W	Rear side Max. static test loading	2400 Pa
Maximum system voltage	1500V DC	Bifaciality	80±5%
Maximum series fuse rating	30A		

Graphs (YTM470N-60/D)

Current - Voltage Curve



Power - Voltage Curve



Current - Voltage Curve

