

TOPCon N type Mono Crystalline Solar Module QPM 460/465/470/475/480T



KEY FEATURES



Strong Mechanical Strength
Pass wind load test of 2400Mpa and snow load test of 5400Mpa



Lower attenuation
N-type components have better reliability and lower LID/LETID attenuation



PID resistance adaptation
The attenuation probability of PID phenomenon is minimized through solar cell production technology optimization and material control



Harsh environmental adaptation
Third party certification for salt spray and ammonia corrosion tests



Multiple busbar and Half cell technique
More light utilization and current collection capabilities, effectively improving product power output and reliability

CERTIFICATE

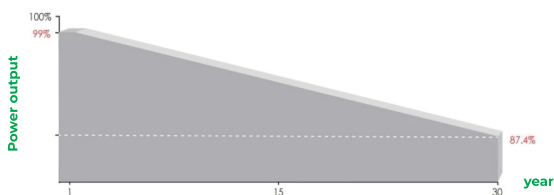


30 years

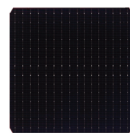
Linear power output warranty

12 years

Product warranty on materials and workmanship



Linear degradation of 0.4% per year over 30 years



0~+3% POWER TOLERANCE

High efficiency TOPCon N - type solar module

Long and reliable quality assurance

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality management system

ISO14001:2015: Environmental management system

ISO45001:2018: Occupational health and safety management system

TECHNICAL PARAMETERS

Model Type	QPM-460T		QPM-465T		QPM-470T		QPM-475T		QPM-480T	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	460	346	465	350	470	353	475	357	480	361
Open Circuit Voltage (Voc)	42.05	39.94	42.22	40.10	42.38	40.25	42.54	40.41	42.71	40.57
Short Circuit Current (Isc)	13.99	11.29	14.07	11.36	14.15	11.42	14.23	11.49	14.31	11.55
Maximum Power Voltage (Vmp)	34.72	32.60	34.89	32.77	35.05	32.94	35.21	33.10	35.38	33.27
Maximum Power Current (Imp)	13.25	10.61	13.33	10.67	13.41	10.73	13.49	10.79	13.57	10.85
Module Efficiency- η_m (%)	21.24		21.6		21.8		22.0		22.2	
Operational Temperature	-40°C~+85°C									
Maximum System Voltage	1500VDC									
Maximum Series Fuse Rating	25A									
Power Tolerance	0~+3%									
Temperature Coefficient of Pmax	-0.310%/°C									
Temperature Coefficient of Voc	-0.260%/°C									
Temperature Coefficient of Isc	+0.046%/°C									
Nominal Operating Cell Temperature	45±2°C									
Safety Class	Class II									
Max Load (Front/back)	5400MPa/2400MPa									

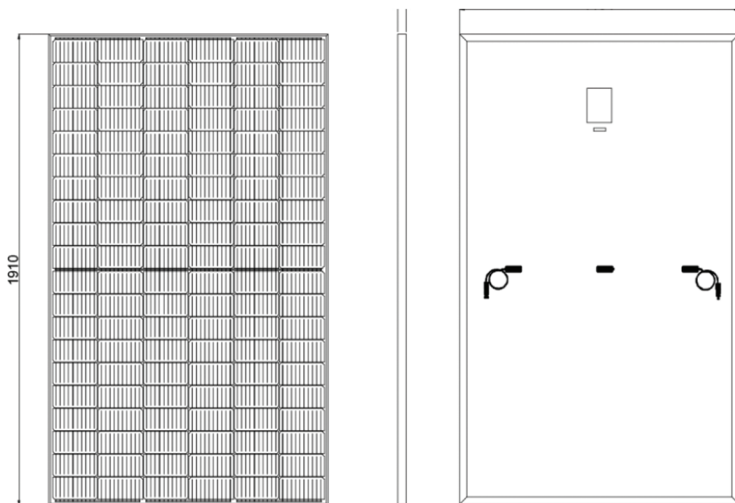
STC: Irradiance 1000 W/m²
NOCT: Irradiance 800 W/m²

Module temperature 25°C
Ambient temperature 25°C

Air Mass = 1.5
Air Mass = 1.5

Wind speed 1 m/s

MECHANICAL DIAGRAMS

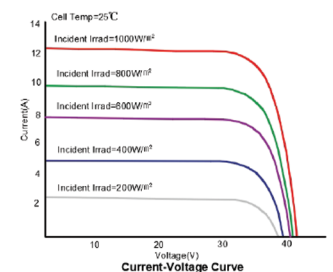
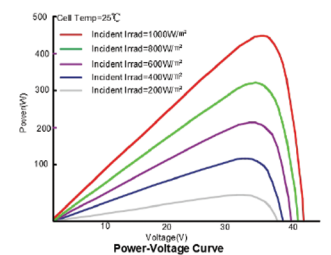
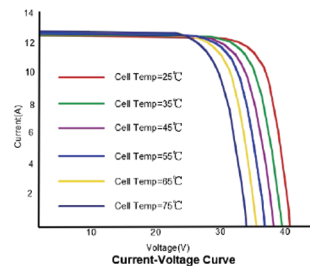


Length: ±2mm
Width: ±2mm
Thickness: ±1mm
Holepitch: ±2mm

PACKING STANDARD

36 pcs/pallet
40GP: 24 pallets/container
864 pcs/container

IV CURVE



SPECIFICATION

Cell type	N type mono crystalline 182"
Half-cell quantity	120pcs (6x20)
Dimension	1916(±2)×1134×30 mm
Weight	24 kg±3%
Glass	3.2 mm
Frame	Sliver/black Anodized Aluminum Alloy
Junction Box	IP68
Cable	300 mm (can be customized)