

# GPM270-310W(60)

## Photovoltaic Modules

Module	GPM270-310W(60)									
Encapsulation	Glass/EVA/Cell/EVA/Backsheet									
Size and Number of cells	156*mm*156mm 60/6*10pcs									
Maximum Power Pmax	W	270	280	285	290	295	300	305	310	
Maximum Power Voltage (Vmp)	V	31.20	31.50	31.80	32.10	32.30	32.50	32.70	33.70	
Maximum Power Current (Imp)	A	8.65	8.89	8.96	9.03	9.13	9.23	9.48	9.20	
Open Circuit Voltage (Voc)	V	37.44	37.80	38.16	38.52	38.76	39.00	39.24	40.44	
Short Circuit Current (Isc)	A	9.09	9.33	9.41	9.49	9.59	9.70	9.96	9.66	
Cell Efficiency	%	18.40	18.66	19.08	19.56	19.88	20.12	20.82	21.20	
Module Efficiency	%	16.76	17.38	17.70	18.01	18.32	18.63	18.94	19.25	
Tolerance	0+3%									
Max System Open Circuit Voltage	1500V									
Max Series Fuse Rating	15A									
Junction Box (protection degree)	≥IP67									
Dimension	1640*992*35mm									
Weight	17.5kg									
Operate Temperature Scope	-40/+85°C									
Relative Humidity	0~100%									
Frame Thinkness	35/40 mm									
Frame Colour	Black/Silver									

Standard Test Conditions[STC]: irradiance 1,000 W/m<sup>2</sup>; AM 1.5; module temperature 25°C. Measuring uncertainty of power is within ±3%. Tolerance of Pmp: 0~+3%. Certified in accordance with IEC61215,IEC61730-1/2.

## Temperature Coefficients

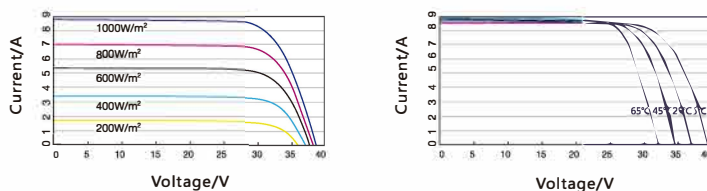
Nominal Operating Cell Temperature(NOCT)	45°C±2°C	
Short Circuit Current Temperature Coefficients	α(Isc)	+0.059%/°C
Open Circuit Voltage Temperature Coefficients	β(Voc)	-0.330%/°C
Peak Power Temperature Coefficients	γ(Pmax)	-0.410%/°C
<b>Output</b>		
Cable 4.0mm <sup>2</sup> (TUV)	Length 900mm	Connector MC4 type

## Advantage

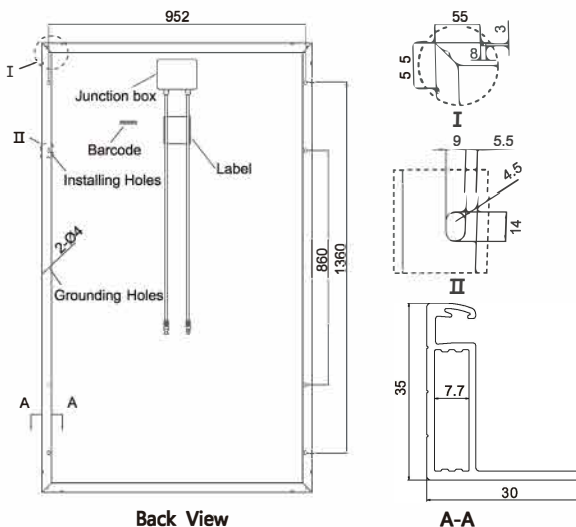
G&P series modules consist of **mono-crystalline** high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA&Backsheet of high quality.

After assembled with anodized aluminum alloy frame, cable and junction box with MC4 connectors, G&P solar modules can be installed easily and work for a long period. At the same time, they can withstand the storm, strong wind and hail impact, etc.

## I-V Curves



## Dimensions



# GPP260-290W(60)

## Photovoltaic Modules

Module	GPP260-290W(60)						
Encapsulation	Glass/EVA/Cell/EVA/Backsheet						
Size and Number of cells	156*mm*156mm 60/6*10pcs						
Maximum Power Pmax	W	260	270	275	280	290	300
Maximum Power Voltage (Vmp)	V	31.20	31.50	31.80	32.10	32.30	32.5
Maximum Power Current (Imp)	A	8.33	8.57	8.65	8.72	8.98	9.23
Open Circuit Voltage (Voc)	V	37.44	37.80	38.16	38.52	38.76	39.00
Short Circuit Current (Isc)	A	8.75	9.00	9.08	9.16	9.43	9.69
Cell Efficiency	%	18.40	18.88	19.21	19.60	20.02	20.44
Module Efficiency	%	15.98	16.60	16.90	17.21	17.83	18.48
Tolerance	0+3%						
Max System Open Circuit Voltage	1500V						
Max Series Fuse Rating	15A						
Junction Box (protection degree)	≥IP67						
Dimension	1640*992*35mm						
Weight	17.5kg						
Operate Temperature Scope	-40/+85°C						
Relative Humidity	0~100%						
Frame Thickness	35/40mm						
Frame Colour	Gold/Brown/Black/Silver						

Standard Test Conditions(STC): irradiance 1,000 W/m<sup>2</sup>; AM 1.5; module temperature 25°C. Measuring uncertainty of power is within ±3%. Tolerance of Pmp: 0~+3%. Certified in accordance with IEC61215,IEC61730-1/2.

## Temperature Coefficients

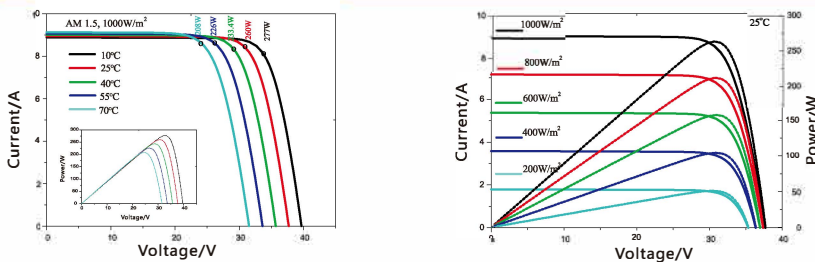
Nominal Operating Cell Temperature(NOCT)	45°C±2°C	
Short Circuit Current Temperature Coefficients	α(Isc)	+0.045%/°C
Open Circuit Voltage Temperature Coefficients	β(Voc)	-0.292%/°C
Peak Power Temperature Coefficients	γ(Pmax)	-0.408%/°C
<b>Output</b>		
Cable 4.0mm <sup>2</sup> (TUV)	Length 900mm	Connector MC4 type

## Advantage

G&P series modules consist of **poly-crystalline** high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA&Backsheet of high quality.

After assembled with anodized aluminum alloy frame, cable and junction box with MC4 connectors, G&P solar modules can be installed easily and work for a long period. At the same time, they can withstand the storm, strong wind and hail impact, etc.

## I-V Curves



## Dimensions

