

Photovoltaic Modules

Module	GPP140-160W(36)					
Encapsulation	Glass/EVA/Cell/EVA/Backsheet					
Maximum Power Pmax	W	140	145	150	155	160
Maximum Power Voltage (Vmp)	V	18.40	18.40	18.60	18.80	19.00
Maximum Power Current (Imp)	A	7.61	7.88	8.06	8.24	8.42
Open Circuit Voltage (Voc)	V	22.08	22.08	22.32	22.56	22.80
Short Circuit Current (Isc)	A	9.13	9.46	9.68	9.89	10.11
Cell Efficiency	%	15.90	16.40	17.10	17.50	17.90
Module Efficiency	%	15.41	15.43	15.44	15.46	15.50
Tolerance	0+3%					
Max System Open Circuit Voltage	600V					
Junction Box (protection degree)	≥IP67					
Dimension	1480*680*35mm					
Weight	10.5kg					
Operate Temperature Scope	-40/+85°C					
Relative Humidity	0~100%					
Frame Thinkness	35mm					
Frame Colour	Gold/Brown/Black/Silver					

Standard Test Conditions(STC): irradiance 1,000 W/m²; AM 1.5; module temperature 25°C. Measuring uncertainty of power is within ±3%. Tolerance of Pmpp: 0~+3%. Certified in accordance with IEC61215,IEC61730-1/2.

Temperature Coefficients

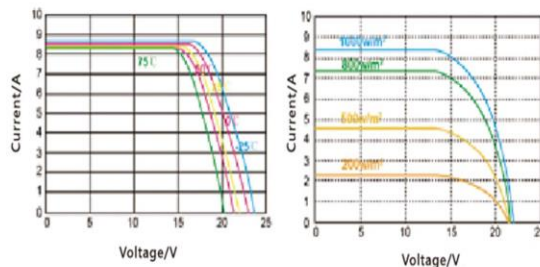
NOCT	45°C±2°C	
Short Circuit Current Temperature Coefficients	$\alpha(I_{sc})$	+0.045%/°C
Open Circuit Voltage Temperature Coefficients	$\beta(V_{oc})$	-0.292%/°C
Peak Power Temperature Coefficients	$\gamma(P_{max})$	-0.408%/°C
Nominal Operating Cell Temperature(NOCT) : 45°C±2°C		
Output		
Cable 4.0mm ² (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

