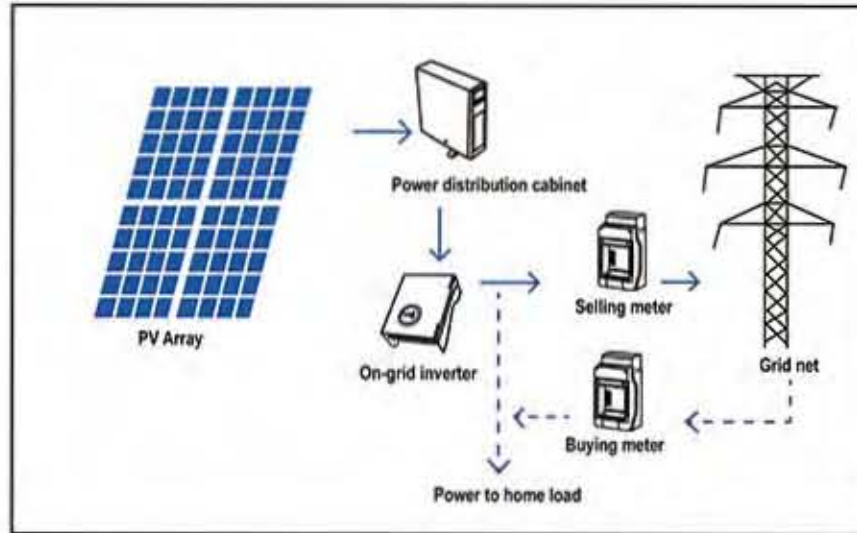
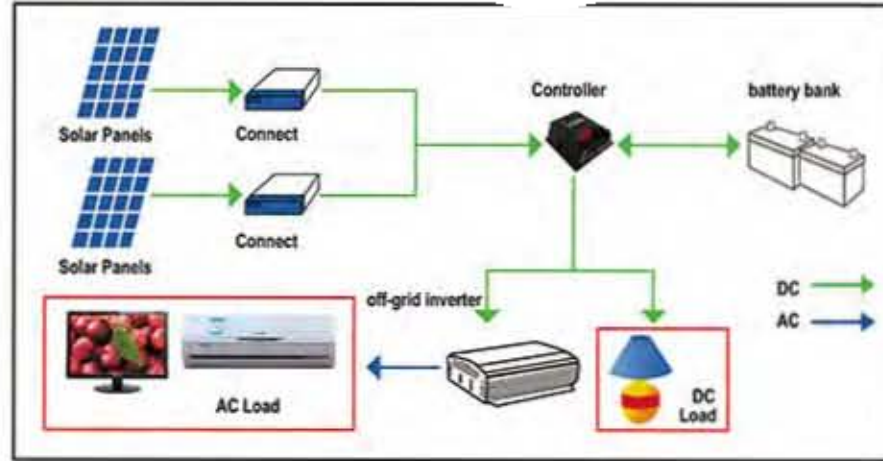




Off-grid systems

An off-grid PV system, generally called a stand-alone system, is designed to provide electricity to a home or business without drawing on supplemental power from the electrical utility. The system consists of a PV array, controller and safety equipment, a battery bank, and usually an inverter.

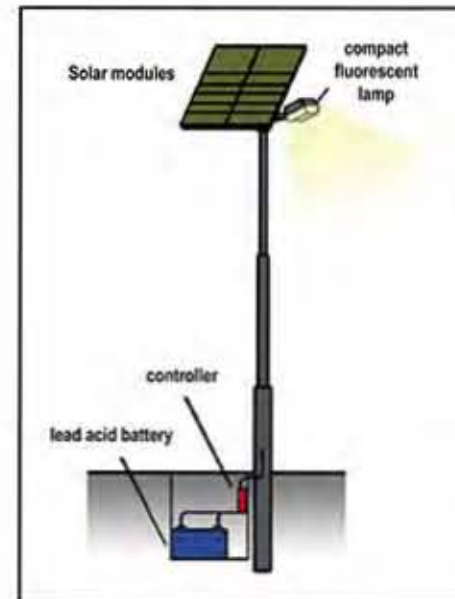


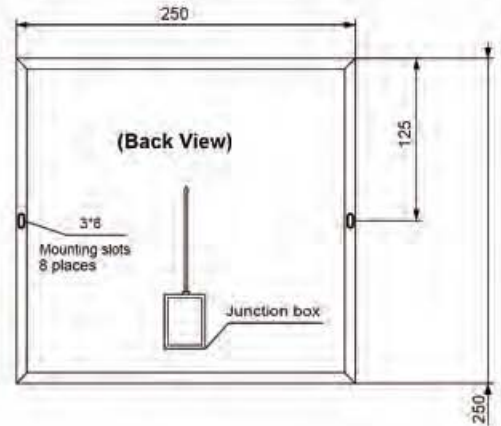
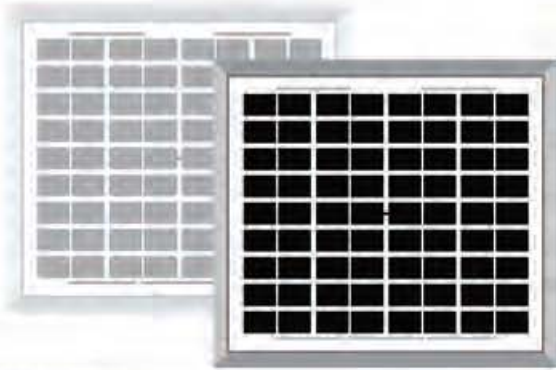
On-Grid PV Systems

An on-grid PV system is also called grid connected PV system. It puts excess power into the supply grid, driving the meter backwards. The system basically consists of PV modules and a grid connected inverter. The modules are usually roof mounted and generated electricity that is either used in the home or sold back to the national grid.

Street Light System

Solar street light is a stand-alone system which charges battery in the daytime and power the LED lights in the evening. The system mainly consists of solar panels, charge controller with light/time-control function, batteries sealed by underground tank, LED lights and an iron pole.





MODULE

Encapsulation		Glass/EVA/Cell/EVA/TPT
Size and Number of cells		17mm*52mm 36/9*4pcs
Maximum Power (Pmax)	W	5.00
Cell efficiency	%	16.80
Module Efficiency	%	12.60
Tolerance	%	±3
Open Circuit Voltage (Voc)	V	21.60
Short Circuit Current (Isc)	A	0.32
Maximum Power Voltage (Vmp)	V	18.00
Maximum Power Current (Imp)	A	0.28
Max.syst.Open Circuit Voltage	V	600
Diodes		1by-pass
Dimension	mm	250*250*18
Weight	kg	0.8
Operate Temp Scope	°C	-40/+85
Relative humidity		0~100%
Frame Thickness	mm	
Frame Colour		Gold / Brown / Black / Aluminum
Quantity/Container		14000pcs/20GP, 29000pcs/40GP, 34000pcs/40HQ

Temperature Coefficients

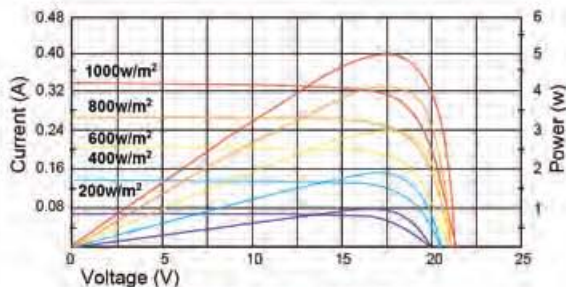
NOCT		45 C ±2 C
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/C
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/C

NOCT: Nominal Operating Cell Temperature date is only for reference.

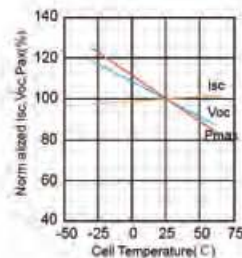
Photovoltaic modules 36pcs 17x52mm mono-crystalline silicon cell

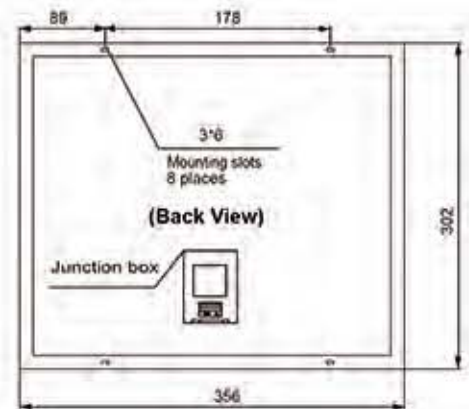
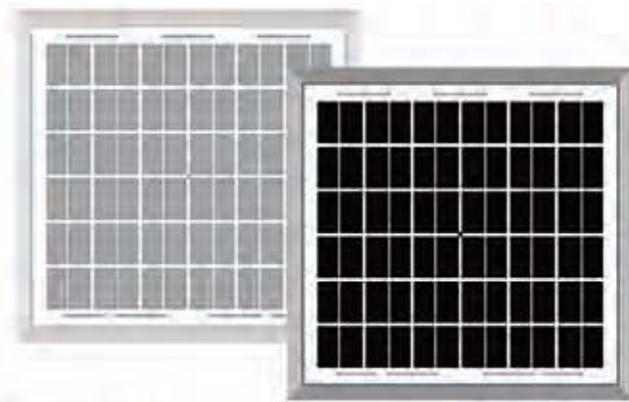
The series modules consist of 36pcs 17x52mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and Laminated with toughened glass, EVA and TPT of high quality.

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.



IRRADIANCE: AM1.5, 1000w/m²





MODULE

Encapsulation	Glass/EVA/Cell/EVA/TPT	
Size and Number of cells	39mm*42mm 36/6*6pcs	
Maximum Power (Pmax)	W	10 15
Cell efficiency	%	14.20 14.80
Module Efficiency	%	13.00 13.50
Tolerance	%	±3
Open Circuit Voltage (Voc)	V	21.60 21.90
Short Circuit Current (Isc)	A	0.64 0.95
Maximum Power Voltage (Vmp)	V	18.00 18.25
Maximum Power Current (Imp)	A	0.56 0.82
Max.syst.Open Circuit Voltage	V	600
Diodes	1by-pass	
Dimension	mm	356*302*25
Weight	kg	1.2
Operate Temp Scope	°C	-40/+85
Relative humidity	0~100%	
Frame Thickness	mm	25
Frame Colour	Gold / Brown / Black / Aluminum	
Quantity/Container	9300pcs/20GP, 19000pcs/40GP, 22000pcs/40HQ	

Temperature Coefficients

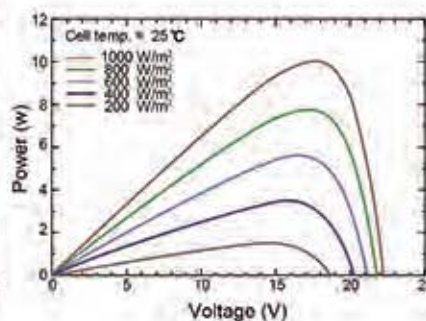
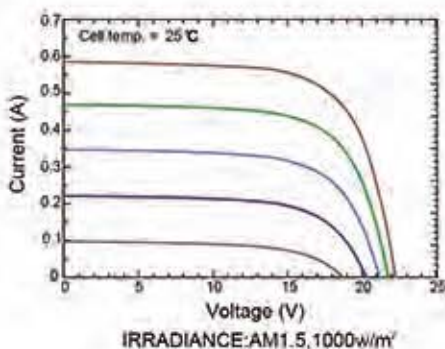
NOCT	45°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C

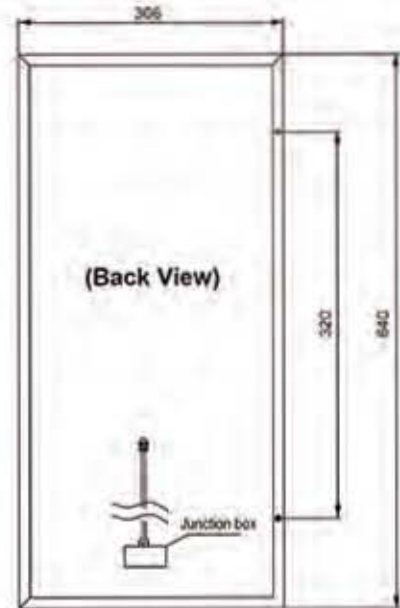
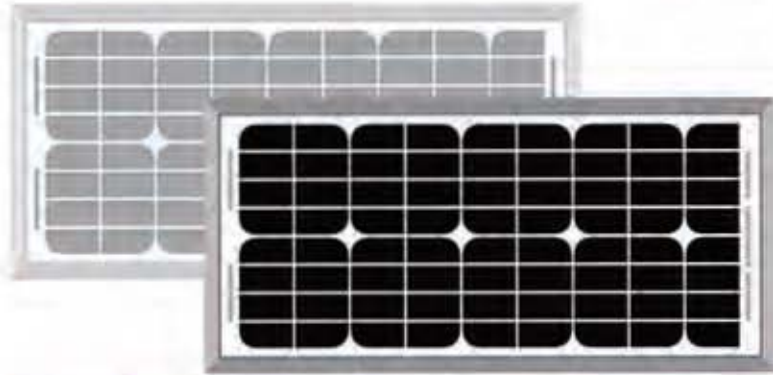
NOCT: Nominal Operating Cell Temperature date is only for reference.

Photovoltaic modules 36pcs 39x42mm mono-crystalline silicon cell

The series modules consist of 36pcs 39x42mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.





MODULE

Encapsulation	Glass/EVA/Cell/EVA/TPT	
Size and Number of cells	62.5mm*62.5mm 36/9*4pcs	
Maximum Power (Pmax)	W	25
Cell efficiency	%	17.6
Module Efficiency	%	14.20
Tolerance	%	±3
Open Circuit Voltage (Voc)	V	21.6
Short Circuit Current (Isc)	A	1.28
Maximum Power Voltage (Vmp)	V	18
Maximum Power Current (Imp)	A	1.11
Max.system Open Circuit Voltage	V	600
Diodes	1by-pass	
Dimension	mm	640*306*25
Weight	kg	2
Operate Temp Scope	°C	-40/+85
Relative humidity	0~100%	
Frame Thickness	mm	25
Frame colour	Gold/Brown/Black/Aluminum	
Quantity/Container	3000pcs/20GP, 6400pcs/40GP, 7500pcs/40HQ	

Temperature Coefficients

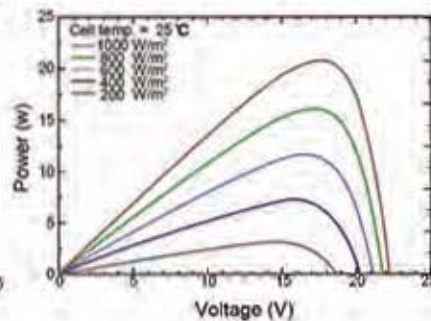
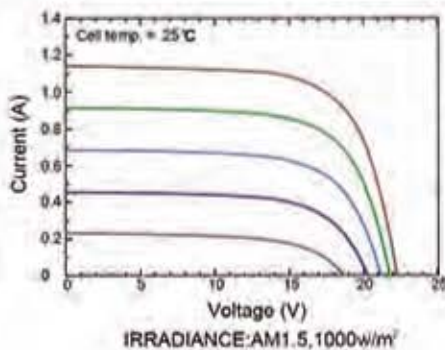
NOCT	45°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C

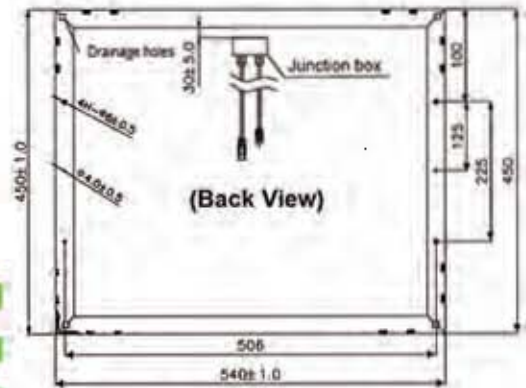
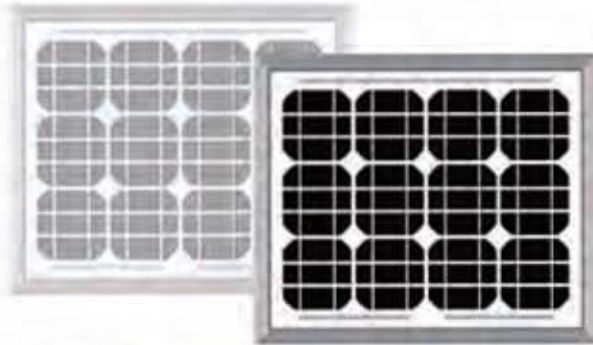
NOCT: Nominal Operating Cell Temperature date is only for reference.

Photovoltaic modules 36pcs 62.5x62.5mm mono-crystalline silicon cell

The series modules consist of 36pcs 62.5x62.5mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.





MODULE

Encapsulation	Glass/EVA/Cell/EVA/TPT	
Size and Number of cells	125mm*41.66mm 36/9*4pcs	
Maximum Power (Pmax)	W	30
Cell efficiency	%	16.5
Module Efficiency	%	14
Tolerance	%	±3
Open Circuit Voltage (Voc)	V	21.6
Short Circuit Current (Isc)	A	1.92
Maximum Power Voltage (Vmp)	V	18
Maximum Power Current (Imp)	A	1.67
Max.syst.Open Circuit Voltage	V	600
Diodes	2by-pass	
Dimension	mm	540*450*35
Weight	kg	3.5
Operate Temp Scope	°C	-40/+85
Relative humidity	0~100%	
Frame Thickness	mm	35
Frame colour	Gold/Brown/Black/Aluminum	
Quantity/Container	2800pcs/20GP, 5800pcs/40GP, 6800pcs/40HQ	

Photovoltaic modules 36pcs 125x41.66mm mono-crystalline silicon cell

The series modules consist of 36pcs 125x41.66mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.

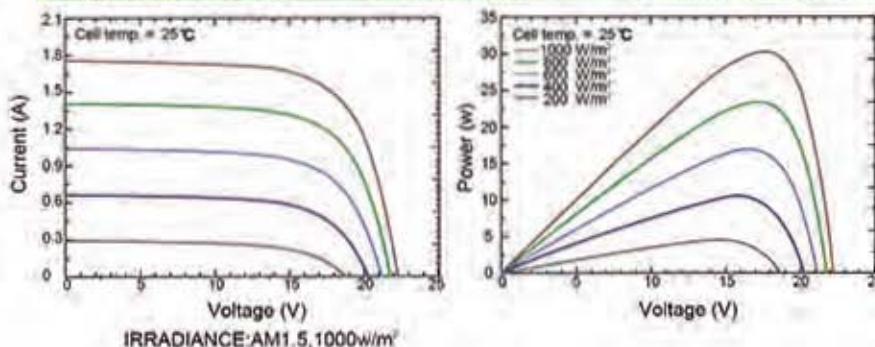
Temperature Coefficients

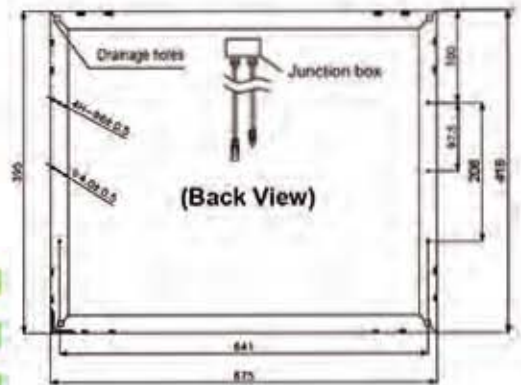
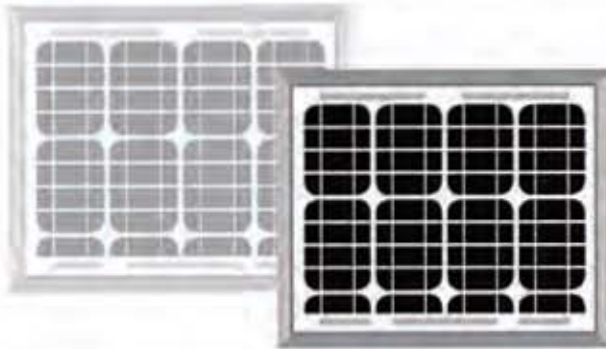
NOCT	45°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

Cable 2.5mm²(TUV) Length 900mm Connector MC Type





MODULE

Encapsulation		Glass/EVA/Cell/EVA/TPT	
Size and Number of cells		156mm*39mm 36/9*4pcs	
Maximum Power (Pmax)	W	35	40
Cell efficiency	%	16.00	17.00
Module Efficiency	%	13.50	14.00
Tolerance	%	±3	
Open Circuit Voltage (Voc)	V	21.60	21.96
Short Circuit Current (Isc)	A	2.24	2.51
Maximum Power Voltage (Vmp)	V	18.00	18.30
Maximum Power Current (Imp)	A	1.94	2.19
Max.syst.Open Circuit Voltage	V	600	
Diodes		2by-pass	
Dimension	mm	675*416*35	
Weight	kg	3	
Operate Temp Scope	°C	-40/+85	
Relative humidity		0~100%	
Frame Thickness	mm	35	
Frame Colour		Gold / Brown / Black / Aluminum	
Quantity/Container		2240pcs/20GP, 4640pcs/40GP, 5440pcs/40HQ	

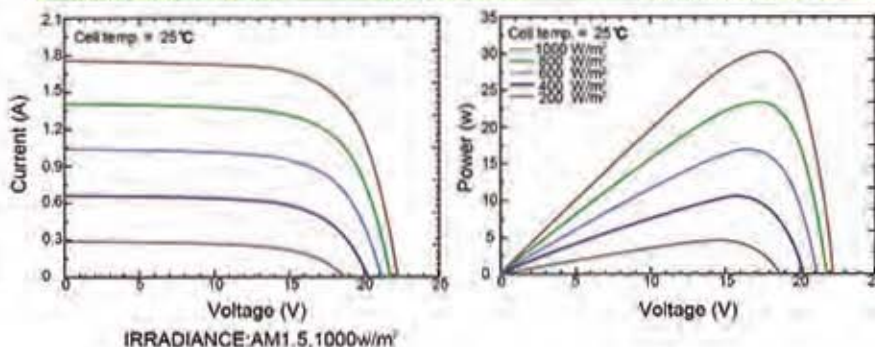
Temperature Coefficients

NOCT		45°C ±2°C
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

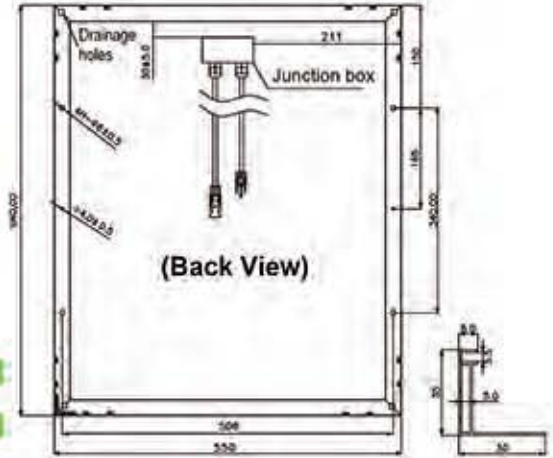
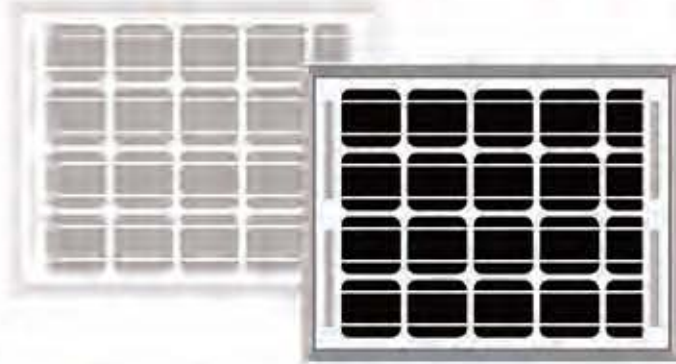
Cable 2.5mm²(TUV) Length 900mm Connector MC Type



Photovoltaic modules 36pcs 156x39mm mono-crystalline silicon cell

The series modules consist of 36pcs 156x39mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and Laminated with toughened glass, EVA and TPT 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.



MODULE

Encapsulation	Glass/EVA/Cell/EVA/TPT			
Size and Number of cells	125mm*62.5mm 36/9*4pcs			
Maximum Power (Pmax)	W	40	45	50
Cell efficiency	%	15.00	16.50	18.00
Module Efficiency	%	13.00	14.50	15.50
Tolerance	%	±3		
Open Circuit Voltage (Voc)	V	21.60	21.78	21.96
Short Circuit Current (Isc)	A	2.56	2.85	3.14
Maximum Power Voltage (Vmp)	V	18	18.15	18.3
Maximum Power Current (Imp)	A	2.22	2.48	2.73
Max.syst.Open Circuit Voltage	V	600		
Diodes	2by-pass			
Dimension	mm	640*550*35		
Weight	kg	5		
Operate Temp Scope	°C	-40/+85		
Relative humidity	0~100%			
Frame Thickness	mm	35		
Frame colour	Gold/Brown/Black/Aluminum			
Quantity/Container	1800pcs/20GP, 3800pcs/40GP, 4400pcs/40HQ			

Photovoltaic modules 36pcs 125x62.5mm mono-crystalline silicon cell

The series modules consist of 36pcs 125x62.5mm mono-crystalline high efficient silicon cells, which are individually sized and electronically matched character interconnection and laminated before tempered glass, EVA and TPT of high with top.

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.

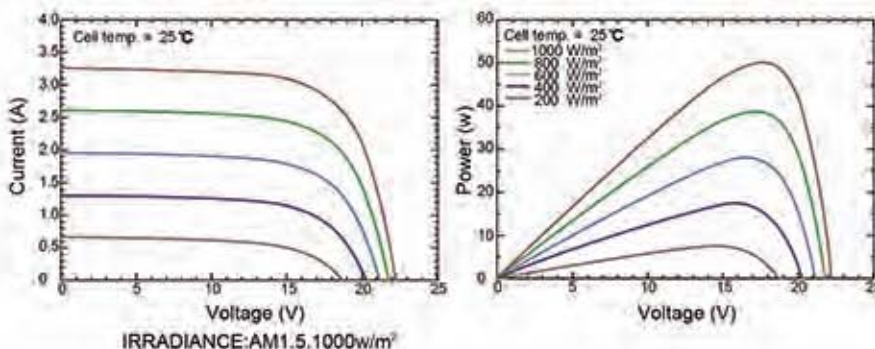
Temperature Coefficients

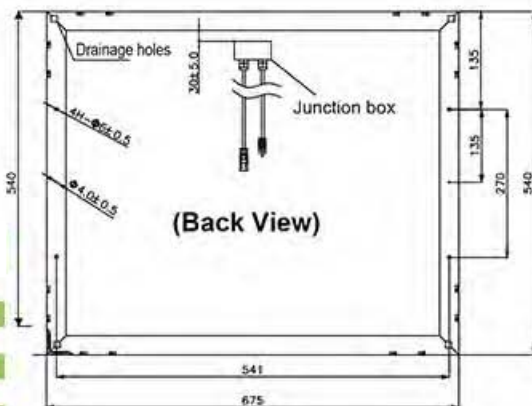
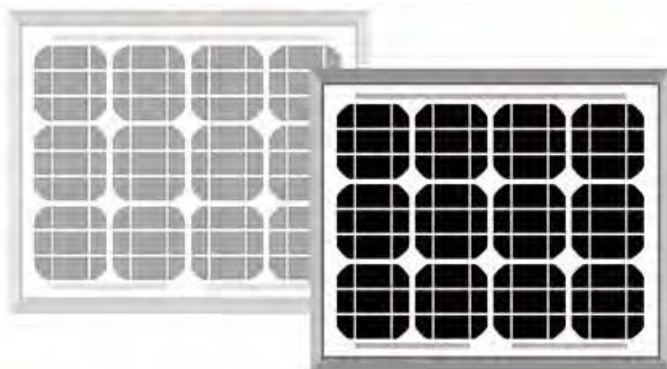
NOCT	45°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

Cable 2.5mm²(TUV) Length 900mm Connector MC Type





MODULE

Encapsulation		Glass/EVA/Cell/EVA/TPT		
Size and Number of cells		156mm*52mm 36/9*4pcs		
Maximum Power (Pmax)	W	45	50	55
Cell efficiency	%	15.8	16.4	17.2
Module Efficiency	%	13.60	14.20	14.80
Tolerance	%	±3		
Open Circuit Voltage (Voc)	V	21.6	21.86	22.06
Short Circuit Current (Isc)	A	2.88	3.16	3.45
Maximum Power Voltage (Vmp)	V	18	18.22	18.35
Maximum Power Current (Imp)	A	2.50	2.74	3.00
Max.syst.Open Circuit Voltage	V	600		
Diodes		2by-pass		
Dimension	mm	675*540*35		
Weight	kg	4		
Operate Temp Scope	°C	-40/+85		
Relative humidity		0~100%		
Frame Thickness	mm	35		
Frame Colour		Gold / Brown / Black / Aluminum		
Quantity/Container		1200pcs/20GP, 2800pcs/40GP, 3200pcs/40HQ		

Photovoltaic modules 36pcs 156x52mm mono-crystalline silicon cell

The series modules consist of 36pcs 156x52mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and Laminated with toughened glass, EVA and TPT 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.

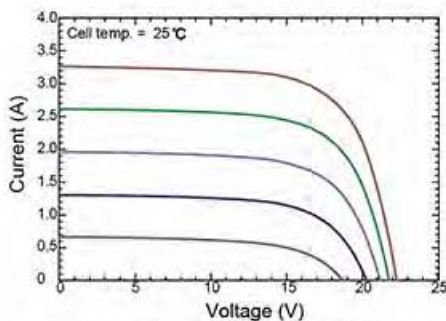
Temperature Coefficients

NOCT		45°C±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C	
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C	
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C	

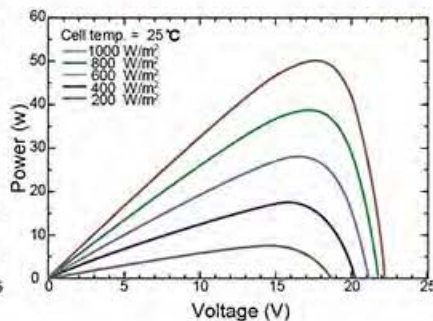
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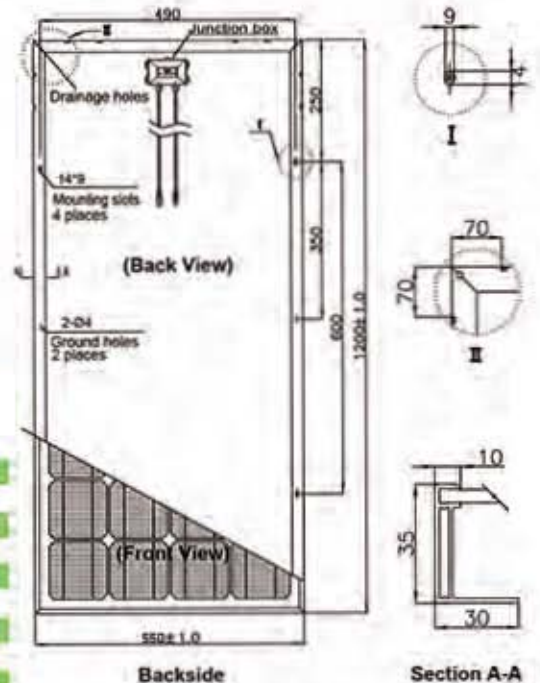
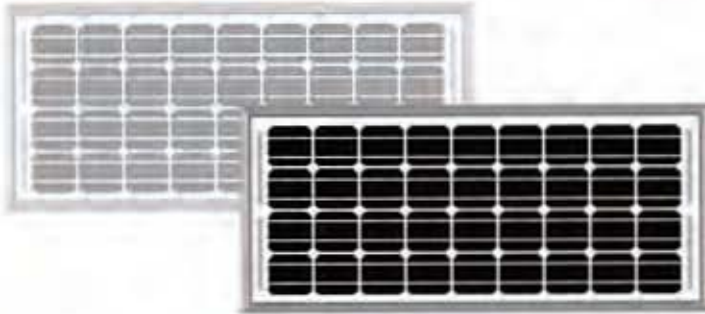
Output

Cable	2.5mm ² (TUV)	Length	900mm	Connector	MC Type
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IRRADIANCE: AM1.5, 1000w/m²





MODULE

Encapsulation		Glass/EVA/Cell/EVA/TPT		
Size and Number of cells		125mm*125mm 36/4*9pcs		
Maximum Power (Pmax)	W	90	95	100
Cell efficiency	%	16.2	16.6	17.8
Module Efficiency	%	14.00	14.70	15.30
Tolerance		%		
Open Circuit Voltage (Voc)	V	21.6	21.78	21.96
Short Circuit Current (Isc)	A	5.75	6.02	6.28
Maximum Power Voltage (Vmp)	V	18	18.15	18.3
Maximum Power Current (Imp)	A	5.00	5.23	5.46
Max.syst.Open Circuit Voltage	V	600		
Diodes		2by-pass		
Dimension	mm	1200*550*35		
Weight	kg	8		
Operate Temp Scope	°C	-40/+85		
Relative humidity		0~100%		
Frame Thickness	mm	35		
Frame colour		Gold/Brown/Black/Aluminum		
Quantity/Container		732pcs/20GP, 1512pcs/40GP, 1512pcs/40HQ		

Photovoltaic modules 36pcs 125x125mm mono-crystalline silicon cell

The series modules consist of 36pcs 125x125mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.

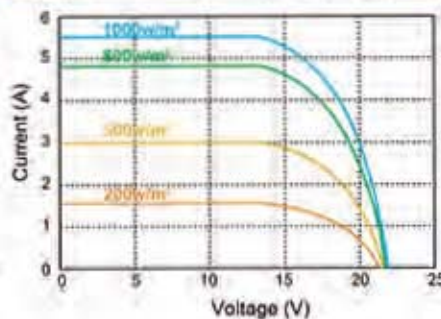
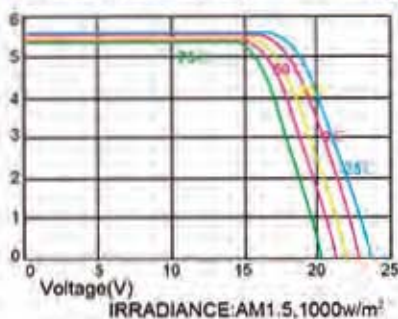
Temperature Coefficients

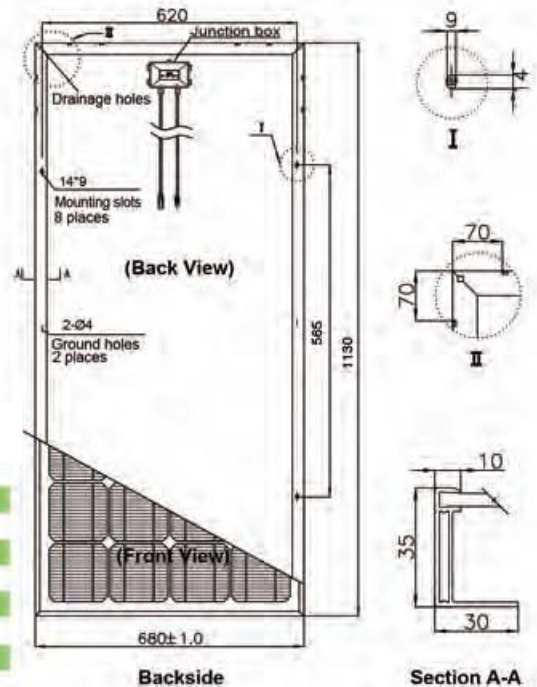
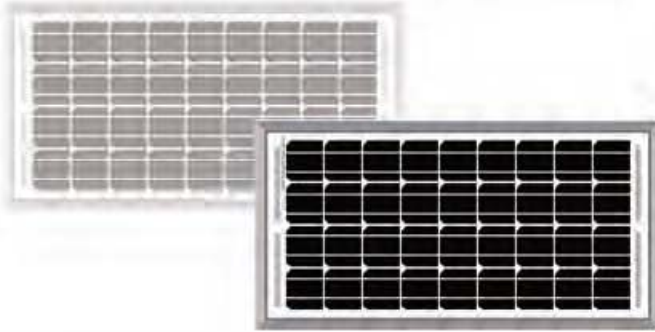
NOCT		45°C ±2°C
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

Cable 4.0 mm²(TUV) Length 800 mm Connector MC Type





Photovoltaic modules 36pcs 156X117 mm mono-crystalline silicon cell

The series modules consist of 36pcs 156X117 mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.

MODULE

Encapsulation	Glass/EVA/Cell/EVA/TPT				
Size and Number of cells	156*117mm 36 / 9*4				
Maximum Power (Pmax)	W	100	105	110	120
Cell efficiency	%	15.80	15.90	16.50	16.80
Module Efficiency	%	13.50	14.00	14.70	15.20
Tolerance	%	±3			
Open Circuit Voltage (Voc)	V	21.60	21.79	21.90	22.08
Short Circuit Current (Isc)	A	6.39	6.65	6.93	7.50
Maximum Power Voltage (Vmp)	V	18.00	18.16	18.25	18.40
Maximum Power Current (Imp)	A	5.56	5.78	6.03	6.52
Max.syst.Open Circuit Voltage	V	600			
Diodes	2by-pass				
Dimension	mm	1130*680*35			
Weight	kg	12			
Operate Temp Scope	°C	-40/+85			
Relative humidity	0~100%				
Frame Thickness	mm	35			
Frame Colour	Gold / Brown / Black / Aluminum				
Quantity/Container	392pcs/20GP, 840pcs/40GP, 840pcs/40HQ				

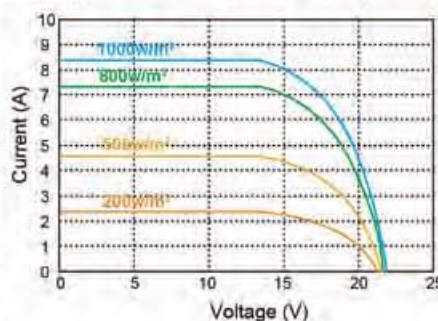
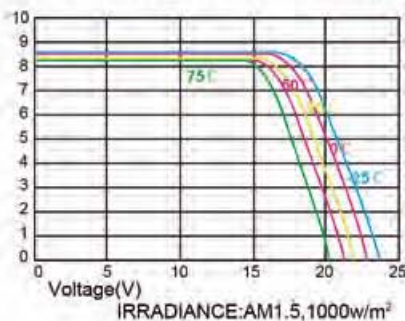
Temperature Coefficients

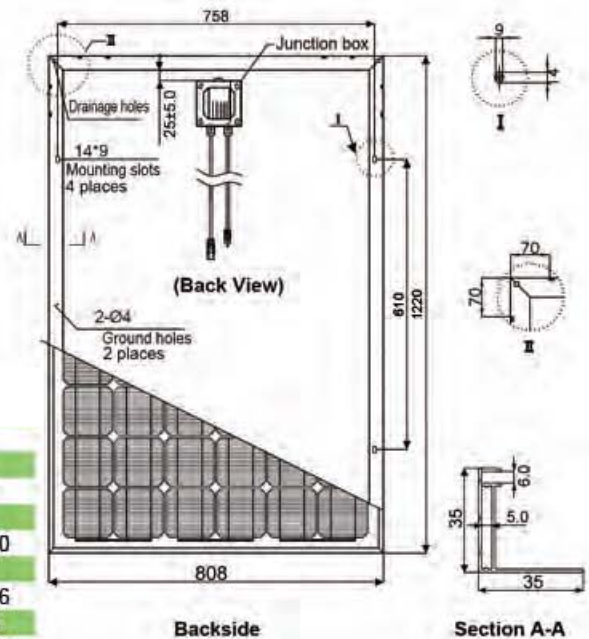
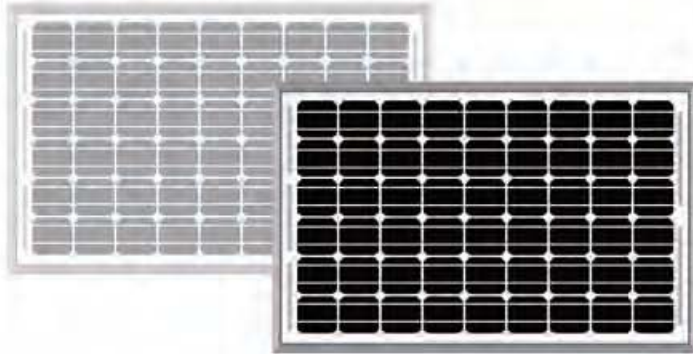
NOCT	46°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.08%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.32%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.38%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

Cable 4.0mm²(TUV) Length 900mm Connector MC Type





MODULE		Glass/EVA/Cell/EVA/TPT				
Encapsulation		125mm*62.5mm 108/6*18pcs				
Size and Number of cells		125mm*62.5mm 108/6*18pcs				
Maximum Power (Pmax)	W	130	135	140	145	150
Cell efficiency	%	15.8	16	16.2	17	18
Module Efficiency	%	14.30	14.60	15.00	15.80	16.20
Tolerance	%	±3				
Open Circuit Voltage (Voc)	V	130	21.86	22.02	22.08	22.26
Short Circuit Current (Isc)	A	15.8	8.52	8.77	9.06	9.30
Maximum Power Voltage (Vmp)	V	14.30	18.22	18.35	18.4	18.55
Maximum Power Current (Imp)	A	7.18	7.41	7.63	7.88	8.09
Max.syst.Open Circuit Voltage	V	600				
Diodes		2by-pass				
Dimension	mm	1220*808*35				
Weight	kg	12				
Operate Temp Scope	°C	-40/+85				
Relative humidity		0~100%				
Frame Thickness	mm	35				
Frame colour		Gold/Brown/Black/Aluminum				
Quantity/Container		392pcs/20GP、840pcs/40GP、840pcs/40HQ				

Photovoltaic modules 108pcs 125X62.5mm mono-crystalline silicon cell

The series modules consist of 108pcs 125X62.5mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.

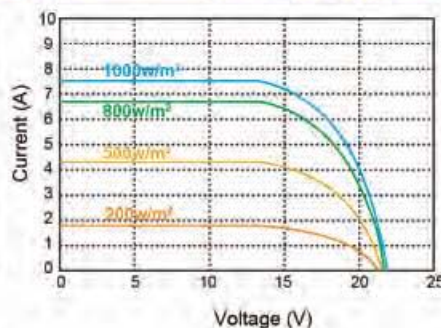
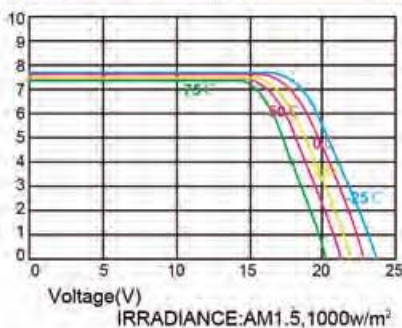
Temperature Coefficients

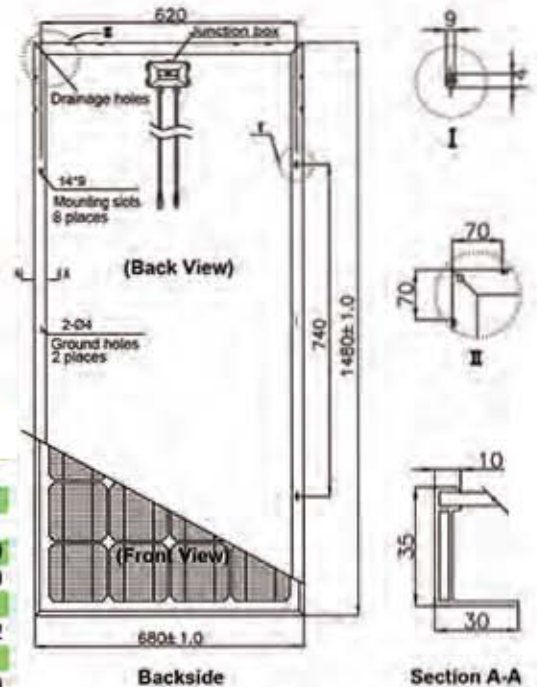
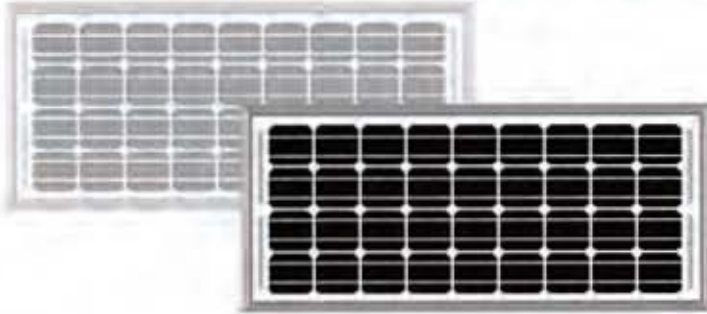
NOCT		46°C ±2°C
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.08 %/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.32 %/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.38 %/°C

NOCT: Nominal Operating Cell Temperature data is only for reference.

Output

Cable 4.0mm²(TUV) Length 900mm Connector MC Type





MODULE		Glass/EVA/Cell/EVA/TPT					
Encapsulation		Glass/EVA/Cell/EVA/TPT					
Size and Number of cells		156mm*156mm 36/9*4pcs					
Maximum Power (Pmax)	W	130	135	140	145	150	160
Cell efficiency	%	15.10	15.60	16.20	16.80	17.30	18.30
Module Efficiency	%	13.50	13.80	14.20	14.80	15.30	16.20
Tolerance	%	±3					
Open Circuit Voltage (Voc)	V	21.60	21.76	21.90	21.96	22.14	22.32
Short Circuit Current (Isc)	A	8.31	8.56	8.82	9.11	9.35	9.89
Maximum Power Voltage (Vmp)	V	18.00	18.13	18.25	18.30	18.45	18.60
Maximum Power Current (Imp)	A	7.22	7.45	7.67	7.92	8.13	8.60
Max.syst.Open Circuit Voltage	V	600					
Diodes		2by-pass					
Dimension	mm	1480*680*35					
Weight	kg	12					
Operate Temp Scope	°C	-40/+85					
Relative humidity		0~100%					
Frame Thickness	mm	35					
Frame Colour		Gold / Brown / Black / Aluminum					
Quantity/Container		392pcs/20GP, 840pcs/40GP, 840pcs/40HQ					

Photovoltaic modules 36pcs 156x156mm mono-crystalline silicon cell

The series modules consist of 36pcs 156x156mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.

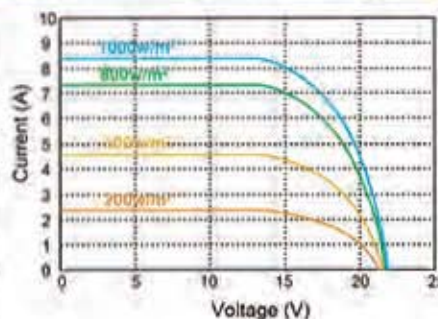
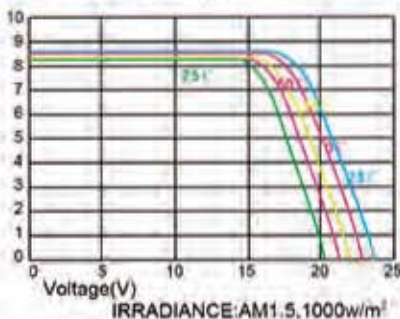
Temperature Coefficients

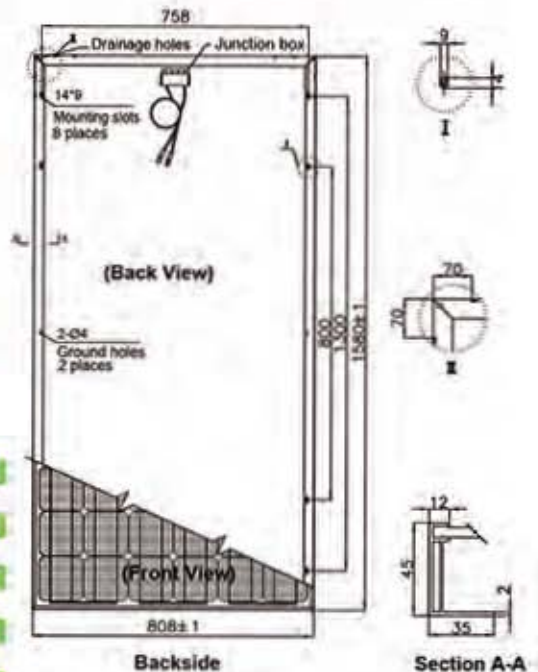
NOCT		46°C ±2°C
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.08%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.32%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.38%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

Cable	Length	Connector
4.0mm ² (TUV)	950mm	MC Type





MODULE

Encapsulation	Glass/EVA/Cell/EVA/TPT					
Size and Number of cells	125mm*125mm 72/6*12pcs					
Maximum Power (Pmax)	W	190	195	200	205	210
Cell efficiency	%	17.4	17.6	17.8	18	18.2
Module Efficiency	%	15.20	15.40	15.70	16.1	16.3
Tolerance	%					
Open Circuit Voltage (Voc)	V	43.44	43.68	43.8	44	44.16
Short Circuit Current (Isc)	A	6.04	6.16	6.30	6.40	6.56
Maximum Power Voltage (Vmp)	V	36.2	36.4	36.5	36.7	36.8
Maximum Power Current (Imp)	A	5.25	5.36	5.48	5.64	5.71
Max.syst.Open Circuit Voltage	V	1000				
Diodes	6by-pass					
Dimension	mm	1580*808*40				
Weight	kg	16				
Operate Temp Scope	°C	-40/+85				
Relative humidity	0-100%					
Frame Thickness (mm)	Quantity/Container					
Frame colour	Gold/Brown/Black/Aluminum					
40mm	300pcs/20GP, 700pcs/40GP, 700pcs/40HQ					
35mm	336pcs/20GP, 784pcs/40GP, 784pcs/40HQ					

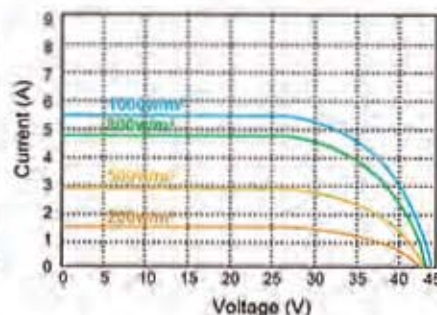
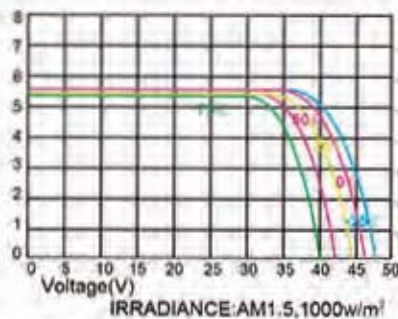
Temperature Coefficients

NOCT	45°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

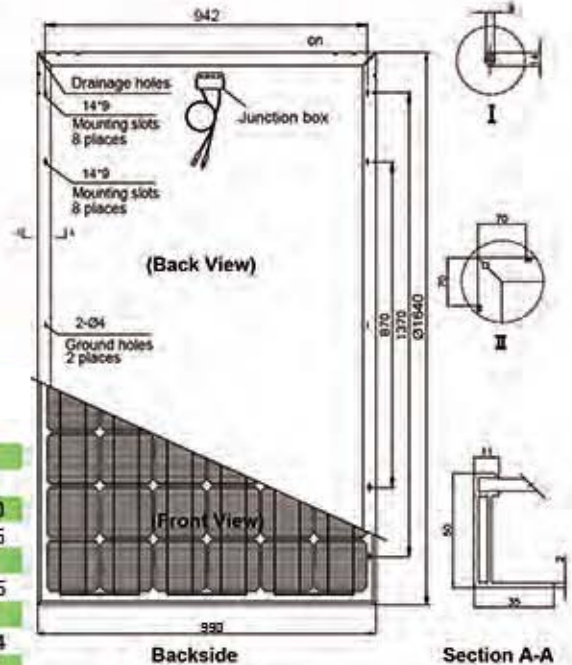
Cable	4.0mm ² (TUV)	Length	900mm	Connector	MC Type
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Photovoltaic modules 72pcs 125x125mm mono-crystalline silicon cell

The series modules consist of 72pcs 125x125mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.



MODULE

Encapsulation	Glass/EVA/Cell/EVA/TPT					
Size and Number of cells	156mm*156mm 60/6*10pcs					
Maximum Power (Pmax)	W	240	245	250	255	260
Cell efficiency	%	16.50	16.80	17.20	17.80	18.30
Module Efficiency	%	15.00	15.50	16.30	16.70	16.85
Tolerance	%	±3				
Open Circuit Voltage (Voc)	V	36.00	36.18	36.36	36.48	36.65
Short Circuit Current (Isc)	A	9.20	9.35	9.49	9.65	9.79
Maximum Power Voltage (Vmp)	V	30.00	30.15	30.30	30.40	30.54
Maximum Power Current (Imp)	A	8.00	8.13	8.25	8.39	8.51
Max.syst.Open Circuit Voltage	V	1000				
Diodes	mm	6by-pass				
Dimension	kg	1640*990*35				
Weight	°C	21				
Operate Temp Scope		-40/+85				
Relative humidity		0~100%				
Frame Thickness (mm)		Quantity/Container				
50mm		216pcs/20GP, 504pcs/40GP, 588pcs/40HQ				
45mm		240pcs/20GP, 560pcs/40GP, 644pcs/40HQ				
40mm		264pcs/20GP, 616pcs/40GP, 728pcs/40HQ				
Frame Colour		Gold / Brown / Black / Aluminum				

Photovoltaic modules 60pcs 156x156mm mono-crystalline silicon cell

The series modules consist of 60pcs 156x156mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.

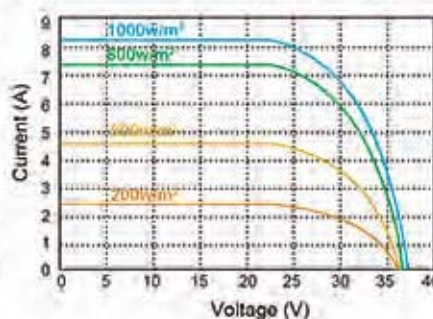
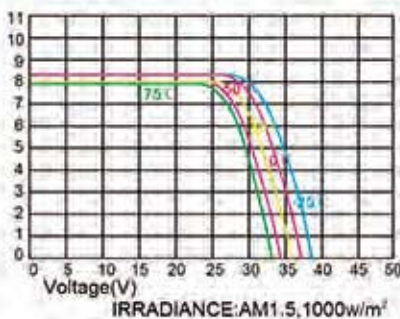
Temperature Coefficients

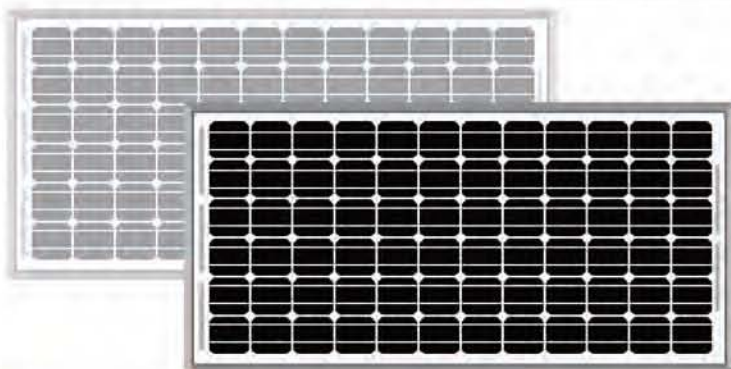
NOCT		45°C ±2°C
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.09%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.34%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.37%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

Cable	4.0mm ² (TUV)	Length	900mm	Connector	MC Type
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MODULE

Encapsulation		Glass/EVA/Cell/EVA/TPT						
Size and Number of cells		156mm*156mm 72/6*12pcs						
Maximum Power (Pmax)	W	290	295	300	305	310	315	320
Cell efficiency	%	16.80	17.20	17.60	17.80	18.00	18.20	18.40
Module Efficiency	%	15.20	15.60	16.00	16.30	16.60	16.80	17.10
Tolerance		%						
Open Circuit Voltage (Voc)	V	43.38	43.50	43.68	43.80	43.98	44.16	44.28
Short Circuit Current (Isc)	A	9.23	9.36	9.36	9.61	9.73	9.84	9.91
Maximum Power Voltage (Vmp)	V	36.15	36.25	36.40	36.50	36.65	36.80	36.90
Maximum Power Current (Imp)	A	8.02	8.14	8.24	8.36	8.46	8.56	8.61
Max.syst.Open Circuit Voltage	V	1000						
Diodes		6by-pass						
Dimension	mm	1956*990*50						
Weight	kg	24						
Operate Temp Scope	°C	-40/+85						
Relative humidity	%	0~100%						
Frame Thinkness (mm)		Quantity/Container						
50mm		180pcs/20GP, 396pcs/40GP, 462pcs/40HQ						
45mm		200pcs/20GP, 440pcs/40GP, 506pcs/40HQ						
Frame Colour		Gold/Brown/black/Ahrminum						

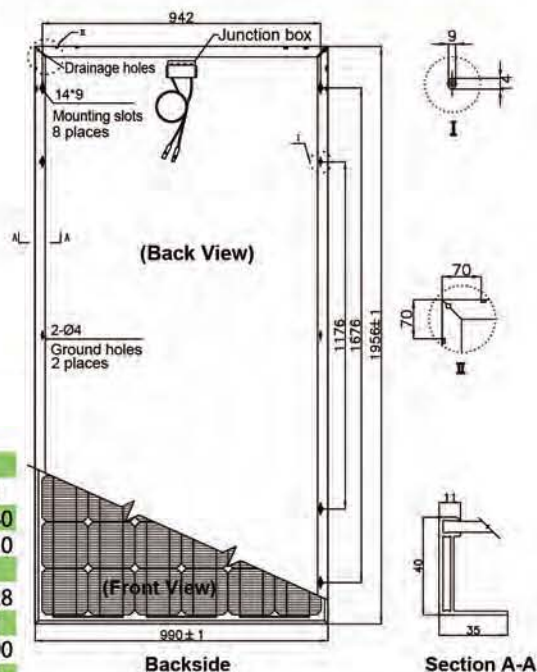
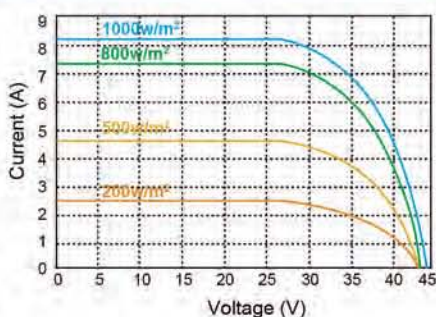
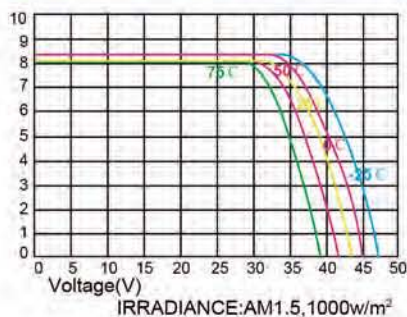
Temperature Coefficients

NOCT		45°C ± 2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.09%/°C	
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.34%/°C	
peak power temperature coefficients	$\gamma(P_{max})$	-0.37%/°C	

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

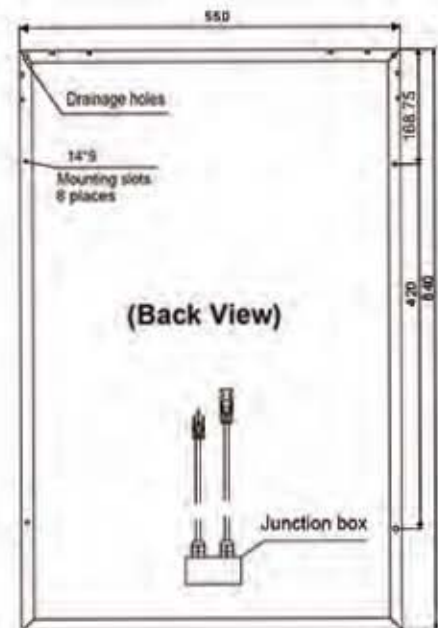
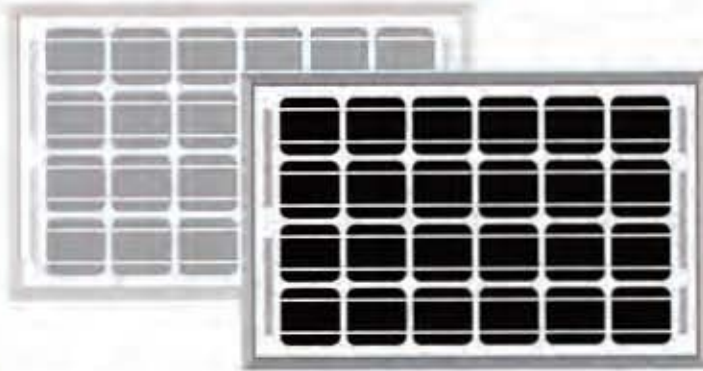
Cable	4.0mm ² (TUV)	Length	900mm	Connector	MC Type
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Photovoltaic modules 72pcs 156x156mm mono-crystalline silicon cell

The series modules consist of 72pcs 156x156mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.



Photovoltaic modules 72pcs 125x41.66mm mono-crystalline silicon cell

The series modules consist of 72pcs 125x41.66mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.

MODULE

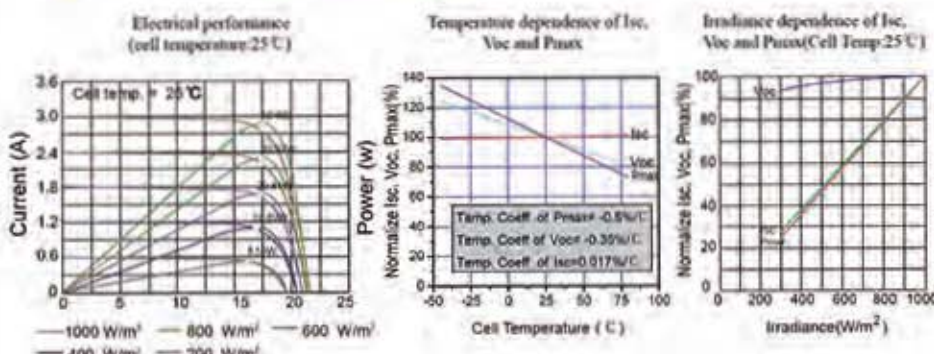
Encapsulation		Glass/EVA/Cell/EVA/TPT	
Size and Number of cells		125mm*41.66mm 72/4*18pcs	
Maximum Power (Pmax)	W	60	65
Cell efficiency	%	16.50	17.50
Module Efficiency	%	14.50	15.80
Tolerance	%	±3	
Open Circuit Voltage (Voc)	V	21.60	21.96
Short Circuit Current (Isc)	A	3.83	4.08
Maximum Power Voltage (Vmp)	V	18	18.3
Maximum Power Current (Imp)	A	3.33	3.55
Max. syst. Open Circuit Voltage	V	600	
Diodes		2by-pass	
Dimension	mm	840*550*35	
Weight	kg	6	
Operate Temp Scope	°C	-40/+85	
Relative humidity		0~100%	
Frame Thickness	mm	35	
Frame colour		Gold/Brown/Black/Aluminum	
Quantity/Container		1400pcs/20GP, 2900pcs/40GP, 3400pcs/40HQ	

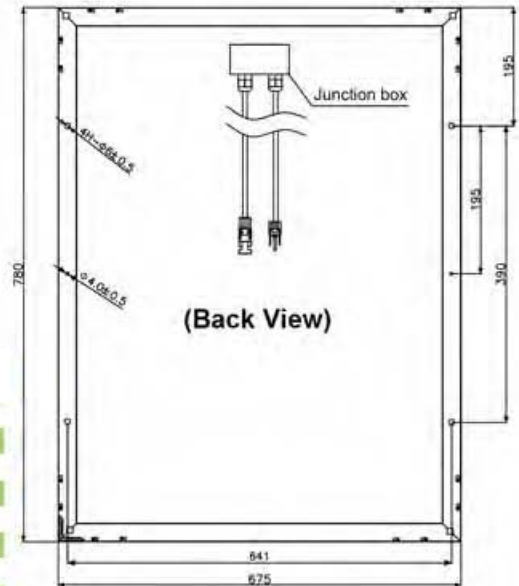
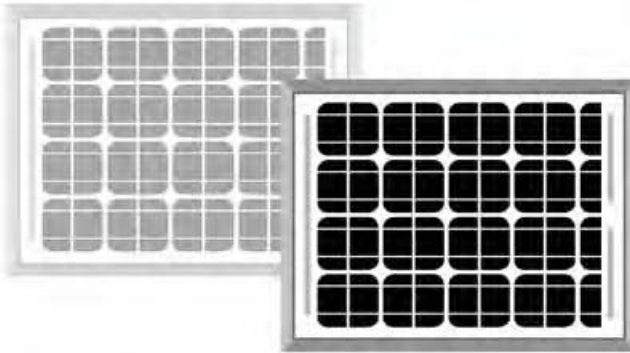
Temperature Coefficients

NOCT		45°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C	
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C	
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C	
NOCT: Nominal Operating Cell Temperature date is only for reference.			

Output

Cable	2.5mm ² (TUV)	Length	900mm	Connector	MC Type
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Photovoltaic modules 36pcs 156x78mm mono-crystalline silicon cell

The series modules consist of 36pcs 156x78mm mono-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.

MODULE

		Glass/EVA/Cell/EVA/TPT		
Encapsulation		Glass/EVA/Cell/EVA/TPT		
Size and Number of cells		156mm*78mm 36/9*4pcs		
Maximum Power (Pmax)	W	70	75	80
Cell efficiency	%	16.00	17.50	18.30
Module Efficiency	%	13.80	14.50	15.36
Tolerance	%	±3		
Open Circuit Voltage (Voc)	V	21.60	21.78	21.88
Short Circuit Current (Isc)	A	4.47	4.75	5.05
Maximum Power Voltage (Vmp)	V	18.00	18.15	18.23
Maximum Power Current (Imp)	A	3.89	4.13	4.39
Max.syst.Open Circuit Voltage	V	600		
Diodes		2by-pass		
Dimension	mm	780*675*35		
Weight	kg	5.8		
Operate Temp Scope	°C	-40/+85		
Relative humidity		0~100%		
Frame Thickness	mm	35		
Frame Colour		Gold / Brown / Black / Aluminium		
Quantity/Container		900pcs/20GP, 1900pcs/40GP, 2200pcs/40HQ		

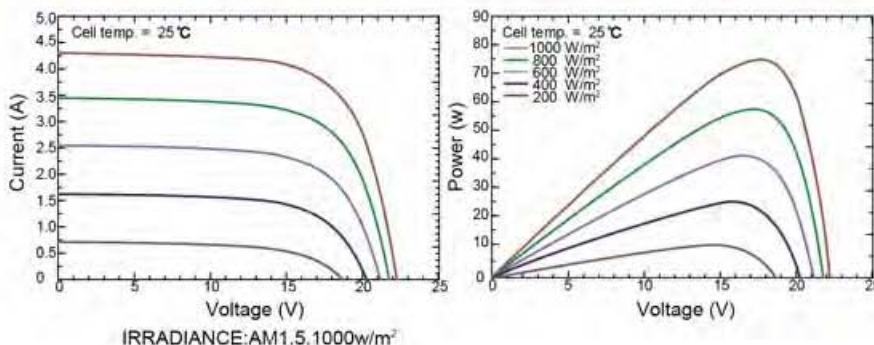
Temperature Coefficients

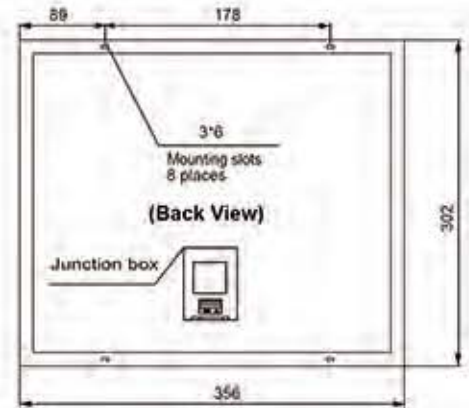
NOCT		45°C ±2°C
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

Cable 2.5mm²(TUV) Length 900mm Connector MC Type





MODULE

Encapsulation	Glass/EVA/Cell/EVA/TPT	
Size and Number of cells	39mm*42mm 36/9*4pcs	
Maximum Power (Pmax)	W	10 15
Cell efficiency	%	15.20 17.80
Module Efficiency	%	13.00 14.50
Tolerance	%	±3
Open Circuit Voltage (Voc)	V	21.60 21.60
Short Circuit Current (Isc)	A	0.64 0.96
Maximum Power Voltage (Vmp)	V	18.00 18.00
Maximum Power Current (Imp)	A	0.56 0.83
Max.syst.Open Circuit Voltage	V	600
Diodes	1by-pass	
Dimension	mm	356*302*25
Weight	kg	0.8
Operate Temp Scope	°C	-40/+85
Relative humidity	0~100%	
Frame Thickness	mm	25
Frame Colour	Gold/Brown/Black/Aluminum	
Quantity/Container	9300pcs/20GP, 19000pcs/40GP, 22000pcs/40HQ	

Photovoltaic modules 36pcs 39x42mm poly-crystalline silicon cell

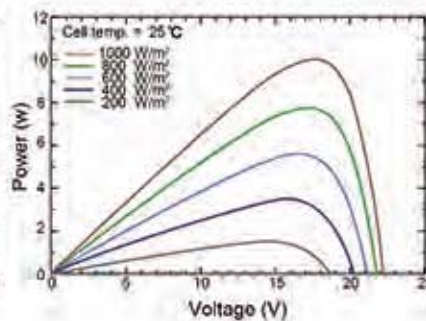
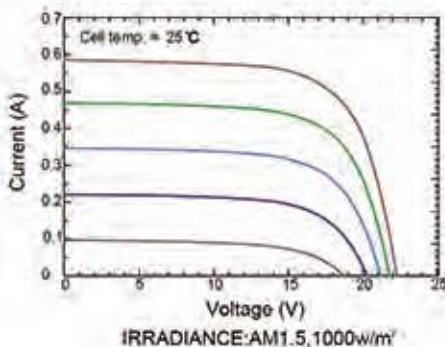
The series modules consist of 36pcs 39x42mm poly-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT of high quality.

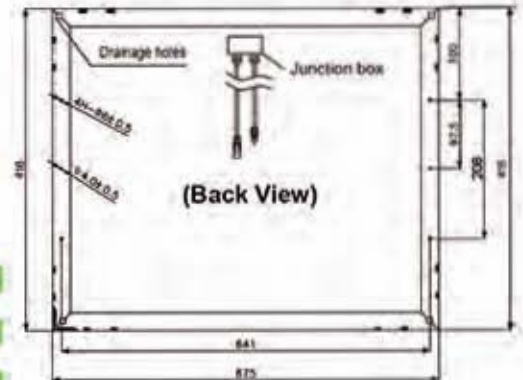
After assembled with anodized aluminum alloy frame, cable and junction box with MC4 connectors, G&P solar modules can be installed easily and work for a long period. At the same time, they can withstand the storm, strong wind and hail impact, etc.

Temperature Coefficients

NOCT	45°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.





MODULE

		Glass/EVA/Cell/EVA/TPT		
Encapsulation		156mm*39mm 36/9*4pcs		
Size and Number of cells		156mm*39mm 36/9*4pcs		
Maximum Power (Pmax)	W	30	35	40
Cell efficiency	%	14.30	16.00	18.00
Module Efficiency	%	13.00	13.50	13.70
Tolerance	%	±3		
Open Circuit Voltage (Voc)	V	21.60	21.74	21.84
Short Circuit Current (Isc)	A	1.92	2.22	2.53
Maximum Power Voltage (Vmp)	V	18.00	18.12	18.20
Maximum Power Current (Imp)	A	1.67	1.93	2.20
Max.syst.Open Circuit Voltage	V	600		
Diodes		2by-pass		
Dimension	mm	675*416*35		
Weight	kg	3		
Operate Temp Scope	°C	-40/+85		
Relative humidity		0~100%		
Frame Thickness	mm	35		
Frame Colour		Gold/Brown/Black/Aluminum		
Quantity/Container		2240pcs/20GP, 4640pcs/40GP, 5440pcs/40HQ		

Photovoltaic modules 36pcs 156x39mm poly-crystalline silicon cell

The series modules consist of 36pcs 156x39mm poly-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.

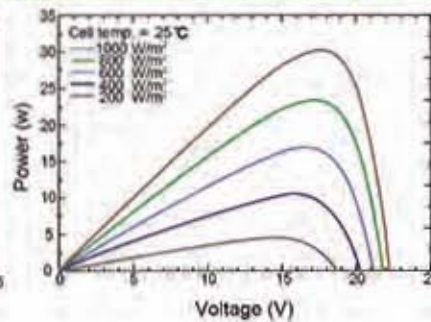
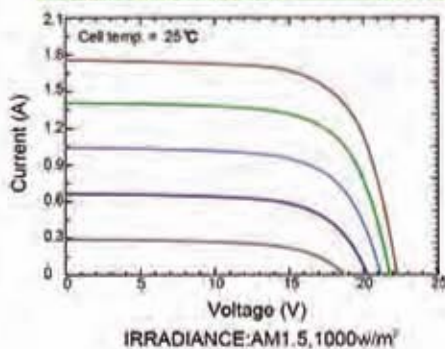
Temperature Coefficients

NOCT		45°C ±2°C
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C

NOCT: Nominal Operating Cell Temperature data is only for reference.

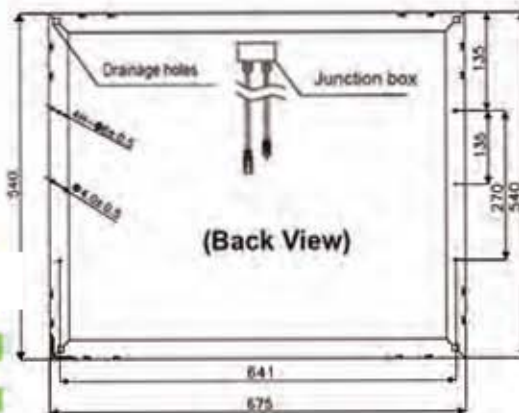
Output

Cable 2.5mm²(TUV) Length 900mm Connector MC Type



IRRADIANCE: AM1.5, 1000w/m²

IRRADIANCE: AM1.5, 1000w/m²



MODULE

		Glass/EVA/Cell/EVA/TPT		
Encapsulation		156mm*52mm 36/9*4pcs		
Size and Number of cells		156mm*52mm 36/9*4pcs		
Maximum Power (Pmax)	W	40	45	50
Cell efficiency	%	14.50	15.40	15.80
Module Efficiency	%	13.00	13.30	13.50
Tolerance	%	±3		
Open Circuit Voltage (Voc)	V	21.60	21.78	21.90
Short Circuit Current (Isc)	A	2.56	2.85	3.15
Maximum Power Voltage (Vmp)	V	18.00	18.15	18.25
Maximum Power Current (Imp)	A	2.22	2.48	2.74
Max.syst.Open Circuit Voltage	V	600		
Diodes		2by-pass		
Dimension	mm	675*540*35		
Weight	kg	4		
Operate Temp Scope	°C	-40/+85		
Relative humidity		0~100%		
Frame Thickness	mm	35		
Frame Colour		Gold/Brown/Black/Aluminum		
Quantity/Container		1200pcs/20GP, 2800pcs/40GP, 3200pcs/40HQ		

Photovoltaic modules 36pcs 156x52mm poly-crystalline silicon cell

The series modules consist of 36pcs 156x52mm poly-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.

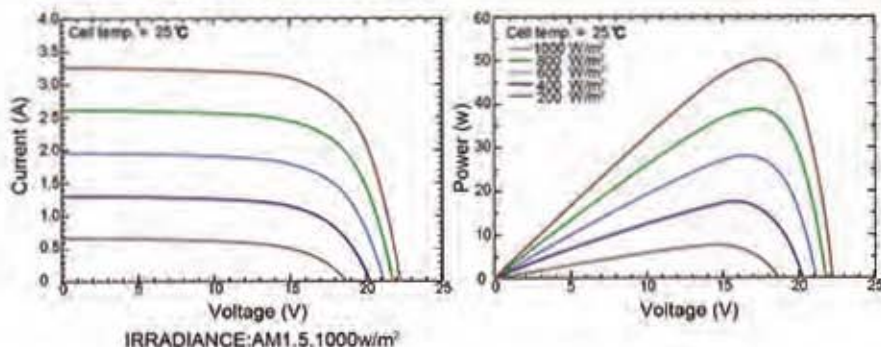
Temperature Coefficients

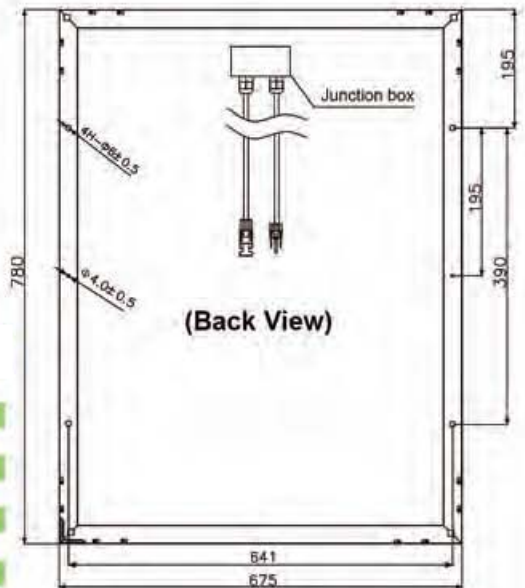
NOCT		45°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C	
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C	
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C	

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

Cable	Length	Connector
2.5mm ² (TUV)	900mm	MC Type





(Back View)

Photovoltaic modules 36pcs 156x78mm poly-crystalline silicon cell

The series modules consist of 36pcs 156x78mm poly-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.

MODULE

Encapsulation		Glass/EVA/Cell/EVA/TPT		
Size and Number of cells		156mm*78mm 36/9*4pcs		
Maximum Power (Pmax)	W	70	75	80
Cell efficiency	%	16.00	17.50	18.30
Module Efficiency	%	13.80	14.50	15.36
Tolerance	%	±3		
Open Circuit Voltage (Voc)	V	21.60	21.78	21.88
Short Circuit Current (Isc)	A	4.47	4.75	5.05
Maximum Power Voltage (Vmp)	V	18.00	18.15	18.23
Maximum Power Current (Imp)	A	3.89	4.13	4.39
Max.syst.Open Circuit Voltage	V	600		
Diodes		2by-pass		
Dimension	mm	780*675*35		
Weight	kg	5.8		
Operate Temp Scope	°C	-40/+85		
Relative humidity		0~100%		
Frame Thickness	mm	35		
Frame Colour		Gold/Brown/Black/Aluminum		
Quantity/Container		900pcs/20GP, 1900pcs/40GP, 2200pcs/40HQ		

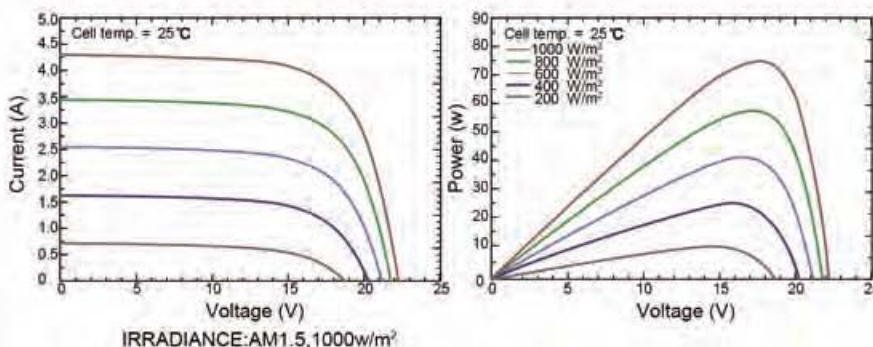
Temperature Coefficients

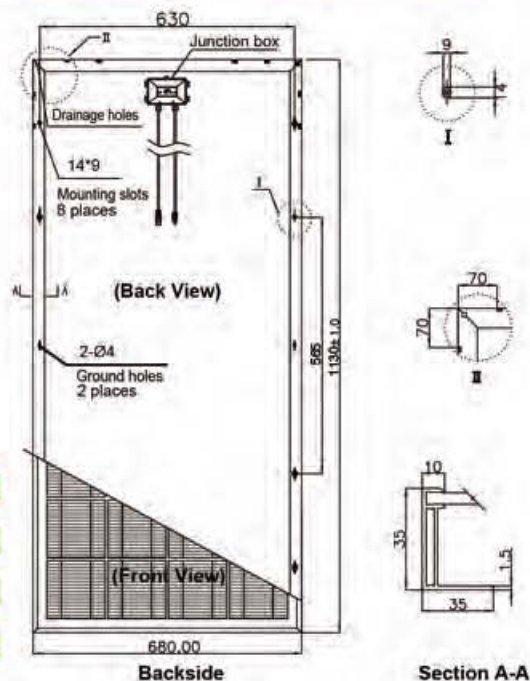
NOCT		45°C ±2°C
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.10%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.38%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.47%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

Cable 2.5mm ² (TUV)	Length 900mm	Connector MC Type
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MODULE

	Glass/EVA/Cell/EVA/TPT					
Encapsulation	Glass/EVA/Cell/EVA/TPT					
Size and Number of cells	156mm*117mm 36/9*4pcs					
Maximum Power (Pmax)	W	100	105	110	115	120
Cell efficiency	%	15.80	16.00	16.30	16.50	16.70
Module Efficiency	%	13.50	13.90	14.20	14.50	14.70
Tolerance	%	±3				
Open Circuit Voltage (Voc)	V	21.60	21.96	22.14	22.34	22.41
Short Circuit Current (Isc)	A	6.39	6.60	6.86	7.11	7.34
Maximum Power Voltage (Vmp)	V	18.00	18.30	18.45	18.60	18.81
Maximum Power Current (Imp)	A	5.56	5.74	5.96	6.18	6.38
Max.syst.Open Circuit Voltage	V	600				
Diodes	2by-pass					
Dimension	mm	1130*680*35				
Weight	kg	12				
Operate Temp Scope	°C	-40/+85				
Relative humidity	0~100%					
Frame Thickness	mm	35				
Frame Colour	Gold/Brown/Black/Aluminum					
Quantity/Container	392pcs/20GP, 840pcs/40GP, 840pcs/40HQ					

Photovoltaic modules 36pcs 156 X 117mm poly-crystalline silicon cell

The series modules consist of 36pcs 156 X 117mm poly-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and Laminated with toughened glass, EVA and TPT 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, ect.

Temperature Coefficients

NOCT	46°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.08%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.32%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.38%/°C

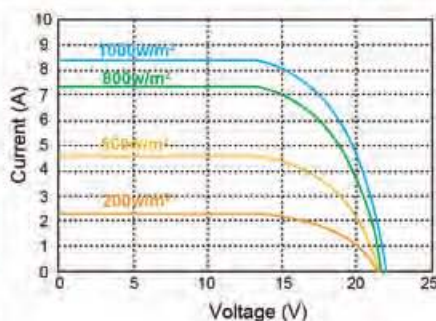
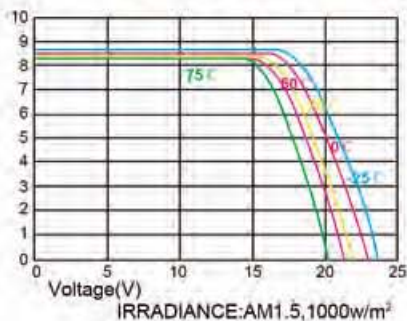
NOCT: Nominal Operating Cell Temperature date is only for reference.

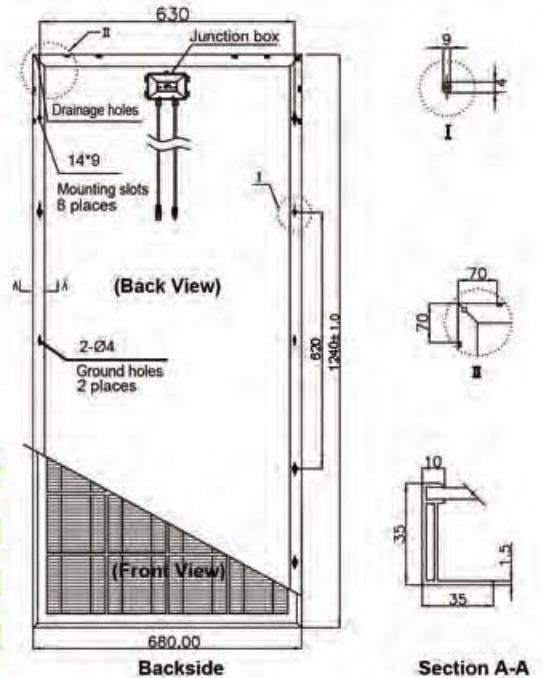
Output

Cable 4.0 mm²(TUV)

Length 950mm

Connector MC Type





MODULE

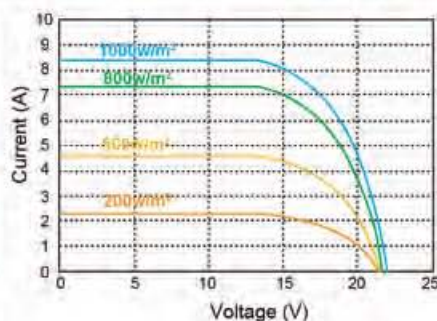
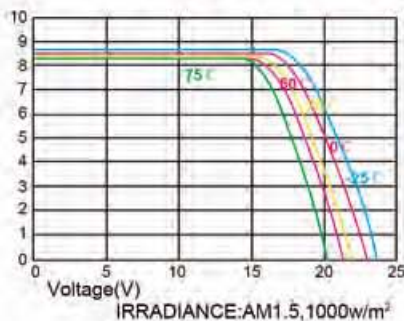
Encapsulation	Glass/EVA/Cell/EVA/TPT			
Size and Number of cells	156mm*117mm 24 + 156*156 12/9*4pcs			
Maximum Power (Pmax)	W	120	125	130
Cell efficiency	%	17.60	17.80	18.00
Module Efficiency	%	15.00	15.50	15.80
Tolerance	%	±3		
Open Circuit Voltage (Voc)	V	21.78	21.96	22.20
Short Circuit Current (Isc)	A	7.60	7.86	8.08
Maximum Power Voltage (Vmp)	V	18.15	18.30	18.50
Maximum Power Current (Imp)	A	6.61	6.83	7.03
Max.syst.Open Circuit Voltage	V	600		
Diodes	2by-pass			
Dimension	mm	1240*680*35		
Weight	kg	12		
Operate Temp Scope	°C	-40/+85		
Relative humidity		0~100%		
Frame Thickness	mm	35		
Frame Colour	Gold/Brown/Black/Aluminum			
Quantity/Container	392pcs/20GP, 840pcs/40GP, 840pcs/40HQ			

Temperature Coefficients

NOCT	46°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.08%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.32%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.38%/°C
NOCT: Nominal Operating Cell Temperature date is only for reference.		

Output

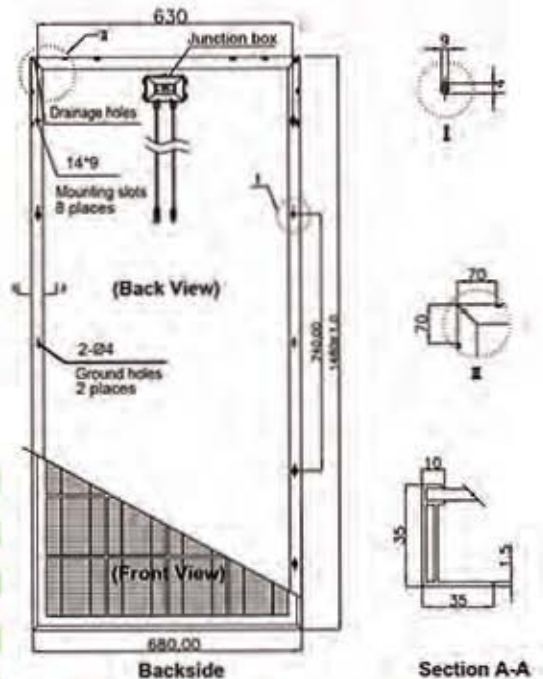
Cable	4mm ² (TUV)	Length	900mm	Connector	MC Type
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Photovoltaic modules 36pcs156 X 156 & 156*117mm poly-crystalline silicon cell

The series modules consist of 36pcs156x156 & 156*117 mmpoly-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and Laminated with toughened glass, EVA and TPT 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, ect.



MODULE

Encapsulation	Glass/EVA/Cell/EVA/TPT					
Size and Number of cells	156mm*156mm 36/9*4pcs					
Maximum Power(Pmax)	W	130	135	140	145	150
Cell efficiency	%	15.10	15.60	16.20	16.80	17.30
Module Efficiency	%	13.50	13.80	14.20	14.80	15.30
Tolerance	%					
Open Circuit Voltage(Voc)	V	21.60	21.76	21.90	21.96	22.14
Short Circuit Current(Isc)	A	8.31	8.56	8.82	9.11	9.35
Maximum Power Voltage(Vmp)	V	18.00	18.13	18.25	18.30	18.45
Maximum Power Current(Imp)	A	7.22	7.45	7.67	7.92	8.13
Max.syst.Open Circuit Voltage	V	600				
Diodes	2by-pass					
Dimension	mm	1480*680*35				
Weight	kg	12				
Operate Temp Scope	°C	-40/+85				
Relative humidity	0~100%					
Frame Thickness	mm	35				
Fram Colour	Gold/Brown/Black/Aluminum					
Quantity/Container	392pcs/20GP, 840pcs/40GP, 840pcs/40HQ					

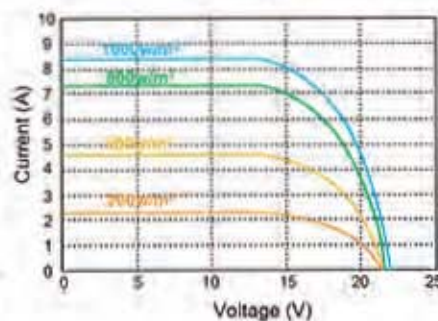
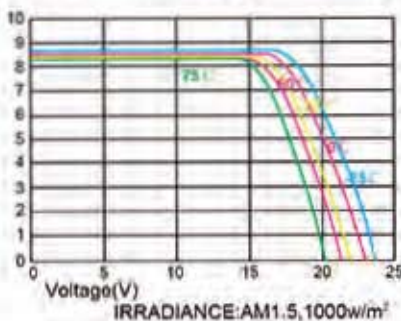
Temperature Coefficients

NOCT	48°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	-0.08%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.32%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.38%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

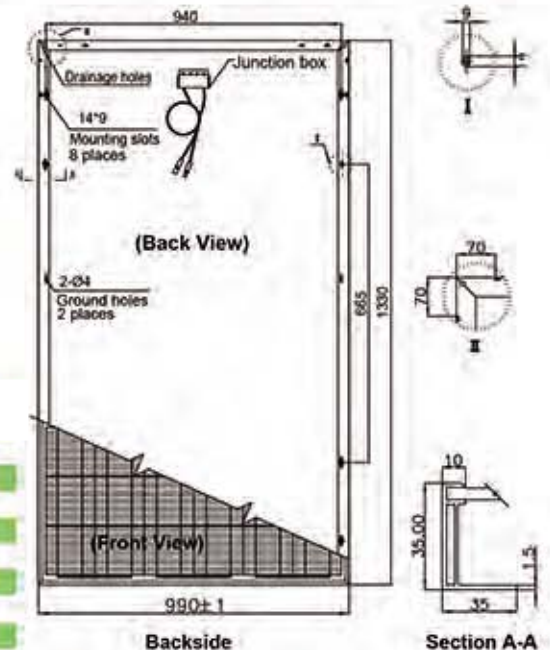
Cable	2.5mm ² (TUV)	Length	900mm	Connector	MC Type
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Photovoltaic modules 36pcs 156x156mm poly-crystalline silicon cell

The series modules consist of 36pcs 156x156mm poly-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.



MODULE

Encapsulation		Glass/EVA/Cell/EVA/TPT				
Size and Number of cells		156mm*156mm 48/6*8pcs				
Maximum Power(Pmax)	W	190	195	200	205	210
Cell efficiency	%	16.50	16.80	17.00	17.30	17.60
Module Efficiency	%	14.70	15.00	15.30	15.60	15.80
Tolerance	%	±3				
Open Circuit Voltage(Voc)	V	28.80	28.99	29.61	29.46	29.58
Short Circuit Current(Isc)	A	9.10	9.28	9.47	9.60	9.80
Maximum Power Voltage(Vmp)	V	24.00	24.16	24.30	24.55	24.65
Maximum Power Current(Imp)	A	7.92	8.07	8.23	8.35	8.52
Max.syst.Open Circuit Voltage	V	1000				
Diodes		6by-pass				
Dimension	mm	1330*990*40				
Weight	kg	16.5				
Operate Temp Scope	°C	-40/+85				
Relative humidity		0~100%				
Frame Thinkness		Quantity/Container				
Frame Colour		Gold/Brown/Black/Aluminum				
45mm		320pcs/20GP, 640pcs/40GP, 736pcs/40HQ				
40mm		352pcs/20GP, 704pcs/40GP, 832pcs/40HQ				

Photovoltaic modules 48pcs 156x156mm poly-crystalline silicon cell

The series modules consist of 48pcs 156x156mm poly-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.

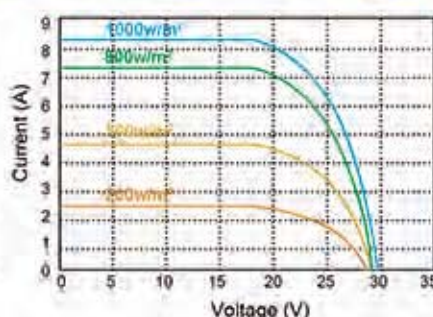
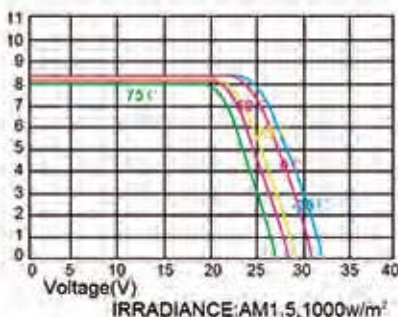
Temperature Coefficients

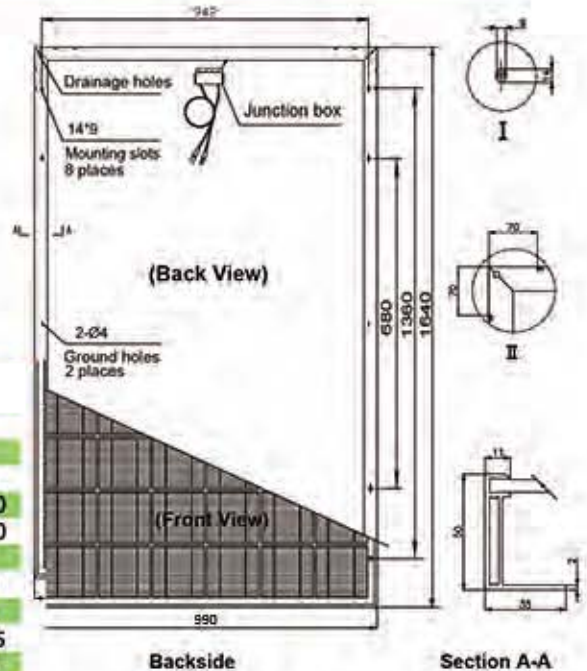
NOCT		46°C ±2°C
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.08%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.32%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.38%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

Cable	4.0mm ² (TUV)	Length	900mm	Connector	MC Type
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MODULE

Encapsulation	Glass/EVA/Cell/EVA/TPT							
Size and Number of cells	156mm*156mm 60/6*10pcs							
Maximum Power (Pmax)	W	230	235	240	245	250	255	260
Cell efficiency	%	16.00	16.40	16.80	17.00	17.30	17.60	17.90
Module Efficiency	%	14.50	14.80	15.00	15.30	15.60	15.90	16.30
Tolerance	%	±3						
Open Circuit Voltage (Voc)	V	36.12	36.18	36.36	36.42	36.54	36.72	36.9
Short Circuit Current (Isc)	A	8.79	8.96	9.11	9.28	9.44	9.58	9.72
Maximum Power Voltage (Vmp)	V	30.1	30.15	30.3	30.35	30.45	30.6	30.75
Maximum Power Current (Imp)	A	7.64	7.79	7.92	8.07	8.21	8.33	8.46
Max.syst.Open Circuit Voltage	V	1000						
Diodes	6by-pass							
Dimension	mm	1640*990*40						
Weight	kg	21						
Operate Temp Scope	°C	-40/+85						
Relative humidity	0~100%							
Frame Thickness (mm)	Quantity/Container							
50mm	216pcs/20GP, 504pcs/40GP, 588pcs/40HQ							
45mm	240pcs/20GP, 560pcs/40GP, 644pcs/40HQ							
40mm	264pcs/20GP, 616pcs/40GP, 728pcs/40HQ							
Frame Colour	Gold/Brown/Black/Aluminum							

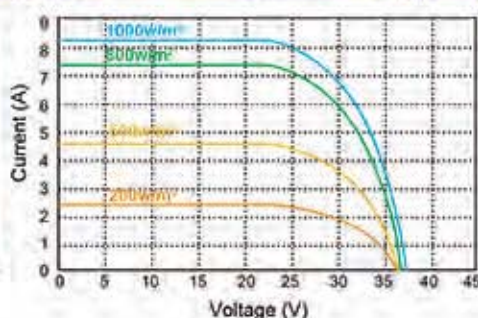
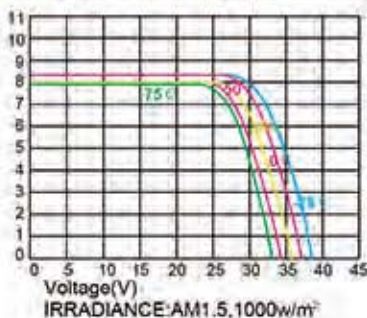
Temperature Coefficients

NOCT	46 °C ±2 °C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.08%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.32%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.38%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

Cable 4.0mm ² (TUV)	Length 900mm	Connector MC Type
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Photovoltaic modules 60pcs 156x156mm poly-crystalline silicon cell

The series modules consist of 60pcs 156x156mm poly-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and laminated with toughened glass, EVA and TPT 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.



MODULE

Encapsulation	Glass/EVA/Cell/EVA/TPT					
Size and Number of cells	156mm*156mm 72/6*12pcs					
Maximum Power (Pmax)	W	290	295	300	305	310
Cell efficiency	%	16.8	17	17.20	17.50	17.8
Module Efficiency	%	15.20	15.50	15.70	15.90	16.50
Tolerance	%	±3				
Open Circuit Voltage (Voc)	V	43.80	43.44	43.60	43.68	43.86
Short Circuit Current (Isc)	A	9.23	9.37	9.50	9.64	9.75
Maximum Power Voltage (Vmp)	V	36.15	36.20	36.33	36.40	36.55
Maximum Power Current (Imp)	A	8.02	8.15	8.26	8.38	8.48
Max.syst.Open Circuit Voltage	V	1000				
Diodes	6by-pass					
Dimension	mm	1956*990*50				
Weight	kg	24				
Operate Temp Scope	°C	-40/+85				
Relative humidity	0~100%					
Frame Thickness (mm)	Quantity/Container					
50mm	180pcs/20GP, 396pcs/40GP, 462pcs/40HQ					
45mm	200pcs/20GP, 440pcs/40GP, 506pcs/40HQ					
Frame Colour	Gold/Brown/Black/Aluminum					

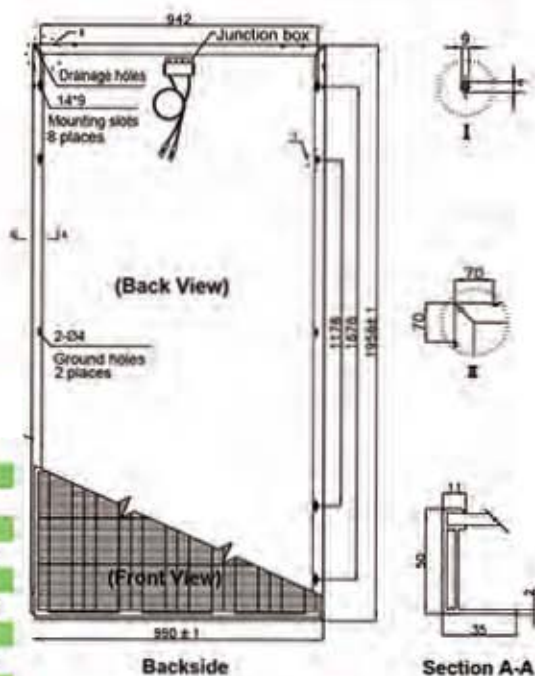
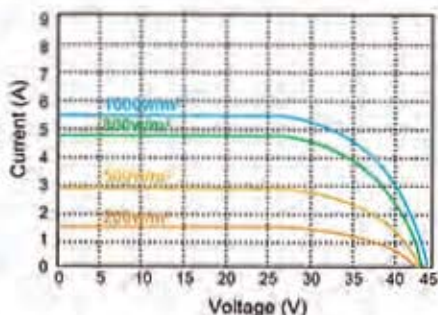
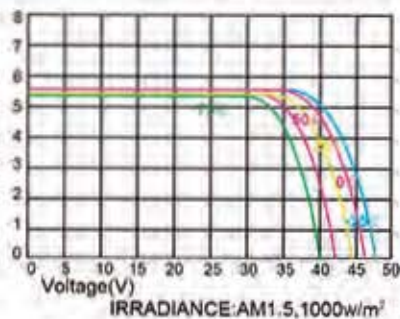
Temperature Coefficients

NOCT	46°C ±2°C	
short-circuit-current temperature coefficient	$\alpha(I_{sc})$	0.08%/°C
open-circuit Voltage temperature coefficients	$\beta(V_{oc})$	-0.32%/°C
peak power temperature coefficients	$\gamma(P_{max})$	-0.38%/°C

NOCT: Nominal Operating Cell Temperature date is only for reference.

Output

Cable 4.0mm²(TUV) Length 900mm Connector MC Type



Photovoltaic modules 72pcs 156x156mm poly-crystalline silicon cell

The series modules consist of 72pcs 156x156mm poly-crystalline high efficient silicon cells, which are individually characterized and electronically matched before interconnection and Laminated with toughened glass, EVA and TPT 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.



FOLDABLE PANEL MODULE

Module Type	GPM-2F-80W	GPM-2F-100W	GPM-2F-120W	GPM-2F-140W	GPM-2F-160W	GPM-3F-180W	GPM-3F-240W
Maximum power at STC (Pmax)	80 W	100 W	120 W	140 W	160 W	180 W	240 W
Maximum power voltage (Vmp)	18.0	18.2	18.5	16.0	18.4	18.0	18.0
Maximum power current (Imp)	4.40	5.56	6.49	8.75	8.70	10.00	13.33
Open circuit voltage (Voc)	20.8	21.0	22.5	18.5	21.2	21.6	21.6
Short circuit current (Isc)	5.06	6.40	7.44	9.57	9.49	11.15	15.30
Cell Efficiency (%)	17.60%	17.30%	17.35%	18.00%	18.50%	17.35%	18.50%
Cutting Cell Size (mm)	156*39	156*52	125*41.66	156*78	156*78	125*41.66	156*78
Solar Cell Quantity PCS (Array)	36 (4x9)	36 (4x9)	36 (4x18)	32 (4x8)	36 (4x9)	36 (4x18)	36 (4x9)
Weight of module (kg)	11.05	12.55	13.55	15.10	16.15	20.00	23.40
Fold Dimensions of module (mm)	675×416×70	675×540×70	840×550×70	700×675×70	780×675×70	840×550×105	780×675×105
Unfold Dimensions of module (mm)	1350×416×35	1350×540×35	1100×840×35	1350×700×35	1350×780×35	1650×840×35	2025×780×35
QTY (PCS for 20'GP/40'GP/40'HQ)	570/1200/1410	520/1090/1280	430/900/1050	410/860/1010	380/800/940	310/650/780	280/590/700
Nominal Operating Cell Temperature	45 ± 2°C						
Power Production Tolerance	± 3%						
Temperature coefficients of Isc	+0.049% /°C						
Temperature coefficients of Voc	-0.340% /°C						
Temperature coefficients of Pmax	-0.430% /°C						
Standard Test Conditions (STC)	Irradiance 1000W/m2, Module temperature 25°C, Air Mass (AM)=1.5						

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Photovoltaic modules 156x156mm poly-crystalline silicon cell

Folding panel Accessories list

1. Smart controller X1
2. 10 meter cable with Anderson or MC4 connector x 1
3. 30cm cable of alligator clip with Anderson connector x 1
4. 1m cable of Cigarette Lighter with Anderson connector x 1
5. Portable backpack X1
6. User Manual x 1

