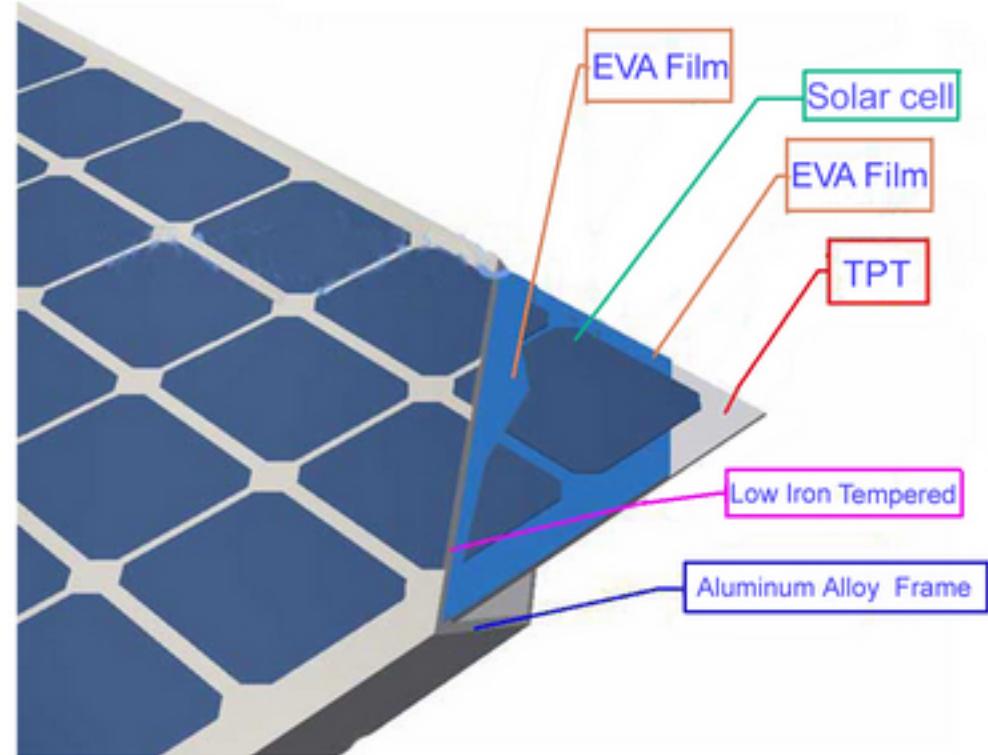


## Solar Panel

Solar panels are made of monocrystalline or polycrystalline silicon solar cells, series connection or parallel connection, then hot-pressed and sealed by tempering glass and EVA TPT, equipped with aluminum alloy frame.

### ◆ Tempering glass

Low iron tempered glass also named white glass, common thickness 3.2 mm or 4 mm, transmittance is up to 90%, This glass also resists UV light radiation, and its transmittance is not falling.



### ◆ EVA

EVA is a kind of hot melt adhesive, the thickness between 0.4 mm - 0.6 mm, smooth surface, uniform thickness,

### ◆ Solar cell

Solar cell is the smallest unit of the photoelectric conversion; its working voltage is about 0.5 V

### ◆ Back veneer

Back veneer is that the protective material of the back of solar panels, including TPT, BBF, DNP, etc.

### ◆ Junction box

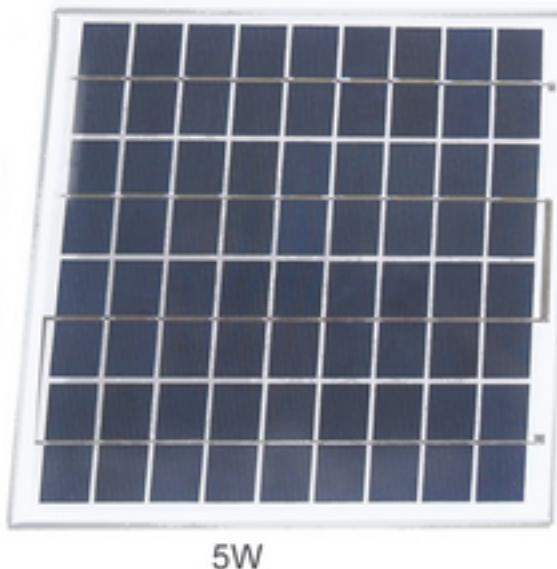
Generally, Junction box is made of ABS, adding anti-aging agent and resist UV radiation agent.

### ◆ Aluminum alloy frame

Frame adopts hard aluminum alloy, thickness of surface oxidation layer is more than 10 micron, and it can ensure 25 years' service life.

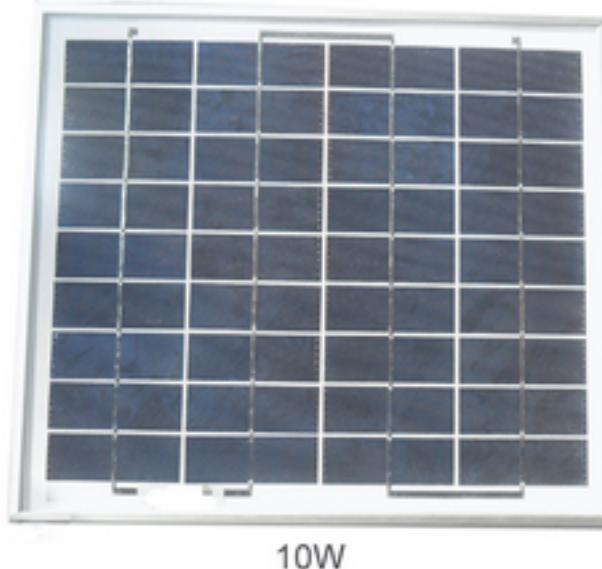


## Solar Panel (Poly Crystalline)



5W

52\*19.5



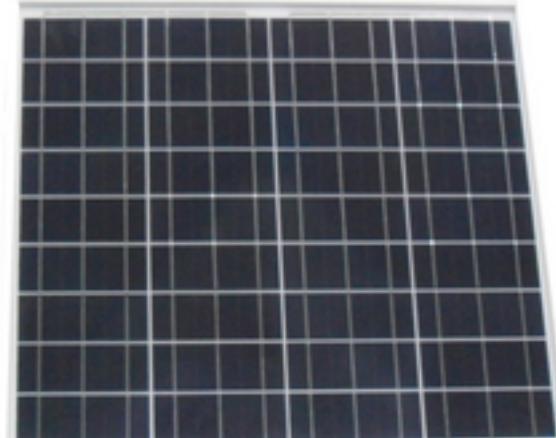
10W

52\*19.5

Model	JYSP-5P	JYSP-10P	JYSP-15P	JYSP-20P
Technology	Poly	Poly	Poly	Poly
Maximum power(Pmax) W	5	10	15	20
Maximum power voltage(Vmp) V	17.60	19.57	18.34	18.18
Maximum power current(Imp) A	0.30	0.51	0.83	1.11
Open circuit voltage (Voc) V	21.21	22.98	21.96	22.65
Short circuit current (Isc) A	0.36	0.57	1.00	1.22
Dimension of module (mm)	260*250*18	350*305*18	426*362*20	540*360*30
Weight (Kg)	0.8	1.5	2.0	2.2
Maximum system voltage (V)			1000	
Temperature coefficient of Pm(%)			-0.48%°C	
Temperature coefficient of Voc(%)			-0.34%°C	
Temperature coefficient of Isc(%)			-0.037%°C	
Temperature range			-40°C +85°C	
Tolerance in power			± 5%	
Resistances	227g steel ball fall down from 1m height and 60m/s wind			
Relative humidity			0 to 100%	
FF(%)			≥72%	
Standard test conditions			AM1.5 1000W/m² 25°C	
Warranty	Pm is not less than 90% in 10 years and 80% in 25 years			



## Solar Panel (Poly Crystalline)



50W



156\*52



60W

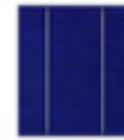
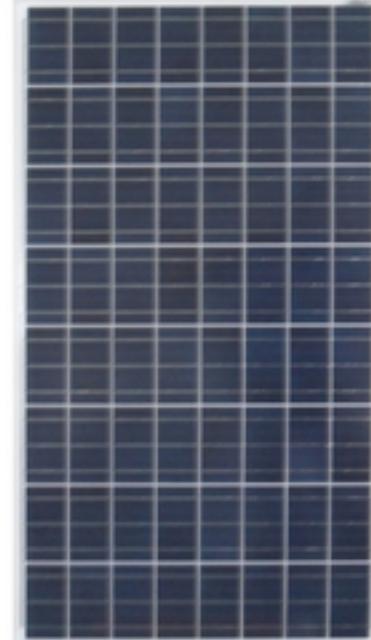


156\*66

Model	JYSP-30P	JYSP-50P	JYSP-60P	JYSP-70P
Technology	Poly	Poly	Poly	Poly
Maximum power(Pmax) W	30	50	60	70
Maximum power voltage(Vmp) V	18.61	18.13	19.43	19.21
Maximum power current(Imp) A	1.61	2.76	3.10	3.65
Open circuit voltage (Voc) V	22.37	22.61	22.97	22.52
Short circuit current (Isc) A	1.78	2.95	3.26	3.76
Dimension of module (mm)	670*350*30	670*540*30	670*645*30	1014*515*30
Weight (Kg)	2.6	3.8	4.5	6.2
Maximum system voltage (V)			1000	
Temperature coefficient of Pm(%)			-0.48%°C	
Temperature coefficient of Voc(%)			-0.34%°C	
Temperature coefficient of Isc(%)			-0.037%°C	
Temperature range			-40°C +85°C	
Tolerance in power			± 5%	
Resistances	227g steel ball fall down from 1m height and 60m/s wind			
Relative humidity			0 to 100%	
FF(%)			≥72%	
Standard test conditions			AM1.5 1000W/m² 25°C	
Warranty	Pm is not less than 90% in 10 years and 80% in 25 years			



## Solar Panel (Poly Crystalline)

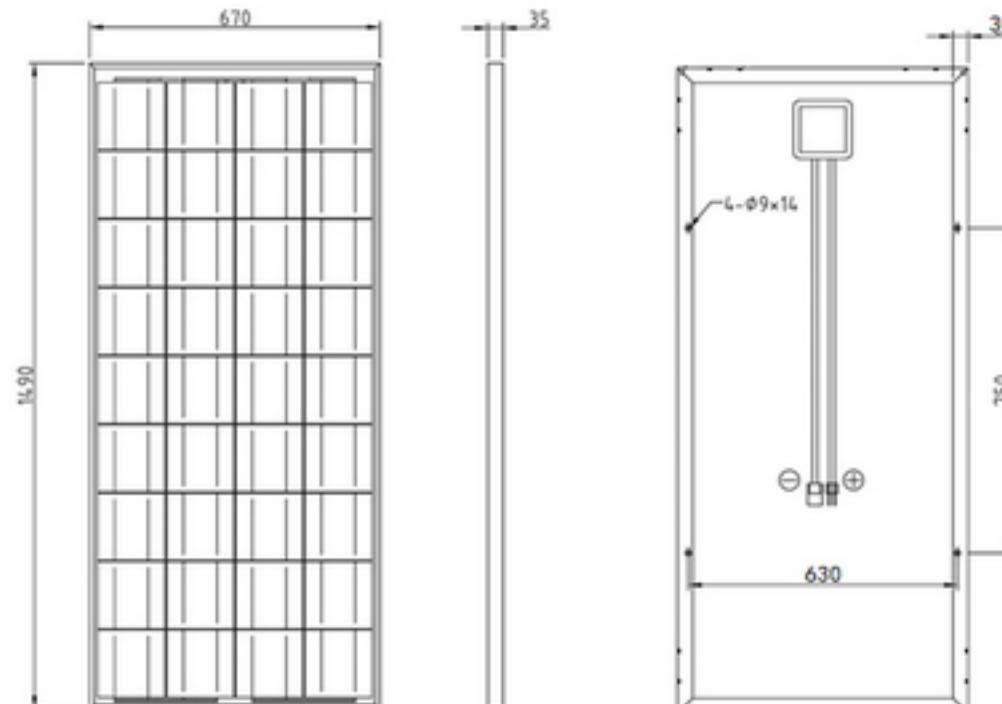


A grade, Long service life, Withstand storm and strong wind;

Model	JYSP-80P	JYSP-100P	JYSP-120P	JYSP-130P
Technology	Poly	Poly	Poly	Poly
Maximum power(Pmax) W	80	100	120	130
Maximum power voltage(Vmp) V	17.30	15.80	16.98	17.13
Maximum power current(Imp) A	4.63	6.34	7.07	7.60
Open circuit voltage (Voc) V	21.91	20.03	22.20	20.51
Short circuit current (Isc) A	4.90	6.73	7.38	7.88
Dimension of module (mm)	1150*525*30	1310*590*30	1470*590*30	1470*590*30
Weight (Kg)	6.2	7.4	9.1	9.1
Maximum system voltage (V)			1000	
Temperature coefficient of Pm(%)			-0.48%°C	
Temperature coefficient of Voc(%)			-0.34%°C	
Temperature coefficient of Isc(%)			-0.037%°C	
Temperature range			-40°C +85°C	
Tolerance in power			± 5%	
Resistances	227g steel ball fall down from 1m height and 60m/s wind			
Relative humidity			0 to 100%	
FF(%)			≥72%	
Standard test conditions			AM1.5 1000W/m² 25°C	
Warranty	Pm is not less than 90% in 10 years and 80% in 25 years			



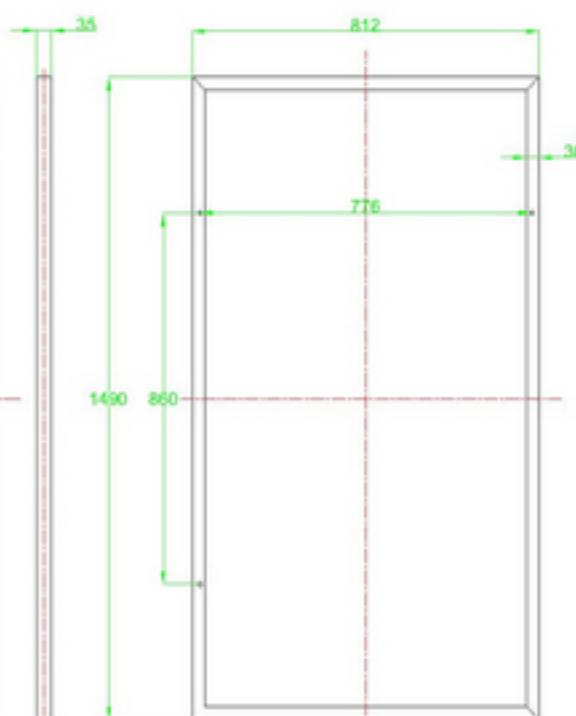
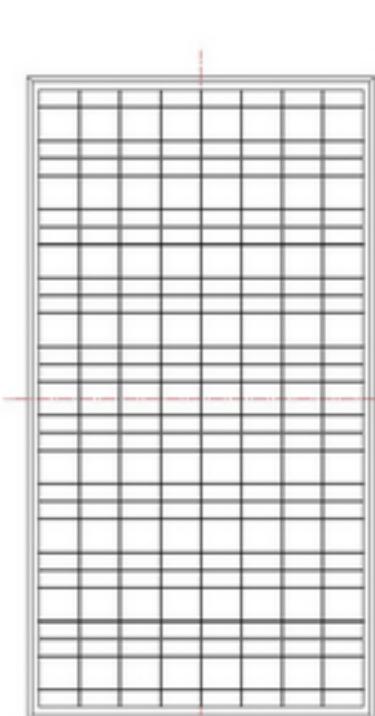
# Solar Panel (Poly Crystalline)



Model	JYSP-145P	JYSP-150P	JYSP-155P	JYSP-160P
Technology	Poly	Poly	Poly	Poly
Maximum power(Pmax) W	145	150	155	160
Maximum power voltage(Vmp) V	17.97	17.21	17.11	17.30
Maximum power current(Imp) A	8.09	8.72	9.07	9.26
Open circuit voltage (Voc) V	22.54	21.51	22.59	22.29
Short circuit current (Isc) A	8.64	9.66	9.49	9.89
Dimension of module (mm)	1490*670*35			
Weight (Kg)	10.5	10.5	10.5	10.5
Maximum system voltage (V)	1000			
Temperature coefficient of Pm(%)	-0.48%°C			
Temperature coefficient of Voc(%)	-0.34%°C			
Temperature coefficient of Isc(%)	-0.037%°C			
Temperature range	-40°C +85°C			
Tolerance in power	± 5%			
Resistances	227g steel ball fall down from 1m height and 60m/s wind			
Relative humidity	0 to 100%			
FF(%)	≥72%			
Standard test conditions	AM1.5 1000W/m² 25°C			
Warranty	Pm is not less than 90% in 10 years and 80% in 25 years			



## Solar Panel (Poly Crystalline)

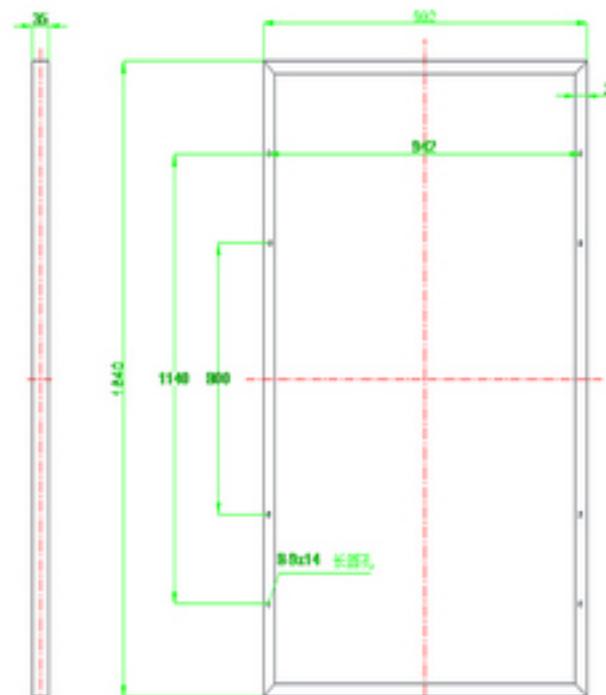
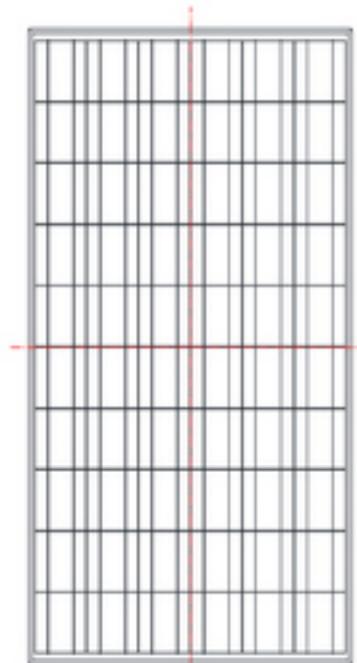
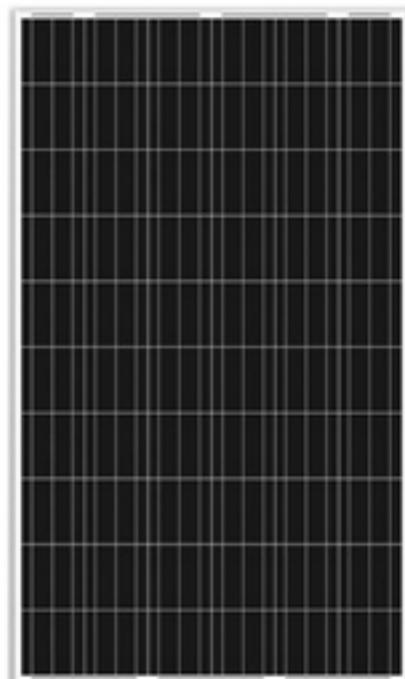


A grade, Long service life, Withstand storm and strong wind;

Model	JYSP-180P	JYSP-200P	JYSP-220P	JYSP-230P
Technology	Poly	Poly	Poly	Poly
Maximum power(Pmax) W	180	200	220	230
Maximum power voltage(Vmp) V	36.41	35.74	29.32	30.68
Maximum power current(Imp) A	4.95	5.60	7.51	7.50
Open circuit voltage (Voc) V	45.20	43.99	36.43	38.03
Short circuit current (Isc) A	5.23	5.98	7.85	8.01
Dimension of module (mm)	1490*812*35	1326*992*40	1640*992*40	1640*992*40
Weight (Kg)	14.0	15.0	21.2	21.2
Maximum system voltage (V)			1000	
Temperature coefficient of Pm(%)			-0.48%°C	
Temperature coefficient of Voc(%)			-0.34%°C	
Temperature coefficient of Isc(%)			-0.037%°C	
Temperature range			-40°C +85°C	
Tolerance in power			± 5%	
Resistances	227g steel ball fall down from 1m height and 60m/s wind			
Relative humidity			0 to 100%	
FF(%)			≥72%	
Standard test conditions			AM1.5 1000W/m² 25°C	
Warranty	Pm is not less than 90% in 10 years and 80% in 25 years			



## Solar Panel (Poly Crystalline)

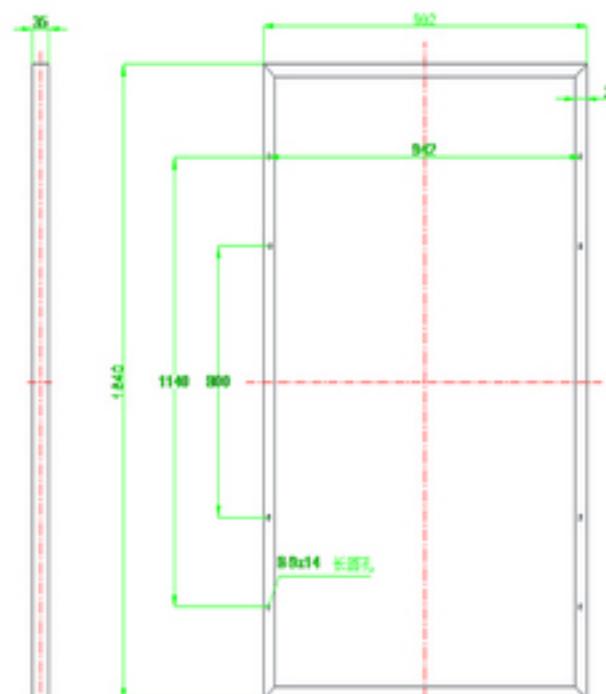
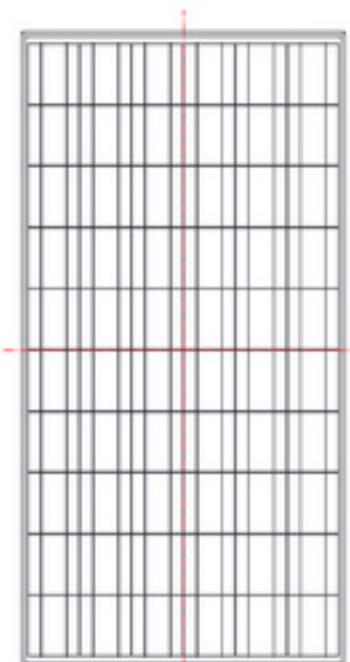


A grade, Long service life, Withstand storm and strong wind;

Model	JYSP-240P	JYSP-250P	JYSP-260P	JYSP-270P
Technology	Poly	Poly	Poly	Poly
Maximum power(Pmax) W	240	250	260	270
Maximum power voltage(Vmp) V	29.66	30.40	30.25	30.70
Maximum power current(Imp) A	8.10	8.23	8.60	8.80
Open circuit voltage (Voc) V	36.99	38.02	38.30	38.88
Short circuit current (Isc) A	8.67	8.80	9.34	9.59
Dimension of module (mm)	1640*992*40			
Weight (Kg)	21.2			
Maximum system voltage (V)	1000			
Temperature coefficient of Pm(%)	-0.48%°C			
Temperature coefficient of Voc(%)	-0.34%°C			
Temperature coefficient of Isc(%)	-0.037%°C			
Temperature range	-40°C +85°C			
Tolerance in power	± 5%			
Resistances	227g steel ball fall down from 1m height and 60m/s wind			
Relative humidity	0 to 100%			
FF(%)	≥72%			
Standard test conditions	AM1.5 1000W/m² 25°C			
Warranty	Pm is not less than 90% in 10 years and 80% in 25 years			



## Solar Panel (Mono Crystalline)

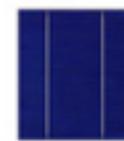
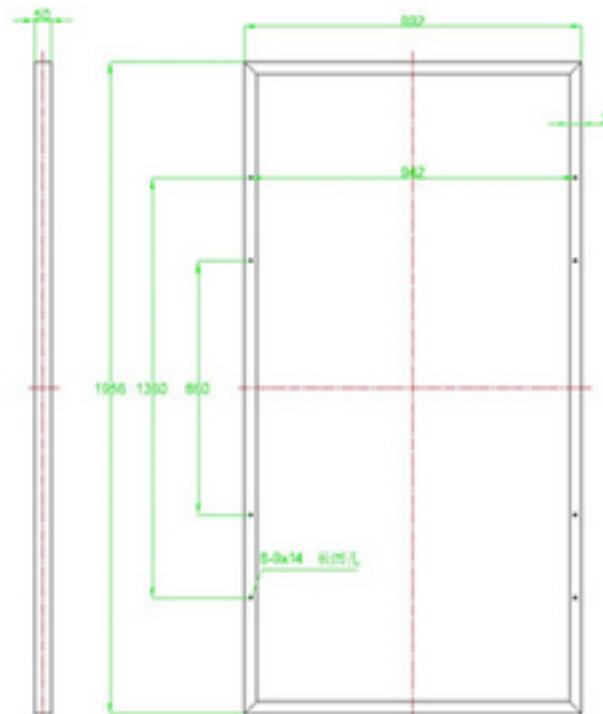
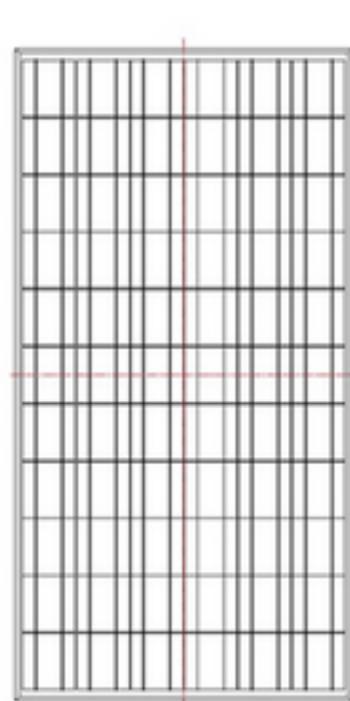


A grade, Long service life, Withstand storm and strong wind;

Model	JYSP-245M	JYSP-250M	JYSP-260M	JYSP-270M
Technology	Mono	Mono	Mono	Mono
Maximum power(Pmax) W	245	250	260	270
Maximum power voltage(Vmp) V	29.05	30.20	30.03	30.48
Maximum power current(Imp) A	8.45	8.29	8.66	8.87
Open circuit voltage (Voc) V	37.23	37.50	38.21	38.44
Short circuit current (Isc) A	8.69	8.99	9.10	9.41
Dimension of module (mm)	1640*992*40			
Weight (Kg)	21.2			
Maximum system voltage (V)	1000			
Temperature coefficient of Pm(%)	-0.48%°C			
Temperature coefficient of Voc(%)	-0.34%°C			
Temperature coefficient of Isc(%)	-0.037%°C			
Temperature range	-40°C +85°C			
Tolerance in power	± 5%			
Resistances	227g steel ball fall down from 1m height and 60m/s wind			
Relative humidity	0 to 100%			
FF(%)	≥72%			
Standard test conditions	AM1.5 1000W/m² 25°C			
Warranty	Pm is not less than 90% in 10 years and 80% in 25 years			



## Solar Panel (Poly Crystalline)

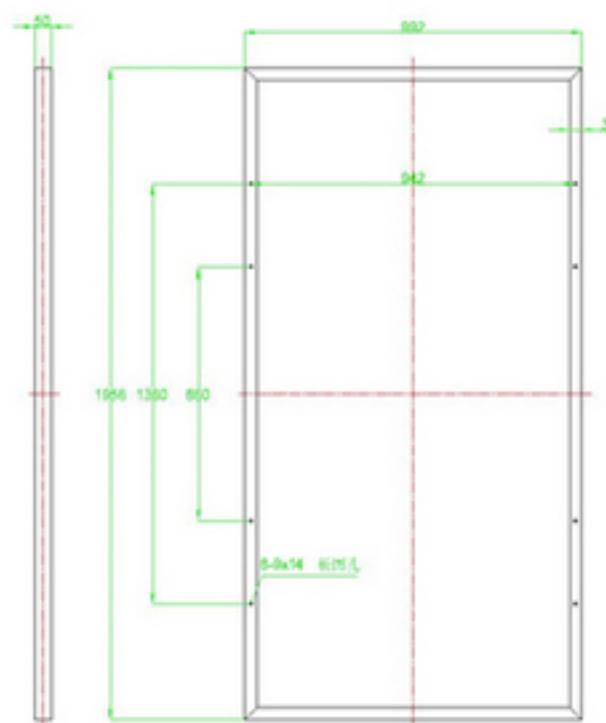
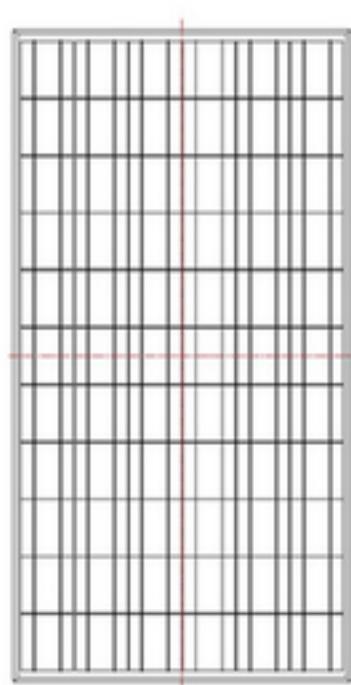


A grade, Long service life, Withstand storm and strong wind;

Model	JYSP-280P	JYSP-290P	JYSP-300P	JYSP-315P
Technology	Poly	Poly	Poly	Poly
Maximum power(Pmax) W	280	290	300	315
Maximum power voltage(Vmp) V	37.83	34.93	36.64	35.68
Maximum power current(Imp) A	7.40	8.31	8.20	8.84
Open circuit voltage (Voc) V	45.71	44.98	44.97	45.02
Short circuit current (Isc) A	8.09	8.76	8.95	9.38
Dimension of module (mm)			1956*992*50	
Weight (Kg)			25.2	
Maximum system voltage (V)			1000	
Temperature coefficient of Pm(%)			-0.48%°C	
Temperature coefficient of Voc(%)			-0.34%°C	
Temperature coefficient of Isc(%)			-0.037%°C	
Temperature range			-40°C +85°C	
Tolerance in power			± 5%	
Resistances	227g steel ball fall down from 1m height and 60m/s wind			
Relative humidity			0 to 100%	
FF(%)			≥72%	
Standard test conditions			AM1.5 1000W/m² 25°C	
Warranty	Pm is not less than 90% in 10 years and 80% in 25 years			



## Solar Panel (Mono Crystalline)



A grade, Long service life, Withstand storm and strong wind;

Model	JYSP-290M	JYSP-300M	JYSP-315M	JYSP-330M
Technology	Mono	Mono	Mono	Mono
Maximum power(Pmax) W	290	300	315	330
Maximum power voltage(Vmp) V	35.34	34.85	36.08	35.72
Maximum power current(Imp) A	8.21	8.62	8.74	9.24
Open circuit voltage (Voc) V	45.33	45.06	45.67	46.21
Short circuit current (Isc) A	8.81	9.40	9.16	9.49
Dimension of module (mm)	1956*992*50			
Weight (Kg)	25.2			
Maximum system voltage (V)	1000			
Temperature coefficient of Pm(%)	-0.48%°C			
Temperature coefficient of Voc(%)	-0.34%°C			
Temperature coefficient of Isc(%)	-0.037%°C			
Temperature range	-40°C +85°C			
Tolerance in power	± 5%			
Resistances	227g steel ball fall down from 1m height and 60m/s wind			
Relative humidity	0 to 100%			
FF(%)	≥72%			
Standard test conditions	AM1.5 1000W/m² 25°C			
Warranty	Pm is not less than 90% in 10 years and 80% in 25 years			



## Solar Street Light Project Gallery



Joysolar big project in Maiduguri in 2006-2007

~ Over 4000 Units



Over 10000 Units solar street light in Nigeria



Joysolar big project in Nouakchott, Mauritania in 2013

4500 units



Joysolar big project in Nigeria in 2014

800 units

