Circle Park Industries
(888)CPI-0211
Frisco Texas

SOLAR MODULES
Features & Performance

Our PV modules have been certified by ISO9001, ISO14001, OHSAS18001 etc. As a leading PV manufacturer, our prioritized goal is to keep developing and producing high quality and high efficiency modules.

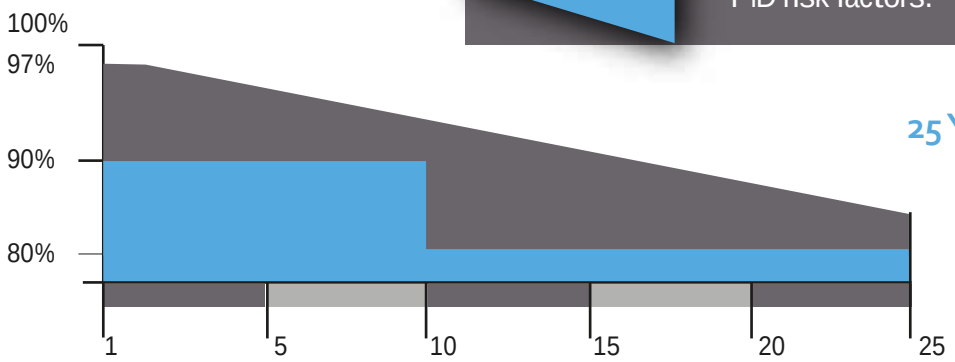
Maximum Power: 235Wp
Module Efficiency: 16.04%
Product Warranty: 10 years
Power Warranty: 10 years ≥90%
25 years ≥80%

ST54P235/230/225
ST54P220/215/210

Mechanical Property
- Snow loads up to 5400Pa
- Wind loads up to 2400Pa

Low Light Performance
- Excellent performance under low light (morning, evening and cloudy days)

High Durability
- Durable PV modules, independently tested for harsh environmental conditions, such as exposure to salt mist, ammonia and known PID risk factors.



25 Years Linear Warranty

Electrical Performance (STC : AM 1.5, 1000W/m², 25˚C)

Module Type	ST54P235	ST54P230	ST54P225	ST54P220	ST54P215	ST54P210
Maximum Power (Pmax / W)	235	230	225	220	215	210
Power Tolerance	0 ~ +3%					
Maximum Power Voltage (Vm / V)	28.0	27.8	27.7	27.4	27.3	27.1
Maximum Power Current (Im / A)	8.42	8.30	8.13	8.06	7.89	7.76
Open Circuit Voltage (Voc / V)	33.9	33.7	33.6	33.4	33.2	33.0
Short Circuit Current (Isc / A)	8.90	8.72	8.68	8.61	8.51	8.43
Module Efficiency (%)	16.04	15.70	15.36	15.02	14.67	14.33

Electrical Performance (NOCT : wind speed 1m/s, 800W/m², 20˚C)

Module Type	ST54P235	ST54P230	ST54P225	ST54P220	ST54P215	ST54P210
Maximum Power (Pmax / W)	172	168	164	161	157	153
Maximum Power Voltage (Vm / V)	25.4	25.2	25.1	24.9	24.8	24.6
Maximum Power Current (Im / A)	6.75	6.65	6.56	6.46	6.33	6.22
Open Circuit Voltage (Voc / V)	31.2	31.0	30.9	30.7	30.6	30.4
Short Circuit Current (Isc / A)	7.19	7.07	7.02	6.95	6.87	6.81

Mechanical Propeties

Dimensions (L×W×H / mm)	1480×990×35
Weight (Kgs)	15.5
Solar Cells	Polycrystalline 156×156mm
No. of Cells	54 (6×9)
Glass	3.2mm low-iron tempered glass
Frame	Anodized aluminum alloy
Junction box	IP 65 above, 3 bypass diodes
Cables	4mm², length 1000mm
Connectors	IP67, MC4 compatible

Operation Conditions

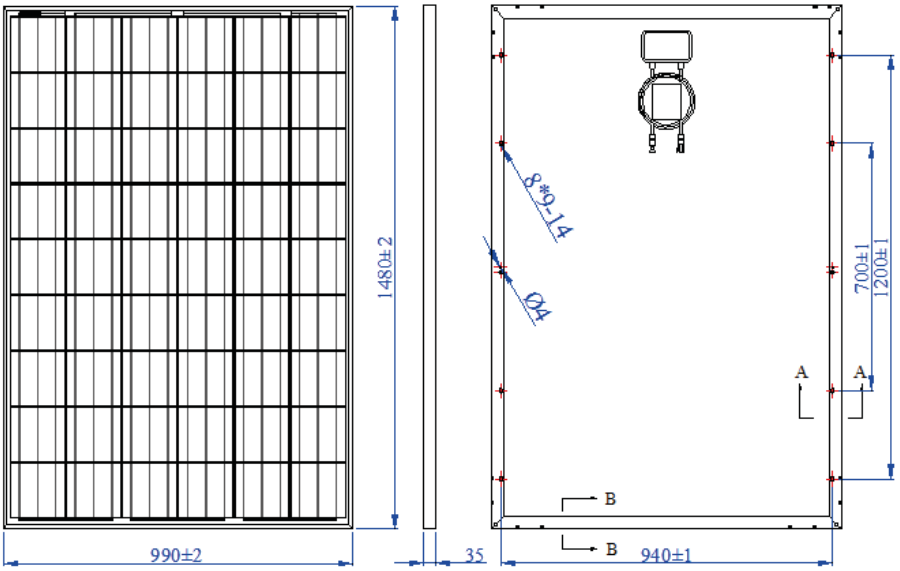
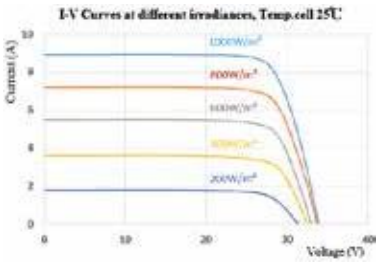
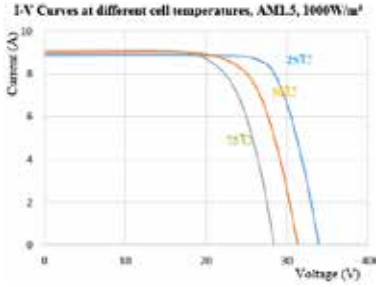
Maximum System Voltage (VDC)	1000 (IEC) / 600 (UL)
Maximum Series Fuse Rating (A)	15
Operating Module Temperature(℃)	-40 to +85

Temperature Propeties

Normal Operating Cell Temperature	45±2℃
Temperature Coefficient of Pm	-0.4 %/℃
Temperature Coefficient of Voc	-0.346 %/℃
Temperature Coefficient of Isc	+0.046 %/℃

System Design

Hail safety impact velocity	D 25mm at 23mm/s
Static Load (Front/Back)	5400Pa/2400Pa
Application class	Class A
Fire safety class (IEC61730)	Class C

Packing Configuration

Container Sizes	20GP	40HC
Pieces per pallet	28	28/33
Pallets per Container	14	15+15
Total pieces	392	915