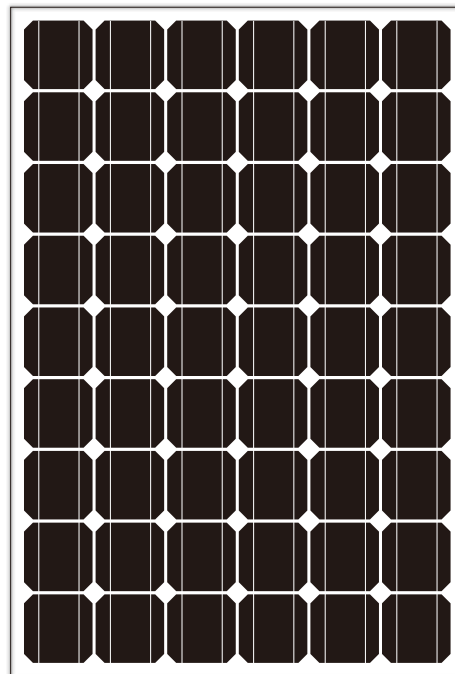
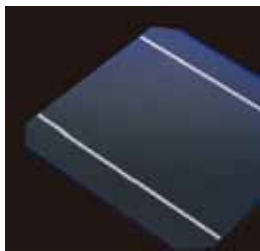


## Tihein Solar Series Mono-crystalline PV Module

# Tihein Solar

High Efficiency, High Quality  
PV Module



### Features:

- High conversion efficiency based on leading innovative PV technologies
- Tempered glass, EVA resin, and weatherproof film, and anodized aluminum frame for extended outdoor use
- Attractive appearance
- High reliable, guarantee  $\pm 3\%$  power output tolerance

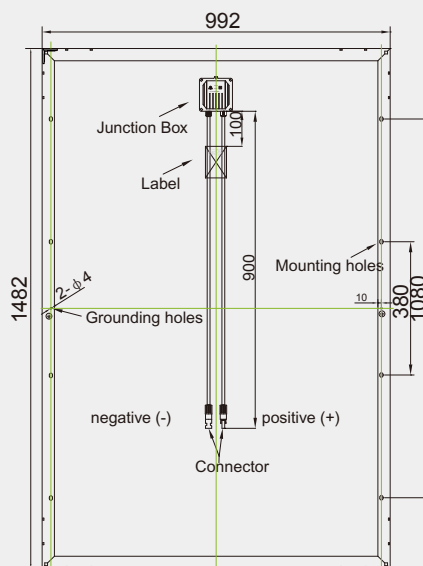
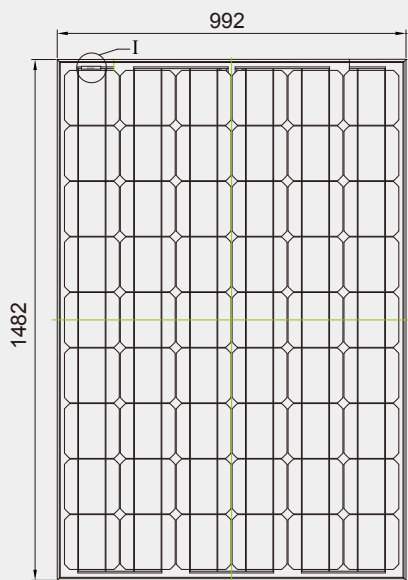
### Safety and Quality:

- 25-year limited warranty on power output:  
90% power output over 10 years 80% power output over 25 years
- 5-year materials and workmanship warranty
- Tested by leading institutes and certified for reliability:  
(1)TUV, IEC61215, IEC61730 (2)MCS (3)CE

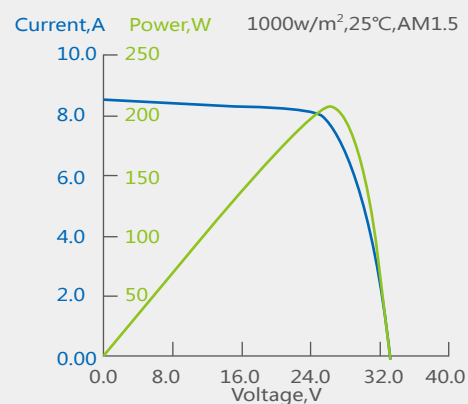
### Qualification Test

Temperature cycling range	-40 C to +85 C for 200 cycles
Damp heat test	85 C and 85 relative humidity for 1000h
Front & rear static load test (eg.:wind)	2400Pa
Front load test (eg.:snow)	5400Pa
Hailstone impact test	25mm hail at 23m/s from 1m distance





## IV CURVES



## Electrical Characteristics (195-235watt monocrystalline silicon module)

Type	Unit	THM	THM	THM	THM	THM	THM	THM	THM	THM
		195M-54	200M-54	205M-54	210M-54	215M-54	220M-54	225M-54	230M-54	235M-54
Peak power(Pmax)	W	195	200	205	210	215	220	225	230	235
Maximum power voltage(Vmp)	V	26.2	26.7	26.7	27.2	27.2	27.7	27.7	27.7	28.2
Open circuit voltage(Voc)	V	33.3	33.9	33.9	34.5	34.5	35.2	35.2	35.2	35.8
Maximum power current(Imp)	A	7.44	7.49	7.68	7.72	7.9	7.94	8.12	8.3	8.33
Short circuit current(Isc)	A	7.96	8.01	8.21	8.25	8.45	8.5	8.69	8.88	8.91
Maximum system voltage	V	1000	1000	1000	1000	1000	1000	1000	1000	1000
PowerTemperature and Coefficient	%/°C	-0.438	-0.438	-0.438	-0.438	-0.438	-0.438	-0.438	-0.438	-0.438
CurrentTemperature and Coefficient	%/°C	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
VoltageTemperature and Coefficient	%/°C	-0.297	-0.297	-0.297	-0.297	-0.297	-0.297	-0.297	-0.297	-0.297

## Mechanical Characteristics

Dimension(mm)	1482×992×50
Weight(kg)	18
Solar cells	54 cells (156×156mm)configured geometrically for a 6×9 matrix connected in series
Output cable length(mm)	900
Construction	Front:High transmission 3.2 mm tempered glass Rear:White backsheet; Encapsulant: EVA.