

PRODUCT OVERVIEW

Sona's modules are optimally manufactured and adjusted to meet the needs of the current market; scientifically designed module dimension makes the installation simple and easy; each cell of the module is the acclaimed "Made by sona".

Our continuous efforts in quality assurance system and certifications the international authentication institutions of sona's products demonstrate commitment to product quality and customer requirements.

产品简介

索纳长期以来不断致力于生产客户及市场需求的最优的生产组件。组件中的每一片电池产自索纳，科学的产品设计使其安装过程更为方便简单。

索纳还不断追求国际质量保证体系以及国际权威机构的认证，以体现我们对产品质量的严格把关和对客户的高度重视和承诺。

MODULE CHARACTERISTICS

- ☞ High efficiency crystalline silicon solar cells.
- ☞ High transmission low iron tempered glass, strong mechanical resistance.
- ☞ Standard waterproof junction box, with bypass diode.
- ☞ High endurance to different atrocious weather.
- ☞ Custom designed modules according to clients' requirement.

组件特征

- ☞ 高效能晶体硅太阳能电池片。
- ☞ 高透光的低铁钢化玻璃，具有优良的机械强度。
- ☞ 标准防水接线盒（含旁路二极管）。
- ☞ 适应各种恶劣天气的高耐候性。
- ☞ 可为客户量身定制或设计的产品。

MECHANICALPARAMETERS		WORKING CONDITIONS	
Cell(mm)	Poly156x156	Maximum System Voltage	DC 1000V(TUV)
Weight(kg)	17.5	Operating Temp.	-40℃~+85℃
Dimensions(LXWXH)(mm)	1482x992x35	Maximum Series Fuse(A)	13
Cable Length(mm)	≥900	Static loading	≤5400Pa
Cable cross section size(mm)	4	Grounding conductivity	<0.1Ω
No. of cells and connections	54(9x6)	NOCT	47±2℃
No. of diodes	6	Application Class	Class A
Packing configuration	30pcs/carton	Insulation Resistance	≥100MΩ

机械参数		工作环境	
电池规格(mm)	多晶 156x156	最大系统电压	DC (直流电) 1000V(TUV)
组件重量(kg)	17.5	操作温度.	-40℃~+85℃
组件尺寸(长 X 宽 X 高)(mm)	1482x992x35	最大保险丝额定电流(A)	13
电缆长度(mm)	≥900	静态载荷	≤5400Pa
电缆线径规格(mm)	4	接地导通	<0.1Ω
电池和连接的数量	54(9x6)	电池额定工作温度	47±2℃
二极管数量	6	应用等级	A 级
包装配置	30 个/箱	绝缘电阻	≥100MΩ

GUARANTEE

5-year limited product warranty

Limited performance warranty: 10 years at 90% of the minimal rated power output, 25 years at 80% of the minimal rated power output.

质量保证

5 年产品材料和工艺保证;

产品有限责任担保: 10 年内提供不低于 90% 的标称功率输出担保, 25 年内提供不低于 80% 的标称功率输出担保。

ELECTRICAL PARAMETERS

TYPE	SNS156P-225	SNS156P-230	SNS156P-235	SNS156P-240
Rated Maximum Power at STC(w)	225	230	235	240
Open Circuit Voltage (Voc/V)	33.79	33.98	34.17	34.57
Maximum Power Voltage (Vmp /V)	28.27	28.46	28.73	28.96
Short Circuit Current (Isc /A)	8.55	8.64	8.73	8.90
Maximum Power Current (Imp /A)	7.96	8.08	8.18	8.29
Module Efficiency(nm/%)	15.3	15.6	16.0	16.3
Power Tolerance	+3%			
α_{Isc}	+0.051%/°C			
β_{Voc}	-0.320%/°C			
γ_{Pmp}	-0.389%/°C			
STC	AM1.5、1000W/m ² 、25°C			

电性参数

型号	SNS156P-225	SNS156P-230	SNS156P-235	SNS156P-240
STC 下的最大额定功率 (W)	225	230	235	240
开路电压 (Voc/V)	33.79	33.98	34.17	34.57
最大功率电压 (Vmp /V)	28.27	28.46	28.73	28.96
短路电流(Isc /A)	8.55	8.64	8.73	8.90
最大功率电流 (Imp /A)	7.96	8.08	8.18	8.29
组件效率(nm/%)	15.3	15.6	16.0	16.3
功率误差允许范围	+3%			
α_{Isc}	+0.051%/°C			
β_{Voc}	-0.320%/°C			
γ_{Pmp}	-0.389%/°C			
STC	AM1.5、1000W/m ² 、25°C			



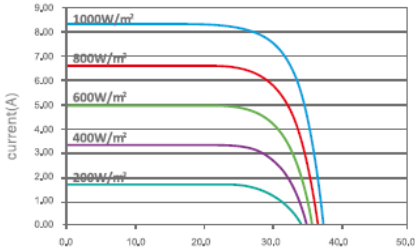
SNS156P-225~240

I-V CURVE 电流-电压曲线

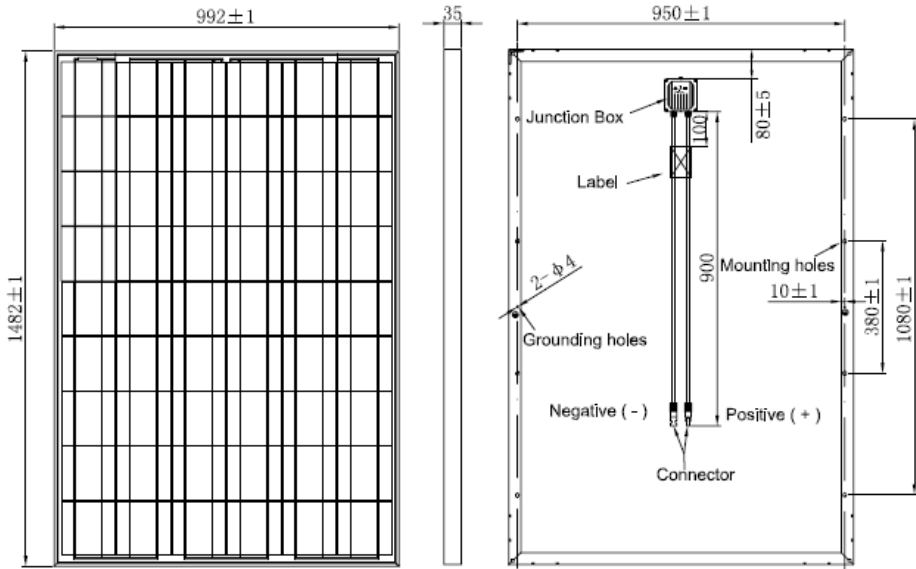
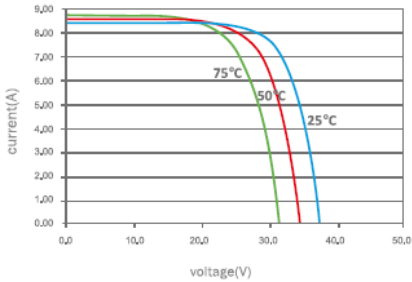
Output under different irradiation and the correlation between Isc/Pmax and Temperature map

在不同温度与光线下，Isc 与最大功率的变化趋势

I-V curve under different irradiation Cell Temp:25°C
在不同辐照下的电流-电压曲线 电池温度: 25°C



I-V curve under different temperature
不同温度下的电流-电压曲线



CERTIFICATIONS 证书

