

STP170S-24/Ab-1

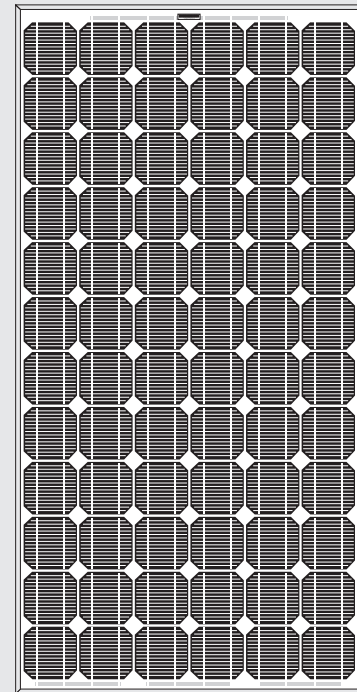
STP160S-24/Ab-1 STP165S-24/Ab-1
STP175S-24/Ab-1 STP180S-24/Ab-1

High Efficiency, High Quality
PV Module

Suntech's STPAb-1 is designed and built to deliver highest efficiency and reliable power for on-grid residential and commercial systems worldwide. Relying on Suntech's well-known stringent manufacturing standards and latest PV technology, the module provides the highest possible energy output per Watt with total module efficiency of 14.1%. Superior conversion rate and exceptional low-light performance enable it to deal with the most challenging conditions of military, utility, residential and commercial installations. The module is the perfect choice for those who demand outstanding performance and exceptional uniform appearance.

Features and benefits

- High efficiency
- Nominal 24 V DC for standard output
- Outstanding low-light performance
- High transparent low-iron, tempered glass
- Unique techniques give the panel following features: esthetic appearance, with stands high wind-pressure and snow load, and easy installation
- Unique technology ensure that problems of water freezing and warping do not occur
- Design to meet unique demand of customer
- 25 year power output warranty



Electrical Characteristics

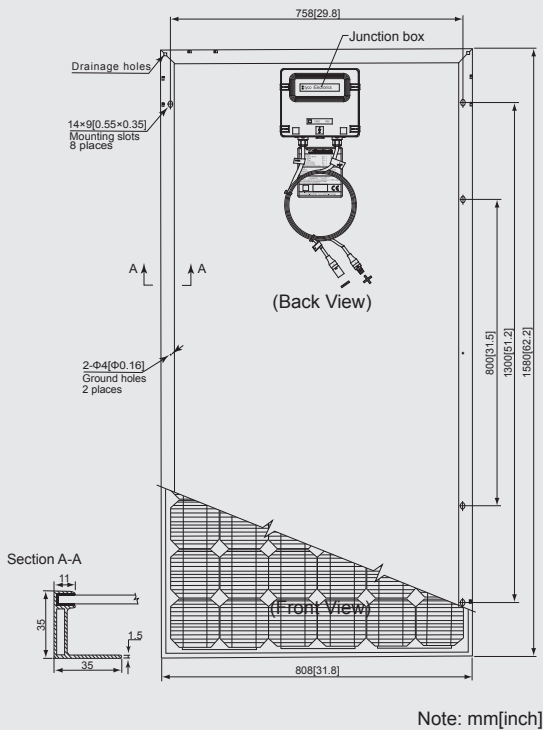
Model	STP180S-24/Ab-1	STP175S-24/Ab-1	STP170S-24/Ab-1	STP165S-24/Ab-1	STP160S-24/Ab-1
Open-circuit voltage (Voc)	44.4V	44.2V	43.8V	43.6V	43.2V
Optimum operating voltage (Vmp)	35.6V	35.2V	35.2V	34.8V	34.4V
Short-circuit current (Isc)	5.4A	5.2A	5.14A	5.04A	5A
Optimum operating current (Imp)	5.05A	4.95A	4.83A	4.74A	4.65A
Maximum power at STC (Pmax)	180Wp	175Wp	170Wp	165Wp	160Wp
Operating temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Maximum system voltage	600V DC	600V DC	600V DC	600V DC	600V DC

STC: Irradiance 1000W/m², Module temperature 25°C, AM=1.5

Warranty & Certifications

Warranty	25 year limited power Warranty
	5 Year Product Warranty
Certifications	UL listed (UL 1703)
	Class C Fire Rating

Module Diagram



Specifications

Cell	Monocrystalline silicon solar cells 125mm×125mm
No. of cells and connections	72(6×12)
Dimension of module	1580mm×808mm×35mm
Weight	15.5kg
Series Fuse Rating	15A

Temperature Coefficients

NOCT	45°C ± 2°C
Short-circuit current temperature coefficient	0.017 %/K
Open-circuit voltage temperature coefficient	-0.34 %/K
Peak power temperature coefficient	-0.48 %/K
Power tolerance	±3%

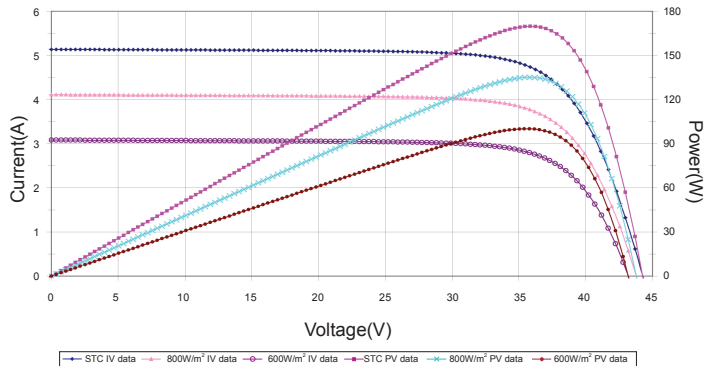
NOCT: Nominal Operating Cell Temperature
(data refer to STP165S)

Output

Cable	AIW (12AWG)
Lengths	1200mm(-) and 800mm(+)
Connection	MC Plug Type IV

Characteristics

Module IV Graph 170W



Normalized Isc, Voc, Pmax vs. module temperature characteristics

