## TSUNTECH

## STP130S-12/Tb

## STP140S-12/Tb

Suntech's STPTb 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 $14 \%$. 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 12 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

High Efficiency, High Quality PV Module


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Electrical Characteristics

| Model | STP140S-12/Tb | STP130S-12/Tb |
| :---: | :---: | :---: |
| Open-circuit voltage (Voc) | 22.4 V | 22.2 V |
| Optimum operating voltage (Vmp) | 17.6 V | 17.5 V |
| Short-circuit current (Isc) | 8.33 A | 8.04 A |
| Optimum operating current (Imp) | 7.95 A | 7.43 A |
| Maximum power at STC (Pmax) | 140 Wp | 130 Wp |
| Operating temperature | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Maximum system voltage | 1000 V DC | 1000 V DC |

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## Module Diagram



Note: mm[inch]

Characteristics
Module IV Graph 130W


[^1]
## Specifications

| Cell | Monocrystalline silicon solar cells <br> $156 \mathrm{~mm} \times 156 \mathrm{~mm}$ |
| :---: | :---: |
| No. of cells and connections | $36(4 \times 9)$ |
| Dimension of module | $1482 \mathrm{~mm} \times 676 \mathrm{~mm} \times 35 \mathrm{~mm}$ |
| Weight | 12 kg |

## Temperature Coefficients

| NOCT | $45^{\circ} \mathrm{C} \pm 2^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Short-circuit current temperature coefficient | $(0.055 \pm 0.01) \% / \mathrm{K}$ |
| Open-circuit voltage temperature coefficient | $-(78 \pm 10) \mathrm{mV} / \mathrm{K}$ |
| Peak power temperature coefficient | $-(0.48 \pm 0.05) \% / \mathrm{K}$ |
| Power tolerance | $\pm 5 \%$ |

NOCT: Nominal Operating Cell Temperature
(the data is only for reference)

## Output

| Cable | $\operatorname{LAPP}\left(4.0 \mathrm{~mm}^{2}\right)$ |
| :---: | :---: |
| Lengths | $750 \mathrm{~mm}(-)$ and $750 \mathrm{~mm}(+)$ |
| Connection | MC Plug Type IV |


[^0]:    STC: Irradiance $1000 \mathrm{~W} / \mathrm{m}^{2}$, Module temperature $25^{\circ} \mathrm{C}, \mathrm{AM}=1.5$

[^1]:    $\rightarrow$ STC IV data $\rightarrow 800 \mathrm{~W} / \mathrm{m}^{2}$ IV data $\rightarrow 600 \mathrm{~W} / \mathrm{m}^{2}$ IV data $\rightarrow$ STC PV data $\rightarrow 800 \mathrm{~W} / \mathrm{m}^{2} \mathrm{PV}$ data $\rightarrow 600 \mathrm{~W} / \mathrm{m}^{2} \mathrm{PV}$ data

