

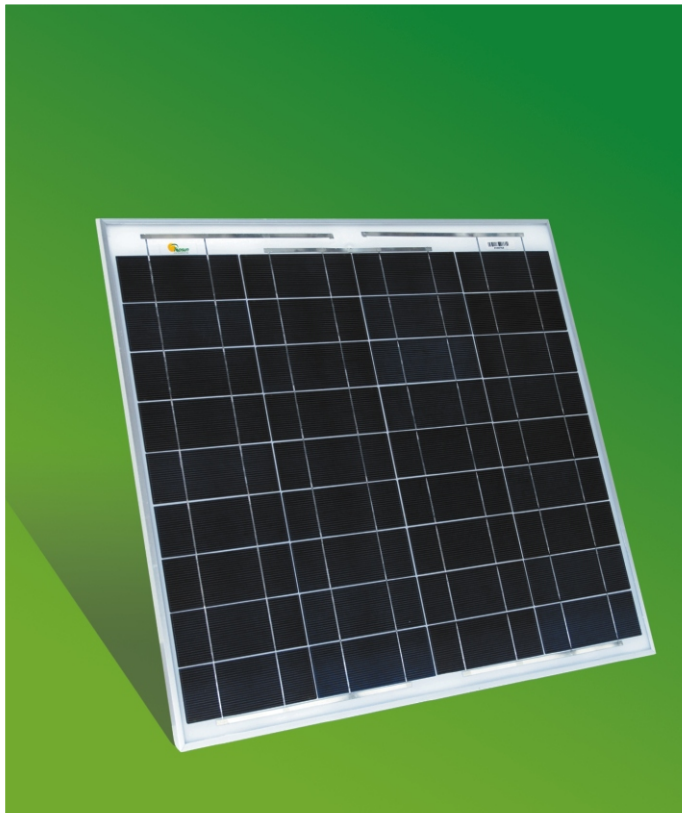


SHINE TP - CH

High Efficient Solar Panel

Topsun's Solar Photovoltaic modules offer high efficiencies, long consistent performance life reliable operations for both on and off grid applications.

SHINE TP - CH 30 - 40 Watt Product Series



CE

1. Medium power modules precisely manufactured to achieve top most module conversion efficiency in the industries.
2. AR coated cell surface to reduce the reflection of sunlight and BSF (Back Surface field) structure to improve cell conversion efficiency.
3. Due to use of high quality and IEC certified raw materials from International reputed brands we assure our modules reliability, durability and consistency when exposed to real usage.
4. Rugged double-coated aluminum-alloy frame for longevity in adverse conditions.
5. Every batch of cells is individually inspected for optical & electrical parameters to ensure aesthetic appeal & consistent performance when the module is applied to an array.
6. Manufactured under ISO 9001:2000 QMS & ISO 14001:2004 EMS.

Constructive Characteristics

Cells	: 36 (4 x 9/3 x 12) Mono/ Multi crystalline silicon cells 125mm/156mm Scribed cells
Contacts	: Full length solder dipped & Electroplated
Laminate	: EVA
Front Face	: Anti-reflective structured tempered glass
Back Face	: Multi layer Laminate of Tedlar Material
Frame	: Anodized aluminum 40mm high
Junction boxes	: IP 65 class 1000 V DC
Cables and connectors	: 2 core x 1.5 sq. mm recommended for use.
Diodes	: Includes Schottkey by pass diodes

Certifications

MNRE & DGSND	: Indian GVT approved
TEC	: Indian telecom standards certified
CE	: National & International quality and performance certified



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Electrical Characteristics

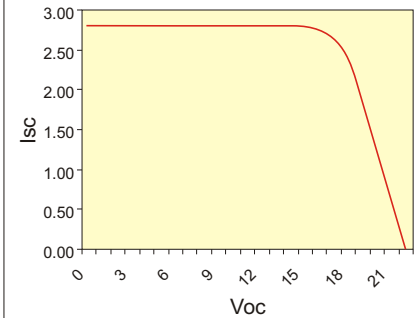
Maximum Power	Pmax (W)	40	37	35	30
Open Circuit Voltage	Voc(V)	21.8	21.6	21.2	21.0
Short Circuit Current	Isc	2.82	2.60	2.46	2.11
Max. Power Voltage	Vmp	17.4	17.4	17.2	17.0
Max. Power Current	Imp	2.30	2.12	2.03	1.76
Module Efficiencies	η (%)	12	11	11	10
Tolerance		±5%			
Temperature Coefficient of Isc		2.2 mA/°c			
Temperature Coefficient of Voc		- 77.4 mV/°c			
Temperature Coefficient of Pmpp		- 0.19 %/°c			
System Volts		1000 V DC			

Data under STC : 1000w/m² , 25 °C, AM=1.5

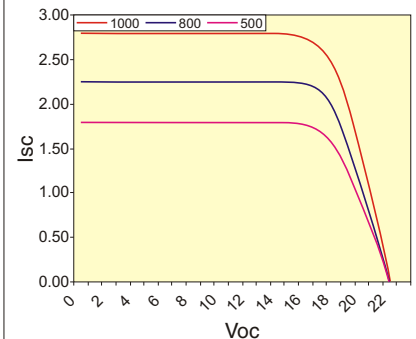
Mechanical Specifications

Dimensions (L x W x D)	: 550 x 650 x 40 (mm x mm x mm)
Weight	: 4.85 Kg (10.67 lbs)
Static load front & back (e.g. Wind)	: 50 psf (2400 pa.)
Front loading (e.g. Snow)	: 113 psf (5400pa.)
Temperature cycling range	: - 40 °C to +85 °C

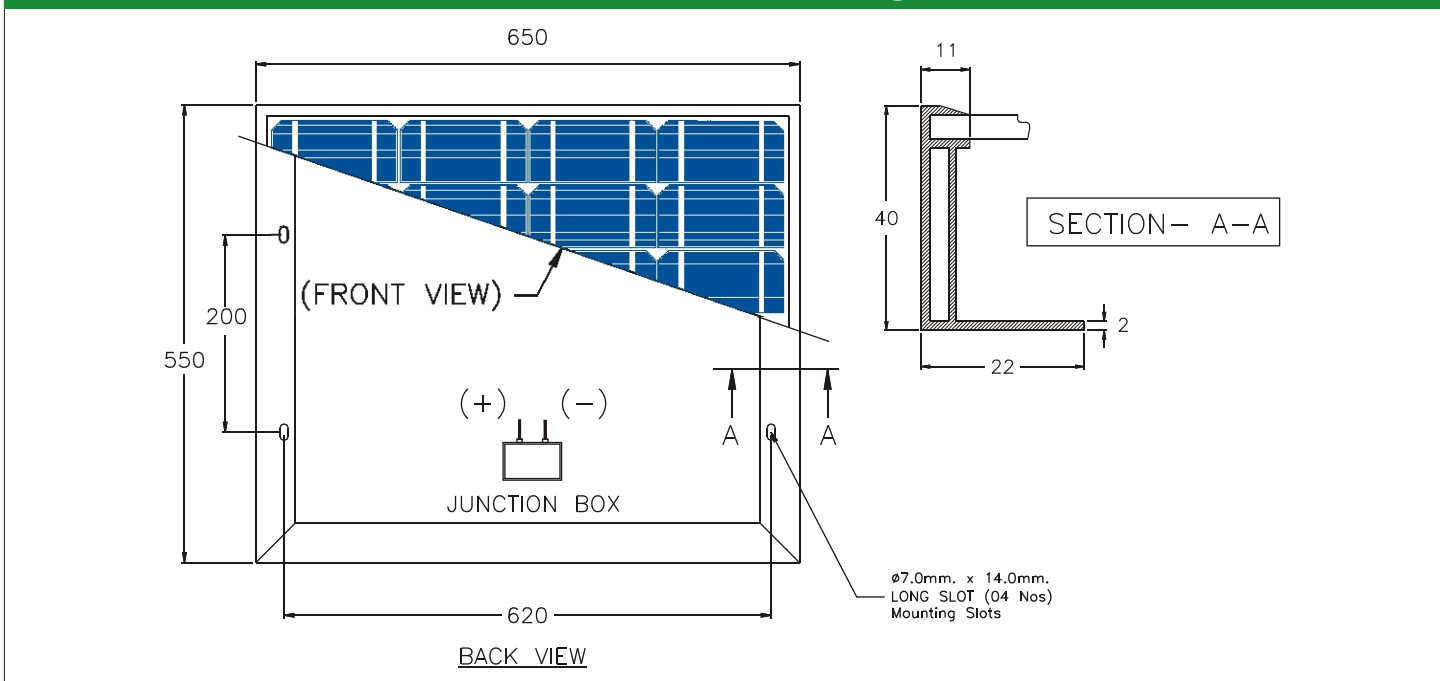
IV Curves



Various Irradiance Levels



Dimensions Drawing



*Our Policy is one of continuous improvements & technical specifications may change without any notice.

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