

# 6/15W

# CIGS THIN FILM SOLAR PANEL

## Applications

- Lanterns
- Mobile phone charging
- Small home lighting systems

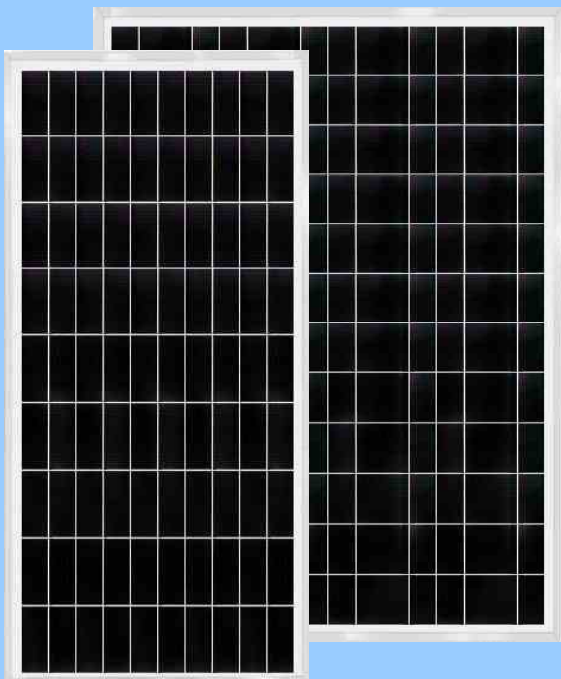
## General

Shurjo Energy photovoltaic panels are made using the latest Copper Indium Gallium diSelenide (CIGS) solar cells. CIGS perform well over a range of light-levels and climatic conditions, providing more KWhr per day compared to conventional silicon technology.

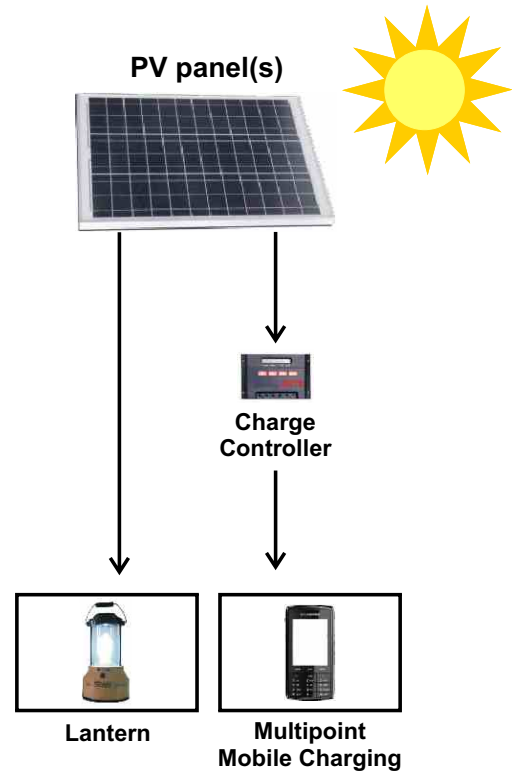
The panels provide consistent power, do not degrade when exposed to sunlight and are amongst the most efficient thin film panels in the market today.

They are constructed using the highest quality proven components, from the world's leading manufactures.

Panels are available in the range from 6-100W for battery charging applications & from 120-182W for grid connect. Customized BIPV panels are also available.



\*Panel photograph is indicative. Appearance may change with change in design.



Pictorial Representation

## Features

- 3 layer tedlar® with aluminium interlayer
- Ultra-clear 3.2 mm toughened and textured glass
- Reinforced anodized aluminium frame
- Robust high quality junction box
- Pre-punched frame for easy mounting
- Manufactured to IEC 61646 & IEC 61730
- **10 years limited warranty**  
2 years against manufacturing defect. 8 years to 90% of rated power, 10 years to 80% of rated power, provided panel is undamaged.

## Advantages

- CIGS cells are 40x thinner than standard crystalline cells.
- This technology requires as little as 25% of energy required to produce crystalline panels.
- CIGS has a crystalline structure which is stable over a period of time giving unabated performance for many years.
- Due to its high light absorbing band-gap, it is an optimal, effective PV material.

# Specifications

# 6/15W SOLAR PANEL SPECIFICATIONS

## Electrical Characteristics

	SE06-H15	SE15-I15
Cell	Crystalline CIGS onto thin film stainless steel foil	
Characteristics (+/- 10%)		
Open circuit voltage (Voc)	27.5V	28.0V
Optimum operating voltage (Vmp)	17.6V	18.5V
Short circuit current (Isc)	0.48A	1.05A
Optimum operating current (Imp)	0.35A	0.81A
Power at STC* (Pmax)	6W	15W
Temperature coefficient for Voc/°C	-0.6%	-0.6%
Temperature coefficient for Power W/°C	-0.6%	-0.6%

## Panel Dimension

	SE06-H15	SE15-I15
Weight	1.7 kg	2.7 kg
Dimension of panel (a) x (b)	228 x 596 mm	406 x 596 mm
Mounting oblong hole (g) x (f)	8 x 6 mm	8 x 6 mm
Distance between mounting holes (c)	300 mm	300 mm
Distance from corner (d)	148 mm	148 mm
Frame thickness (x) - (y)	21 x 22 mm	21 x 22 mm

## Limits

Operating temperature	-40 to +85°C	
Maximum system voltage	48V DC	500V DC

## Output

Output terminal	Potted junction box with 3 meter flying lead	
Cable	0.5 mm <sup>2</sup> - 4 amp - 1100V - 6.1mm overall diameter	
Cable length	3 m	
Connection	Stripped wire	

\*STC: Irradiance 1000W/m<sup>2</sup> @ 25°C, AM=1.5

**Note:** Panels, when first used, need two days of full sun exposure before reaching optimum performance.

Panels are marketed in India by PAE Ltd.

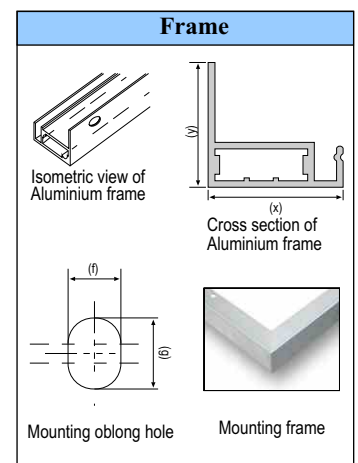
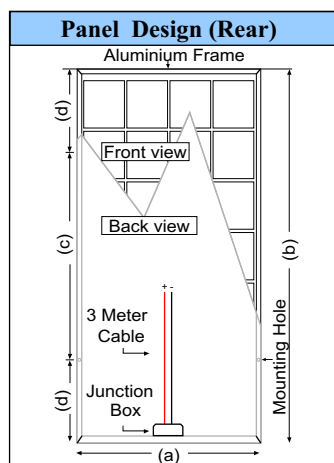
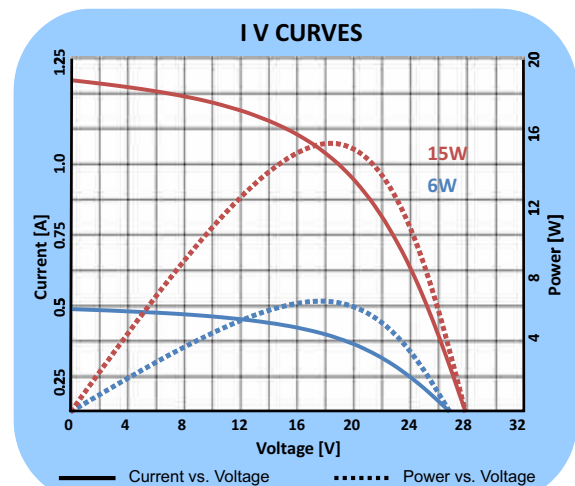
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Cells manufactured in the USA