**SoloPanel® SP3S** is an innovative photovoltaic module based upon Copper, Indium, Gallium, Selenium ("CIGS") semiconductor material electro-deposited on a flexible stainless steel substrate and encapsulated in a state-of-the-art moisture barrier laminate. It is designed for a wide range of applications.

# SoloPanel® Model

# SP3S

## LOW INSTALLED SYSTEM COST

The flexible, lightweight form factor of the SP3S enables rapid and easy installation as well as low cost system integration with a wide variety of mounting solutions. The SP3S module is optimized for commercial and industrial building integration.

#### HIGH ENERGY PERFORMANCE

SoloPower<sup>®</sup> is the market leader in high efficiency flexible modules. Modules are designed for superior performance under all light conditions, including low sun angle, providing excellent energy yield throughout the year.

#### **PROVEN DURABILITY**

SoloPower<sup>®</sup> modules are built to meet or exceed UL 1703, IEC 61646 & IEC 61730 standards. Cells and modules are continually subjected to rigorous environmental and accelerated life cycle testing beyond industry standards.

## **Imagine Integration**

SoloPower, Inc. is a US based manufacturer of high-efficiency thin-film photovoltaic modules based on Copper Indium Gallium di Selenide (CIGS). The unique manufacturing process utilizes a low cost, proprietary electro-deposition tool set. The company is headquartered in San Jose, California.



#### **KEY FEATURES**

- One hundred fifty three (153)
  series connected, high efficiency,
  CIGS solar cells optimize panel
  performance
- + Low weight, non-penetrating mounting solutions take advantage of the lightweight module characteristics
- + Superior low-sun angle and low light performance provide excellent energy yield
- + Low profile bypass diodes allow for maximum performance under shade conditions
- Weather resistant front sheet, sealed junction box and protective back sheet provide a long life, reliable and durable package
- Modules are built to meet and/ or exceed UL standard 1703, IEC 61646 & IEC 61730 standards
- + Manufactured in a highly automated state-of-the-art facility
- + 5-year limited warranty against defective materials and workmanship
- + 25-year warranty on power output
- + Designed and manufactured in USA
- + For a complete listing of SoloPower products visit: www.solopower.com

## **APPLICATIONS**

Segments: Commercial, Industrial Rooftop & Utility

#### **ELECTRICAL CHARACTERISTICS (STC)**<sup>1</sup>

Solopower SP3S		190	205	220	235	250
Rated Power (Pmax) <sup>2</sup>	W	190	205	220	235	250
Voltage at Pmax (Vmp)	V	55.3	57.8	59.9	64.5	70.2
Current at Pmax (Imp)	А	3.4	3.5	3.7	3.6	3.6
Short-circuit current (Isc)	А	4.3	4.3	4.4	4.3	4.2
Open-circuit Voltage (Voc)	V	78.0	81.1	82.6	87.2	90.3
Efficiency <sup>3</sup>	%	9.7	10.4	11.2	12.0	12.7

 STC standard test conditions: 1000W/m<sup>2</sup> intensity, Air Mass 1.5, 25°C cell temperature. The power tolerance is -3% / +5% Wp, at STC. The electrical characteristics are within ± 10% unless otherwise specified.

- 2. Stabilized Power.
- 3. Aperture Efficiency.

#### Solopower SP3S

Solopower SF33					
Temp. Co-efficient of Isc	%/°C	- 0.03	Pmp	- 0.48	%/°C
Temp. Co-efficient of Voc	%/°C	- 0.36			
Max. Series Fuse Rating	А	7			
Maximum DC Voltage					
US	VDC	600			
EU	VDC	1,000			
NOCT	°C	48			

## PHYSICAL CHARACTERISTICS

#### Solopower SPS3

Length	74.2 in / 1.886 m
Width	45.1 in / 1.146 m
Thickness	0.1 in / 2.0 mm
Weight	11.4 lbs / 5.2 kg
Roof Load From Module	0.49 lbs/ft² / 2.4 kg/m²

#### QUALIFICATIONS

Certified to Standards: UL 1703, IEC 61646, & IEC 61730.



#### WARRANTY

#### Limited Warranty

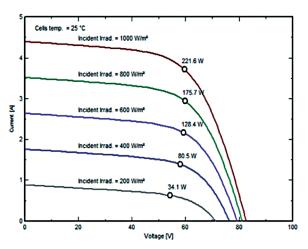
Materials and workmanship: 5 years

Power output: 25 years (90% of nominal rated power for years 1 to 10, 80% of nominal rated power for years 11 to 25). Designed and manufactured in the US.

Contact sales@solopower.com for complete terms of the limited warranty.

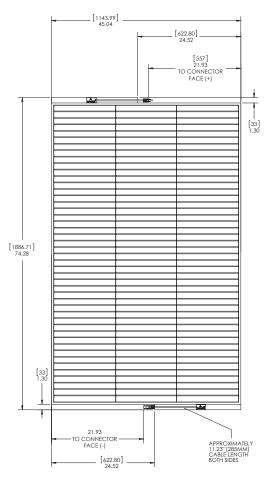
@2010 SoloPower, Inc. $^{\circ}$  All rights reserved. SoloPower $^{\circ}$ , the SoloPower $^{\circ}$  logo, and Solo Panel $^{\circ}$  are trademarks of SoloPower, Inc. $^{\circ}$  in the US and other countries.

#### **IV CURVES**



Current (A) vs. Voltage (V) at various Irradiance levels

## MECHANICAL DRAWING





5981 Optical Court San Jose, CA USA 95138 408-281-1582