

### **SOLAR GRID PANELS**

SU5J-190 is a solid solar module with 72 mono-crystalline solar cells. These modules can be used for on-grid solar applications. Our meticulous design and production techniques ensure a high-yield, long-term performance for every module produced. Our rigorous quality control and in-house testing facilities guarantee Soluzione USA Solar's modules to meet the highest quality standards in the market.

### **APPLICATIONS**

- Solar power stations
- On-Grid commercial/industrial roof-tops
- On- Grid residential roof-tops
- Off-Grid system
- Other solar grid applications

### **KEY FEATURES**

- 5 years product warranty (materials and workmanship)
- 12 years module power output warranty (> 90%)
- 25 years module power output warranty (>80%)
- Industry leading power tolerance:  $\pm 3\%$
- Strong framed module, withstanding IEC 5,400 Pa front load test, for snow accumulation
- Reinforced structure, withstanding IEC 2,400 Pa front and rear static load test, for wind stress
- Tested for temperature cycling, 200 cycles,  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- Tested for hailstone impact with 25 mm hail at 23 m/s from 1m distance

### **QUALITY CERTIFICATES**

- UL 1703
- IEC 61215, IEC 61730, CE
- ISO9001 Standards for quality management systems



*Planned Certifications*

[www.soluzioneusa.com](http://www.soluzioneusa.com)

# SU5J-190 Mono Crystalline Solar Module Series (160/165/170/175/180/185/190)

## Preliminary Data Sheet

### TYPICAL ELECTRICAL CHARACTERISTICS

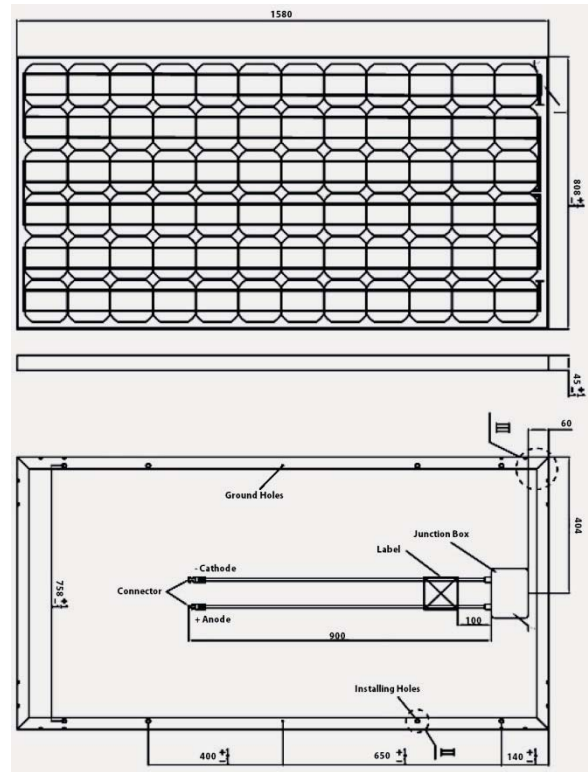
		SU5J-190						
		160	165	170	175	180	185	190
<b>Max Power (Wp)</b>		160	165	170	175	180	185	190
<b>Max Power Voltage (V<sub>MP</sub>)</b>		35.0	35.0	35.5	35.5	36.0	36.0	36.0
<b>Max Power Current (I<sub>MP</sub>)</b>		4.57	4.71	4.79	4.93	5.00	5.14	5.28
<b>Open Circuit Voltage (V<sub>OC</sub>)</b>		42.0	42.0	42.6	42.6	43.2	43.2	43.2
<b>Short Circuit Current (I<sub>SC</sub>)</b>		5.12	5.28	5.36	5.52	5.60	5.76	5.91
<b>Operating Temperature</b>		-40°C to +85°C						
<b>Maximum System Voltage</b>		600 V <sub>DC</sub> (UL)/1,000 V <sub>DC</sub> (TUV, VDE)						
<b>Maximum Series Fuse Rating</b>		10 A						
<b>Power Tolerance</b>		±3%						
<b>Temperature Coefficients</b>	<b>P<sub>MAX</sub></b>	-0.47%/°C						
	<b>V<sub>OC</sub></b>	-0.35%/°C						
	<b>I<sub>SC</sub></b>	0.05%/°C						
	<b>NOCT</b>	48°C ± 2°C						

Standard Test Conditions (STC: AM1.5) of irradiance of 1,000W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C

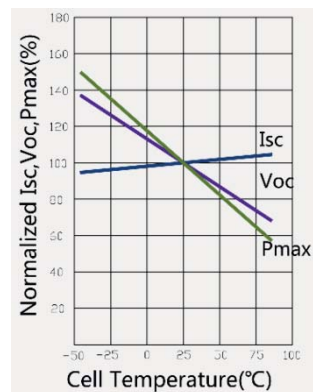
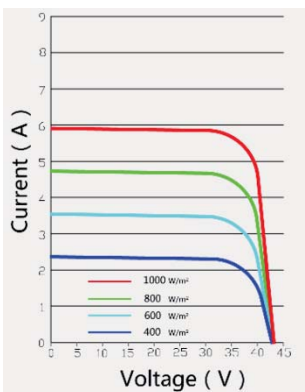
### MECHANICAL DATA

<b>Cell Type</b>	125x125 Mono Solar Cell
<b>Cell Arrangement</b>	72 (6 x 12)
<b>Dimensions</b>	1,580 x 808 x 45 mm (62.2 x 31.8 x 1.77 in)
<b>Weight</b>	15.5 Kg (34.2 lbs)
<b>Front Construction</b>	High Transmission 3.2 mm Tempered Glass
<b>Rear Construction</b>	White TPT, EVA Encapsulant
<b>Frame Material</b>	Anodized Aluminum Alloy
<b>Output Cable Length</b>	900 mm (35.43 in)
<b>Number of Diodes</b>	3

### ENGINEERING DRAWINGS



### I-V CURVES (160)



### ABOUT SOLUZIONE USA INC.

Soluzione USA is a fab-less solar product manufacturer. It was founded in 2003 to support Internationalization Projects and Businesses. We select and endorse products that meet the highest, world class quality standards and we combine them with the well known and recognized Soluzione USA business services. We are established in America, Europe and Asia with a team of professionals with over 280 years of cumulated professional experience.



1762 Rose Avenue  
 San Marino, CA 91108  
 Los Angeles County, USA  
 Tel. +1 (650) 766-9419  
 Fax +1 (626) 292-5883