



## FS-100 100 Watt Solar Panel

Built with an aluminum frame that ensures superior performance during even the most severe weather, the Future Solutions solar panel has high efficiency solar cells that ensure high performance and maximum power output.

### ADVANCED SOLAR CELLS

High-efficiency solar cells ensure high performance of the solar module and create maximum power output.

### PANEL LIFE

Under 10% decrease of output power within 10 years and 20% decrease in 20 - 25 years.

### ALUMINUM FRAME

Screw-less corner joints provide superior rigidity, with pre-drilled mounting holes for ease of installation.

### HIGH-TRANSMISSION GLASS

High-transmission 3.2mm tempered glass (over 92 - 95% transmission). Provides high module efficiency even in diffused light conditions.

### SUPERIOR JUNCTION BOX

High quality, weather proof junction box for extended life in harsh conditions.

### WEATHER-PROOF DESIGN

High impact resistance to the most severe weather: high wind, driving rain, heavy snow and hail. Moisture-proof and corrosion resistant.

# FS-100

## 100 Watt Solar Panel

### MECHANICAL SPECIFICATIONS

|                       |                                        |
|-----------------------|----------------------------------------|
| Dimensions            | 46.75 x 21.25 x 1.25 inches            |
| Weight                | 14 lbs                                 |
| Frame                 | Anodized Aluminum Alloy                |
| Cable Length          | 34 inches                              |
| Number of Cells (Pcs) | 36 (3x12)                              |
| Hail Impact Test      | 227g steel ball dropped from 1m height |
| Cell Size             | 6 inches                               |
| Cell Type             | Multicrystalline                       |
| Junction Box          | IP65                                   |
| Max Load Capacity     | 5400 Pa                                |

### ELECTRICAL SPECIFICATIONS

**STANDARD TEST CONDITIONS:**  
IRRADIANCE: 1000W/M<sup>2</sup> AM:1.5  
TEMPERATURE: 77°F

|                             |        |
|-----------------------------|--------|
| Maximum Power (pmax)        | 100W   |
| Maximum Power Voltage (Vmp) | 21.6 V |
| Maximum Power Current (Imp) | 5.67 A |
| Open Circuit Voltage (Voc)  | 21.6 V |
| Short Circuit Current (Isc) | 6.07 A |

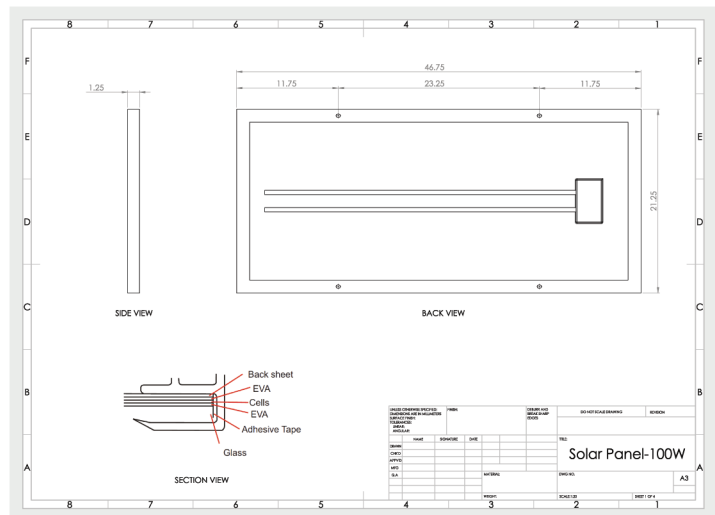
### TEMPERATURE COEFFICIENTS

|                            |           |
|----------------------------|-----------|
| Temp. Coefficients of Pmax | -0.45%/°C |
| Temp. Coefficients of Voc  | -0.34%/°C |
| Temp. Coefficients of Isc  | +0.05%/°C |

### MAX LIMITS

|                              |                   |
|------------------------------|-------------------|
| Maximum System Voltage       | 600V UL/1000V IEC |
| Module Operating Temperature | -40 to +185°F     |

### DIAGRAM OF PANEL MODULE



\*\*\*All specifications and data described in this data sheet are tested under Standard Test Conditions (STC- Irradiance: 1000W/m<sup>2</sup>, Air Mass: 1.5, Temperature: 77°F) and may deviate marginally from actual values. Future Solutions and affiliates have reserved the rights to make any modifications to the information on this data sheet without notice. It is our goal to supply our customers with the most recent information regarding our products for informational purposes only. These data sheets can be found to download at [fsi-solutions.com](http://fsi-solutions.com).