

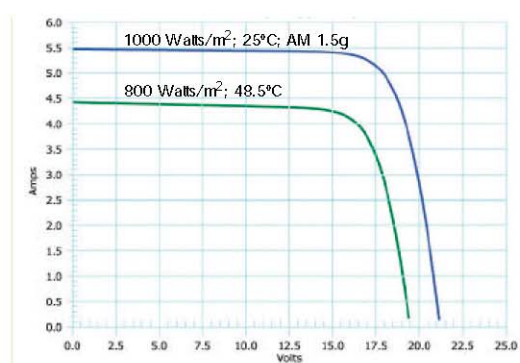
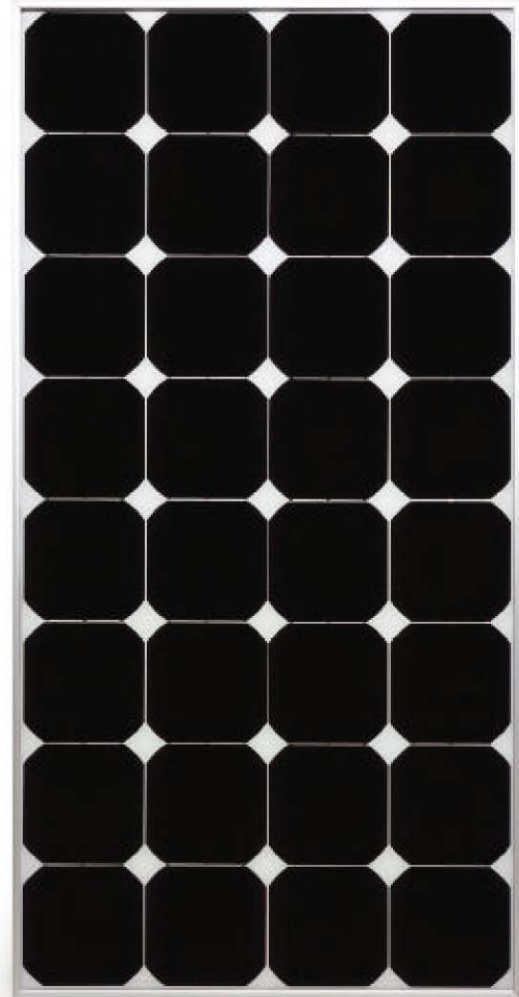
SPR 90 (Page 1 of 2) 90W High Efficiency Photovoltaic Module

SUNPOWER

The SunPower SPR-90 is ideal for a wide range of off-grid applications where high battery-charging current from a small footprint is desirable. Our monocrystalline silicon solar cells combine higher voltage per cell with an extremely low voltage-temperature coefficient to enable superior battery charging performance at high operating temperature. Exceptional low-light performance and broad spectral response further enhance energy delivery in all weather conditions, year round. Minimum module power rating (-0% tolerance) means that the actual power of every module meets or exceeds specification. SunPower modules—innovative design, proven materials, outstanding performance.

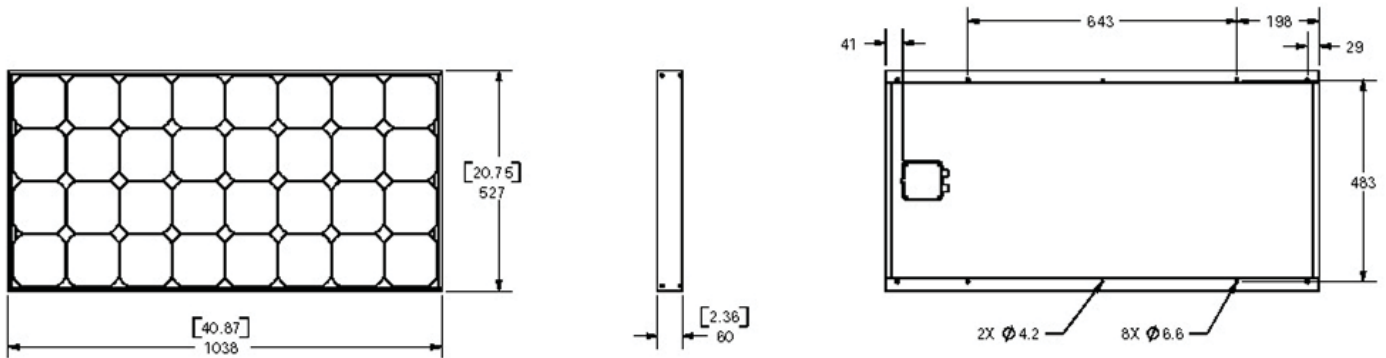
Features & Benefits

- A sturdy, anodized aluminum frame with mounting holes to match the industry norm enables easy installation on currently available mounting structures.
- Over 5.1 amps of peak battery charging current.
- Minimum power rating (-0% tolerance) means that the actual power of every module meets or exceeds nominal rated power.
- Unique back-contact solar cells with minimum 20% conversion efficiency.
- Extremely low voltage-temperature coefficient ensures maximum battery charging current is available even during high-temperature operation.
- Exceptional low-light performance and high sensitivity to light across the entire solar spectrum maximizes yearly charging performance in any weather.
- Highest quality 4mm-thick high-transmission strengthened glass provides enhanced stiffness and impact resistance.
- Aerospace style cell interconnects with in-plane strain relief provide extremely high reliability.
- Advanced EVA encapsulation system with multi-layer backsheets provides excellent long-term package durability.



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90W High Efficiency Photovoltaic Module



Typical Electrical Characteristics

STC is defined as: irradiance of 1000W/m², spectrum AM 1.5g and cell temperature of 25°C

| | |
|---------------------------------------|-------|
| Minimum Peak Power P _{min} | 90W |
| Rated Voltage V _{mp} | 17.7V |
| Rated Current I _{mp} | 5.1A |
| Open Circuit Voltage V _{oc} | 21.2V |
| Short Circuit Current I _{sc} | 5.5A |
| Series Fuse Rating | 15A |
| Maximum System Voltage | 120V |

ELECTRICAL CHARACTERISTICS AT NOMINAL OPERATING CELL TEMPERATURE CONDITIONS (NOCT)

NOCT assumes: irradiance of 800W/m², wind velocity of 1m/s and T_{amb} of 20°C

| | |
|---------------------------------------|--------|
| Temperature T _{NOCT} | 48.5°C |
| Rated Power P _{max} | 65W |
| Rated Voltage V _{mp} | 16.0V |
| Rated Current I _{mp} | 4.1A |
| Open Circuit Voltage V _{oc} | 19.45V |
| Short Circuit Current I _{sc} | 4.4A |

MECHANICAL SPECIFICATIONS

| | |
|--|------------|
| Dimensions (mm) | 1038 x 527 |
| Thickness, including junction box (mm) | 60 |
| Weight (kg) | 7.4 |