

Length 63.39 in (1610 mm)
Width 31.89 in (810 mm)
Height 1.34 in (34 mm)
Frame Aluminum
Weight 33 lbs (15 kg)

Sunmodule

SW 155/165/175 mono

The Sunmodule leads the PV industry in quality, output and reliability. The fully automated production process at SolarWorld's factories ensures consistently high quality and enables tight power tolerances.

The glass is set deep into the module frame and secured with silicone adhesive, which provides exceptional rigidity for the entire module and prevents frame loosening from handling or sliding snow and ice. Tests carried out in accordance with IEC 61215, which applied loads up to 5.4 kN/m², confirm the Sunmodule's ability to withstand heavy accumulations of snow and ice.

The Sunmodule's patented low-profile junction box provides exceptional protection against corrosion and features integral heat sinks that help maintain a lower temperature if and when any of the 25 amp Schottky bypass diodes are conducting. The junction box is connected by a solid welded bond to maximize reliability and performance life. In addition, the integrated high-quality robust cables are factory equipped with NEC 2008 code-compliant locking connectors. Each Sunmodule is covered by a 25-year performance warranty and is recyclable.



SW 155/165/175 mono

Performance under standard test conditions

| | | SW 155 | SW 165 | SW 175 |
|-----------------------------|-----------|--------|--------|--------|
| Maximum power | P_{max} | 155 Wp | 165 Wp | 175 Wp |
| Open circuit voltage | V_{oc} | 43.6 V | 44.0 V | 44.4 V |
| Maximum power point voltage | V_{mpp} | 34.8 V | 35.3 V | 35.8 V |
| Short circuit current | I_{sc} | 4.90 A | 5.10 A | 5.30 A |
| Maximum power point current | I_{mpp} | 4.46 A | 4.68 A | 4.89 A |

Performance at 800 W/m², NOCT, AM 1.5

| | | SW 155 | SW 165 | SW 175 |
|-----------------------------|-----------|----------|----------|----------|
| Maximum power | P_{max} | 110.8 Wp | 118.0 Wp | 125.1 Wp |
| Open circuit voltage | V_{oc} | 39.4 V | 39.8 V | 40.2 V |
| Maximum power point voltage | V_{mpp} | 31.2 V | 31.6 V | 32.1 V |
| Short circuit current | I_{sc} | 4.05 A | 4.22 A | 4.38 A |
| Maximum power point current | I_{mpp} | 3.55 A | 3.73 A | 3.90 A |

Minor reduction in efficiency under partial load conditions at 25°C: at 200 W/m², 95% (+/- 3%) of the STC efficiency (1000 W/m²) is achieved.

Component materials

| | |
|------------------|---------------------------|
| Cells per module | 72 |
| Cell type | monocrystalline silicon |
| Cell dimensions | 125 x 125 mm ² |

System integration parameters

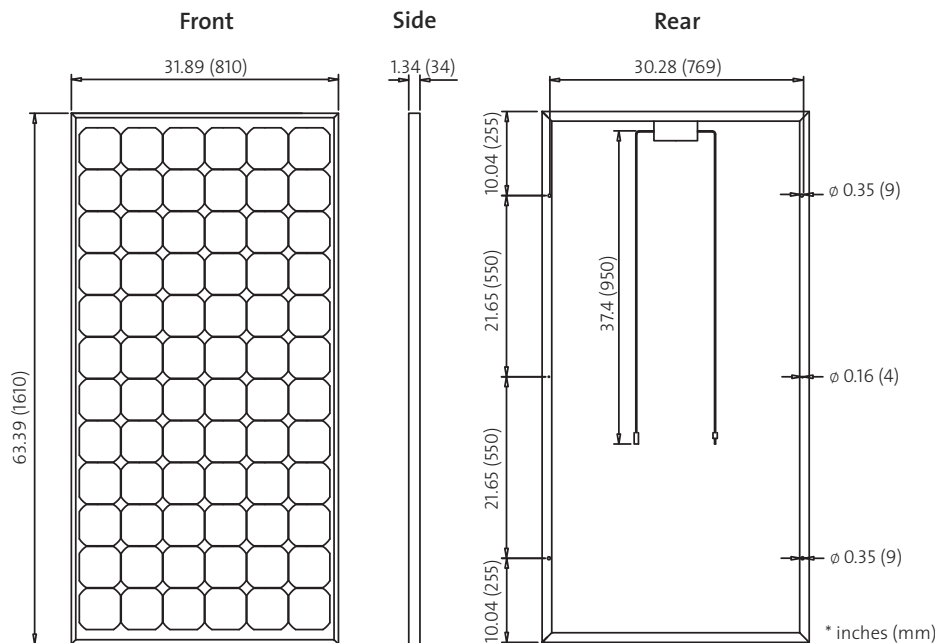
| | |
|--------------------------------|-----------------------|
| Maximum system voltage SC II | 1,000 V _{DC} |
| Maximum system voltage USA NEC | 600 V _{DC} |
| Maximum series fuse rating | 15 A |

Thermal characteristics

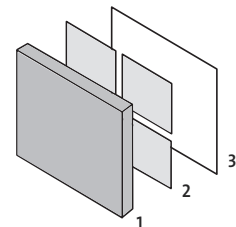
| | |
|--------------|-----------|
| NOCT | 46°C |
| TC I_{sc} | 0.036 %/K |
| TC V_{oc} | -0.33 %/K |
| TC P_{max} | -0.47 %/K |

Additional data

| | |
|-----------------|-----------|
| Power tolerance | +/- 3 % |
| Junction box | IP 65 |
| Connector | MC type 4 |



Construction



- 1] Front: tempered glass
- 2] crystalline solar cells embedded in EVA (ethylene-vinyl-acetate)
- 3] Rear: Tedlar