

# Sunmodule<sup>®</sup> Plus SW 255 mono black



TUV Power controlled:  
Lowest measuring tolerance in industry



Every component is tested to meet  
3 times IEC requirements



Designed to withstand heavy  
accumulations of snow and ice



Sunmodule Plus:  
Positive performance tolerance



25-year linear performance warranty  
and 10-year product warranty



Glass with anti-reflective coating



## World-class quality

Fully-automated production lines and seamless monitoring of the process and material ensure the quality that the company sets as its benchmark for its sites worldwide.

## SolarWorld Plus-Sorting

Plus-Sorting guarantees highest system efficiency. SolarWorld only delivers modules that have greater than or equal to the nameplate rated power.

## 25 years linear performance guarantee and extension of product warranty to 10 years

SolarWorld guarantees a maximum performance degression of 0.7% p.a. in the course of 25 years, a significant added value compared to the two-phase warranties common in the industry. In addition, SolarWorld is offering a product warranty, which has been extended to 10 years.\*

\*in accordance with the applicable SolarWorld Limited Warranty at purchase.  
[www.solarworld.com/warranty](http://www.solarworld.com/warranty)



- Qualified, IEC 61215
- Safety tested, IEC 61730
- Periodic Inspection
- Blowing sand resistant



- Ammonia resistance tested
- Periodic Inspection
- Power Controlled



We turn sunlight into power.

# Sunmodule<sup>®</sup> Plus SW 255 mono black

## PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC)\*

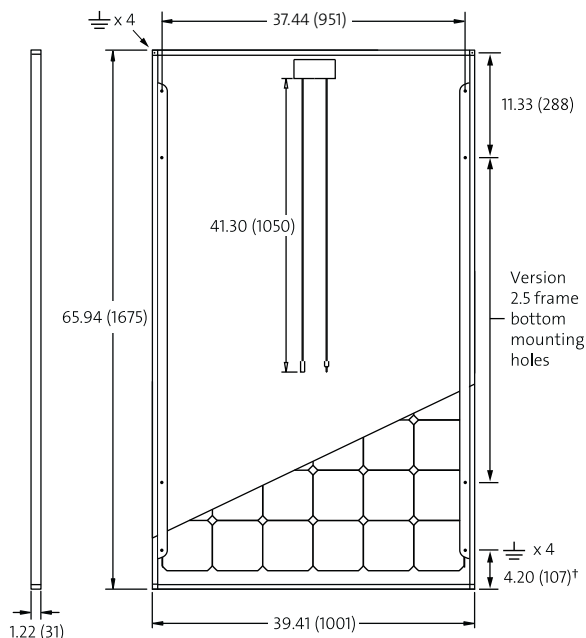
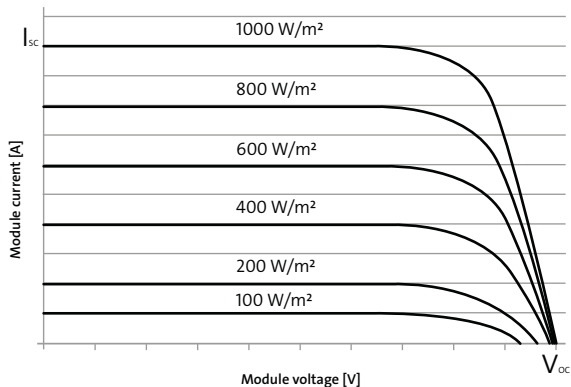
|                             |           |        |
|-----------------------------|-----------|--------|
| Maximum power               | $P_{max}$ | 255 Wp |
| Open circuit voltage        | $V_{oc}$  | 38.7 V |
| Maximum power point voltage | $V_{mpp}$ | 30.6 V |
| Short circuit current       | $I_{sc}$  | 9.05 A |
| Maximum power point current | $I_{mpp}$ | 8.43 A |

\*STC: 1000 W/m<sup>2</sup>, 25°C, AM 1.5

1) Measuring tolerance ( $P_{max}$ ) traceable to TUV Rheinland: +/- 2% (TUV Power Controlled).

## THERMAL CHARACTERISTICS

|                       |               |
|-----------------------|---------------|
| NOCT                  | 48 °C         |
| TC $I_{sc}$           | 0.04 %/°C     |
| TC $V_{oc}$           | -0.30 %/°C    |
| TC $P_{mpp}$          | -0.45 %/°C    |
| Operating temperature | -40°C to 85°C |



## PERFORMANCE AT 800 W/m<sup>2</sup>, NOCT, AM 1.5

|                             |           |          |
|-----------------------------|-----------|----------|
| Maximum power               | $P_{max}$ | 188.5 Wp |
| Open circuit voltage        | $V_{oc}$  | 35.0 V   |
| Maximum power point voltage | $V_{mpp}$ | 27.7 V   |
| Short circuit current       | $I_{sc}$  | 7.32 A   |
| Maximum power point current | $I_{mpp}$ | 6.81 A   |

Minor reduction in efficiency under partial load conditions at 25°C: at 200 W/m<sup>2</sup>, 100% (+/-2%) of the STC efficiency (1000 W/m<sup>2</sup>) is achieved.

## COMPONENT MATERIALS

|                  |                                     |
|------------------|-------------------------------------|
| Cells per module | 60                                  |
| Cell type        | Mono crystalline                    |
| Cell dimensions  | 6.14 in x 6.14 in (156 mm x 156 mm) |
| Front            | Tempered glass (EN 12150)           |
| Frame            | Black anodized aluminum             |
| Weight           | 46.7 lbs (21.2 kg)                  |

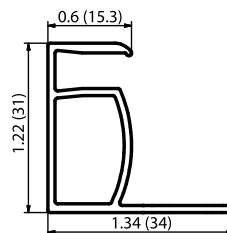
## SYSTEM INTEGRATION PARAMETERS

|                              |                   |                                   |
|------------------------------|-------------------|-----------------------------------|
| Maximum system voltage SC II | 1000 V            |                                   |
| Max. system voltage USA NEC  | 1000 V            |                                   |
| Maximum reverse current      | 16 A              |                                   |
| Number of bypass diodes      | 3                 |                                   |
| UL Design Loads*             | Two rail system   | 113 psf downward<br>64 psf upward |
| UL Design Loads*             | Three rail system | 170 psf downward<br>64 psf upward |
| IEC Design Loads*            | Two rail system   | 113 psf downward<br>50 psf upward |

\*Please refer to the Sunmodule installation instructions for the details associated with these load cases.

## ADDITIONAL DATA

|                            |                                       |
|----------------------------|---------------------------------------|
| Power sorting <sup>1</sup> | -0 Wp / +5 Wp                         |
| J-Box                      | IP65                                  |
| Module leads               | PV wire per UL4703 with H4 connectors |
| Module efficiency          | 15.21 %                               |
| Fire rating (UL 790)       | Class C                               |
| Glass                      | Low iron tempered with ARC            |



### VERSION 2.5 FRAME

- Compatible with both "Top-Down" and "Bottom" mounting methods
- Grounding Locations:
  - 4 corners of the frame
  - 4 locations along the length of the module in the extended flange<sup>†</sup>

