FGE

SUNMODULE 285 BLACK

TUV Power controlled:
Lowest measuring tolerance in industry

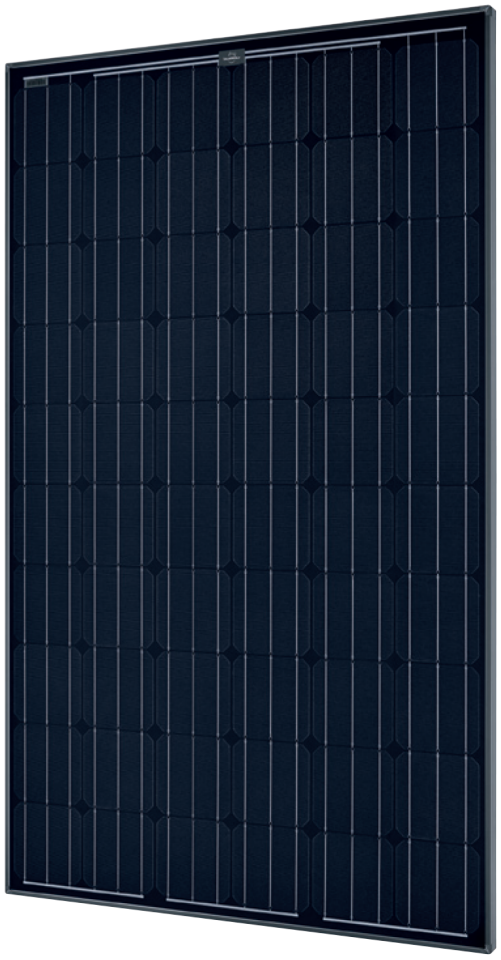
Every component is tested to meet
3 times IEC requirements

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-year linear performance guarantee and extension of product warranty to 10 years
SolarWorld guarantees a maximum performance digression 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, along with our industry-first 10-year product warranty.*

*in accordance with the applicable SolarWorld Limited Warranty at purchase.
www.solarworld.com/warranty

- Qualified, IEC 61215
- Safety tested, IEC 61730
- Blowing sand resistance, IEC 60068-2-68
- Ammonia resistance, IEC 62716
- Salt mist corrosion, IEC 61701
- Periodic inspection

- Periodic inspection
- Power controlled

UL 1703

ISO 9001
ISO 14001
Certified

Home Innovation
NGBS GREEN CERTIFIED

SUNMODULE 285 BLACK

PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC)*

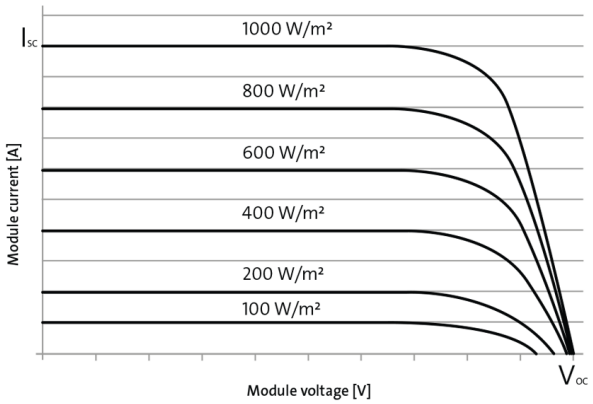
Maximum power	P_{max}	285 Wp
Open circuit voltage	V_{oc}	39.7 V
Maximum power point voltage	V_{mpp}	31.3 V
Short circuit current	I_{sc}	9.84 A
Maximum power point current	I_{mpp}	9.20 A
Module efficiency	η_m	17.0 %

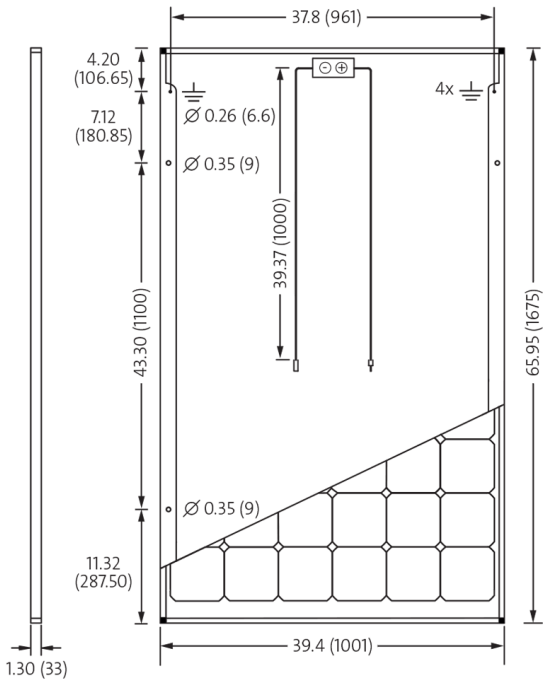
*STC: 1000 W/m², 25°C, AM 1.5

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

THERMAL CHARACTERISTICS

NOCT	48 °C
TC I_{sc}	0.044 %/°C
TC V_{oc}	-0.31 %/°C
TC P_{mpp}	-0.43 %/°C
Operating temperature	-40°C to 85°C





PERFORMANCE AT 800 W/m², NOCT, AM 1.5

Maximum power	P_{max}	211.1 Wp
Open circuit voltage	V_{oc}	36.0 V
Maximum power point voltage	V_{mpp}	28.4 V
Short circuit current	I_{sc}	7.96 A
Maximum power point current	I_{mpp}	7.43 A

Minor reduction in efficiency under partial load conditions at 25°C: at 200 W/m², 100% (+/-2%) of the STC efficiency (1000 W/m²) is achieved.

COMPONENT MATERIALS

Cells per module	60
Cell type	Mono crystalline
Cell dimensions	6.17 in x 6.17 in (156.75 x 156.75 mm)
Front	Tempered glass (EN 12150)
Frame	Black anodized aluminum
Weight	39.7 lbs (18.0 kg)

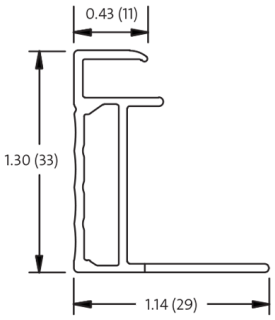
SYSTEM INTEGRATION PARAMETERS

Maximum system voltage SC II / NEC		1000 V
Maximum reverse current		25 A
Number of bypass diodes		3
*Design Loads**	*Two rail system*	113 psf downward 64 psf upward
*Design Loads**	*Three rail system*	178 psf downward 64 psf upward
*Design Loads**	*Edge mounting*	178 psf downward 41 psf upward

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

ADDITIONAL DATA

Power sorting[1]	-0 Wp / +5 Wp
J-Box	IP65
Module leads	PV wire per UL4703 with H4 connectors
Module type (UL 1703)	1
Glass	Low iron tempered with ARC



- Compatible with both "Top-Down" and "Bottom" mounting methods
- ⏚ Grounding Locations:
  – 4 locations along the length of the module in the extended flange.

FUTURE GREEN ENERGY PRIVATE LIMITED

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