



# TECHNICAL DATA

## SOMERA GRAND ULTIMA MAX

THIS DATASHEET IS APPLICABLE FOR: SOMERA VSMH.75.AAA.05 (AAA=375-400)

### Electrical Data<sup>1,2</sup> All data refers to STC (AM 1.5, 1000 W/m<sup>2</sup>, 25°C)

Peak Power P <sub>max</sub> (Wp)	Power Tolerance : 0 ~ +4.99Wp	375	380	385	390	395	400
Maximum Voltage V <sub>mpp</sub> (V)		41.4	41.4	41.6	41.8	41.8	42.2
Maximum Current I <sub>mp</sub> (A)		9.06	9.18	9.25	9.33	9.45	9.48
Open Circuit Voltage V <sub>oc</sub> (V)		50.4	50.6	50.6	51.2	51.2	51.3
Short Circuit Current I <sub>sc</sub> (A)		9.78	9.81	9.83	9.86	9.92	9.94
Module Efficiency η (%)		18.14	18.38	18.63	18.87	19.11	19.35

1) STC: 1000 W/m<sup>2</sup> irradiance, 25°C cell temperature, AM1.5G Spectrum according to EN 60904-3. | 2) Measurement Tolerance at STC : P<sub>max</sub> : ± 3% Voc : ± 5% I<sub>sc</sub> : ± 5%

### Electrical Parameters at NOCT<sup>3</sup>

Power (W)	267.9	271.4	275.0	278.6	282.1	285.7
V@P <sub>max</sub> (V)	37.0	37.0	37.1	37.3	37.3	37.7
I@P <sub>max</sub> (A)	7.25	7.34	7.40	7.46	7.56	7.58
V <sub>oc</sub> (V)	46.7	46.9	46.9	47.4	47.4	47.5
I <sub>sc</sub> (A)	7.82	7.85	7.86	7.89	7.94	7.95

3) NOCT Irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, AM 1.5G Spectrum, Wind Speed 1m/sec  
Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

### Temperature Coefficients (Tc) permissible operating conditions

Tc of Open Circuit Voltage (β)	- 0.28%/°C
Tc of Short Circuit Current (α)	0.057%/°C
Tc of Power (γ)	-0.39%/°C
Maximum System Voltage	1500 V
NOCT	45°C ± 2°C
Temperature Range	-40°C to + 85°C

### Mechanical Data

Length × Width × Height	2065 ± 2mm × 1001 ± 2mm × 40 ± 1mm
Weight	22.6 kg +/- 3%
Junction Box	IP68/IP67, Split Junction Box with individual bypass diodes
Cable Cross Section Size	4mm <sup>2</sup>
Connectors	PVKST4-EVO2/xy_UR/PVKBT4-EVO 2/xy_UR, PV-JM608, 05-8.
Application Class	Class A (Safety class II)
Superstrate	3.2 mm (0.13 inches) high transmission low iron tempered glass, AR coated
Cells	150 (25 × 6) Mono PERC 5BB solar cells
Cell Encapsulant	EVA (Ethylene Vinyl Acetate)
Back Sheet	Composite film
Frame	Anodized aluminium frame with twin wall profile
Maximum Static Load, Front	3600Pa, 1.5
Maximum Static Load, Back	1600Pa, 1.5
Maximum Series Fuse Rating	20 A

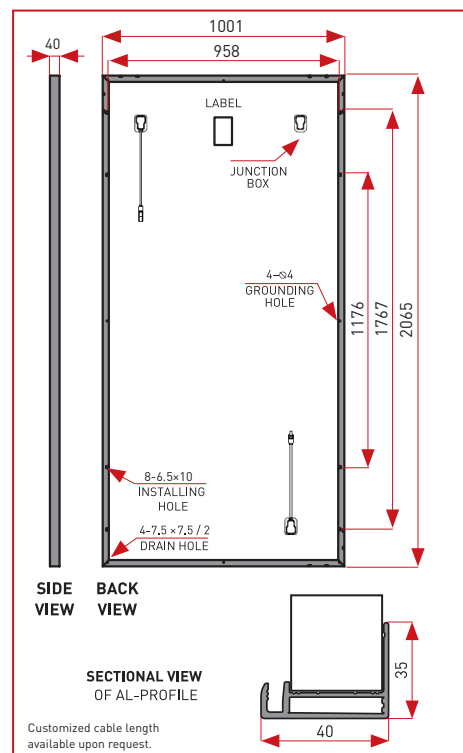
### Warranty and Certifications

Product Warranty**	10 years
Performance Warranty**	Linear Power Warranty for 27 years with 3% for 1st year degradation and 0.65% from year 2 to year 27
Approvals and Certificates <sup>Δ</sup>	UL1703, IEC 61215:2016, IEC 61730:2016, IS14286, IS/IEC 61730

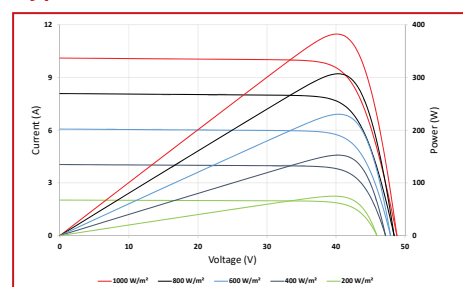
### Packaging Information

Quantity /Pallet: 26	Pallets/Container (40'HC): 22	Quantity/Container (40'HC): 572
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### Dimensions in mm

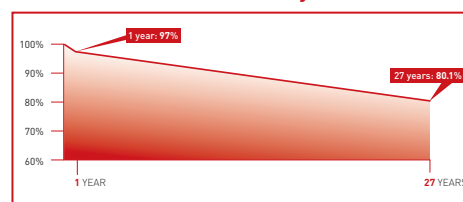


### Typical Electrical Curves<sup>4</sup>



<sup>4</sup> Average relative efficiency reduction of 5% at 200 W/m<sup>2</sup> according to EN 60904-1.

### Performance Warranty



\*\* Refer to Vikram Solar's warranty document for terms and conditions.

**CAUTION:** READ SAFETY AND INSTALLATION MANUAL BEFORE USING THE PRODUCT.

Electrical data without guarantee. Please confirm your exact requirement with the company representative while placing your order.

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