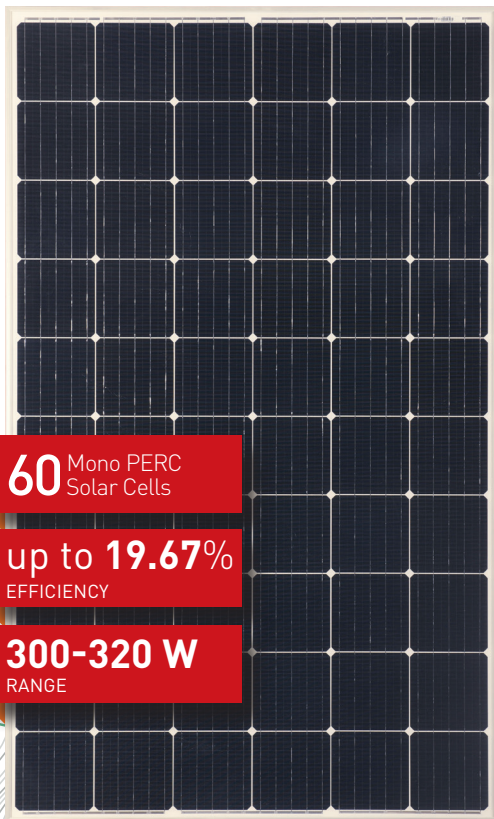


SOMERA ULTIMA



Engineered to provide **EXCELLENT LOW LIGHT** and **LONGER WAVELENGTH RESPONSE**



EXTREMELY RELIABLE PRODUCT suiting harsh environment conditions withstanding 2400Pa Wind load, 5400Pa Snow load



Using highly efficient **PASSIVATED EMITTER REAR CONTACT TECHNOLOGY (PERC)** cells



MAXIMUM SYSTEM VOLTAGE INCREASED TO 1500VDC (IEC & UL), increased string length, low BOS cost



QUALITY AND SAFETY

- ♦ 27 years of linear power output warranty **
- ♦ Rigorous quality control meeting the highest international standards
- ♦ 100% EL tested to minimise micro crack

APPLICATIONS

- ♦ On-grid large scale utility systems
- ♦ On-grid rooftop residential and commercial systems
- ♦ Off-grid residential systems

TECHNICAL DATA

SOMERA ULTIMA

THIS DATASHEET IS APPLICABLE FOR: SOMERA VSM.60.AAA.05 (AAA=300-320)

Electrical Data^{1,2} All data refers to STC

Peak Power P_{max} (Wp)	Power Tolerance : 0 ~ +4.99Wp	300	305	310	315	320
Maximum Voltage V_{mpp} (V)		32.7	32.90	33.1	33.3	33.5
Maximum Current I_{mpp} (A)		9.18	9.27	9.37	9.47	9.55
Open Circuit Voltage V_{oc} (V)		40.3	40.50	40.7	40.90	41.20
Short Circuit Current I_{sc} (A)		9.68	9.80	9.91	10.02	10.07
Module Efficiency η (%)		18.44	18.75	19.05	19.36	19.67

1) STC:1000 W/m² irradiance, 25°C cell temperature, AM1.5G Spectrum according to EN 60904-3. | 2) Measurement Tolerance at STC : P_{max} : ± 3% V_{oc} : ± 5% I_{sc} : ± 5%.

Electrical Parameters at NOCT³

Power (W)	223.6	227.1	231.0	234.9	238.4
$V@P_{max}$ (V)	30.5	30.5	30.7	30.9	31.1
$I@P_{max}$ (A)	7.33	7.44	7.52	7.54	7.55
V_{oc} (V)	37.5	37.6	37.8	38.1	38.3
I_{sc} (A)	7.82	7.75	7.93	8.02	8.06

3) NOCT Irradiance 800 W/m², 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)	-0.26%/°C
Tc of Short Circuit Current (α)	0.046%/°C
Tc of Power (γ)	-0.36%/°C
Maximum System Voltage	1500 V
NOCT	45°C ± 2°C
Temperature Range	-40°C to + 85°C

Mechanical Data

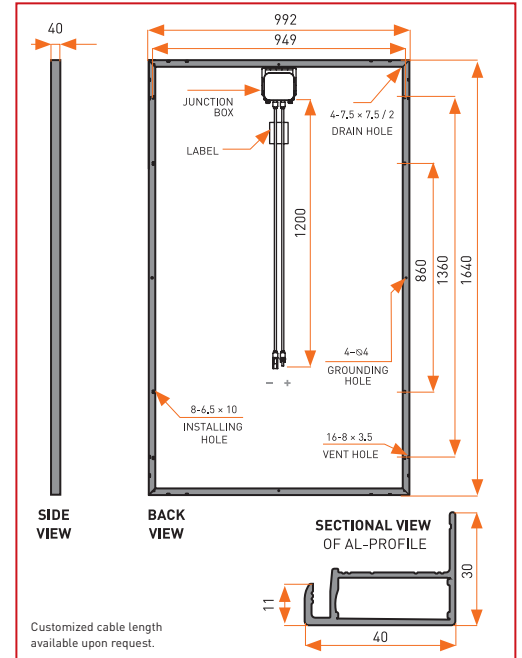
Length × Width × Height	1640 ± 2mm × 992 ± 2mm × 40 ± 1mm
Weight	18.50 kg +/- 3%
Junction Box	IP68/IP67, 3 Bypass diodes
Cable Cross Section Size	4mm ²
Connectors	PVKST4-EVO2/xy_UR/PVKBT4-EVO 2/xy_UR, PV-JM608, 05-8.
Application Class	Class A (Safety class II)
Superstrate	3.2 mm (0.13 inches) high transmission low iron tempered glass, AR coated
Cells	60 (10 × 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. Back: 1600Pa, 1.5
Maximum Series Fuse Rating	20A (IEC)

Warranty and Certifications

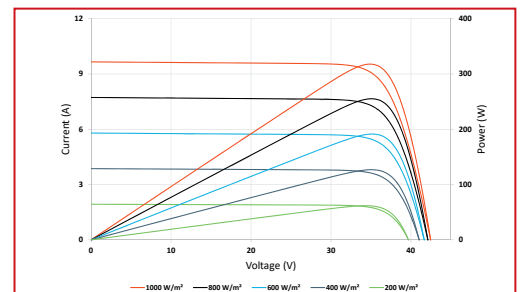
Product Warranty**	12 years
Performance Warranty**	Linear Power Warranty for 27 years with 3% for 1st year degradation and 0.65% from year 2 to year 27
Approvals and Certificates	IEC 61215:2016, IEC 61730:2016

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

Dimensions in mm

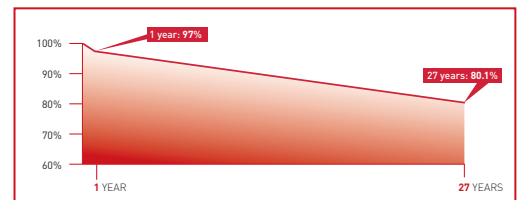


Typical Electrical Curves⁴



4) Average relative efficiency reduction of 5% at 200 W/m² according to EN 60904-1.

Performance Warranty



Packaging Information

Quantity/Pallet	25
Pallets/Container (40'HC)	28
Quantity/Container (40'HC)	700

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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