

ELDORA

HIGH EFFICIENCY POLY-Si PV MODULES


vikramsolar

CREATING CLIMATE FOR CHANGE

ELDORA VSP.72.AAA.05 | POLYCRYSTALLINE SOLAR PV MODULES | 72 CELLS | 320-340 WATT

ELDORA GRAND ULTIMA SILVER



HIGHER OUTPUT OF MODULE POWER

by reducing cell to module power loss



Designed for very HIGH AREA

EFFICIENCY ideally suited for roof-top and ground-mounted applications



Extremely NARROW POWER BINNING

TOLERANCE of +2.5 Wp to reduce current mismatch loss in single string



EXTREMELY RELIABLE PRODUCT

suited for harsh environment conditions withstanding 2400Pa Wind load, 5400Pa Snow load



MAXIMUM SYSTEM VOLTAGE

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

72 cells

POLYCRYSTALLINE

upto **17.55%**

EFFICIENCY

320-340 W

RANGE



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
- ◆ Excellent anti-PID performance

- ◆ Certified for salt mist corrosion resistance – severity VI
- ◆ Certified for ammonia resistance
- ◆ 3rd Party validated PAN file
- ◆ Certified for sand and dust test
- ◆ No negative tolerance

APPLICATIONS

- ◆ On-grid large scale utility systems
- ◆ On-grid rooftop residential, commercial and industrial roof top installations
- ◆ Off-grid residential systems

TECHNICAL DATA

ELDORA GRAND ULTIMA SILVER

THIS DATASHEET IS APPLICABLE FOR: ELDORA VSP.72.AAA.05 (AAA=320-340)

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

Peak Power P_{max} (Wp)	320	322.5	325	327.5	330	332.5	335	337.5	340
Maximum Voltage V_{mpp} (V)	37.7	37.7	37.8	37.9	38	38.1	38.1	38.1	38.2
Maximum Current I_{mpp} (A)	8.5	8.55	8.61	8.65	8.7	8.74	8.8	8.86	8.91
Open Circuit Voltage V_{oc} (V)	46	46.1	46.2	46.2	46.3	46.4	46.5	46.6	46.7
Short Circuit Current I_{sc} (A)	9.03	9.08	9.13	9.19	9.24	9.29	9.35	9.40	9.45
Module Efficiency η (%)	16.52	16.65	16.78	16.90	17.03	17.16	17.29	17.42	17.55

1) STC:1000 W/m² irradiance, 25°C cell temperature, AM1.5g spectrum according to EN 60904-3. | 2) Power measurement uncertainty is within +/- 3%.

Electrical Parameters at NOCT³

Power (W)	237.6	239.5	241.3	243.2	245.0	246.9	248.5	250.6	252.2
$V@P_{max}$ (V)	34.8	34.8	34.9	35.0	35.1	35.2	35.2	35.2	35.3
$I@P_{max}$ (A)	6.82	6.86	6.91	6.94	6.98	7.02	7.06	7.11	7.15
V_{oc} (V)	42.6	42.7	42.8	42.8	42.9	43.0	43.1	43.2	43.3
I_{sc} (A)	7.31	7.35	7.39	7.44	7.48	7.52	7.57	7.61	7.65

3) NOCT irradiance 800 W/m², ambient temperature 20°C, wind speed 1 m/sec.

Temperature Coefficients (Tc) permissible operating conditions

Tc of Open Circuit Voltage (β)	-0.29%/°C
Tc of Short Circuit Current (α)	0.057%/°C
Tc of Power (γ)	-0.38%/°C
Maximum System Voltage	1500 V
NOCT	44°C ± 2°C
Temperature Range	-40°C to + 85°C

Mechanical Data

Length × Width × Height	1955 × 991 × 40 mm (76.96 × 39.01 × 1.57 inches)
Weight	22 kg (48.50 lbs)
Junction Box	IP68/IP67, 3 bypass diodes
Cable & Connectors	1200 mm (47.24 inches) length cables, MC4 Compatible/MC4 Connectors/Amphenol
Application Class	Class A (Safety class II)
Superstrate [#]	3.2 mm (0.13 inches) high transmission low iron tempered glass, AR coated
Cells	72 Polycrystalline, 5BB solar cells
Cell Encapsulant	EVA (Ethylene Vinyl Acetate)
Back Sheet	Composite film
Frame	Anodized aluminium frame with twin wall profile
Mechanical Load Test	5400 Pa (Snow load), 2400 Pa (Wind load)
Maximum Series Fuse Rating	15 A

* Also available in anti-soil and anti-glare.

Warranty and Certifications

Product Warranty**	10 years
Performance Warranty**	Linear power warranty for 27 years with 2.5% for 1st year degradation and 0.67% from year 2 to year 27
Approvals and Certificates	IEC 61215 Ed2, IS/IEC 61730, UL 1703, IEC 61701, IEC 62716, IEC 60068-2-68, IEC 62804, MCS, CE, CAN/CSA 61730, CEC(California) [#] , PV Cycle [^] , IS 14286

[^] All (*) certifications under progress. | ** Refer to Vikram Solar's warranty document for terms and conditions.

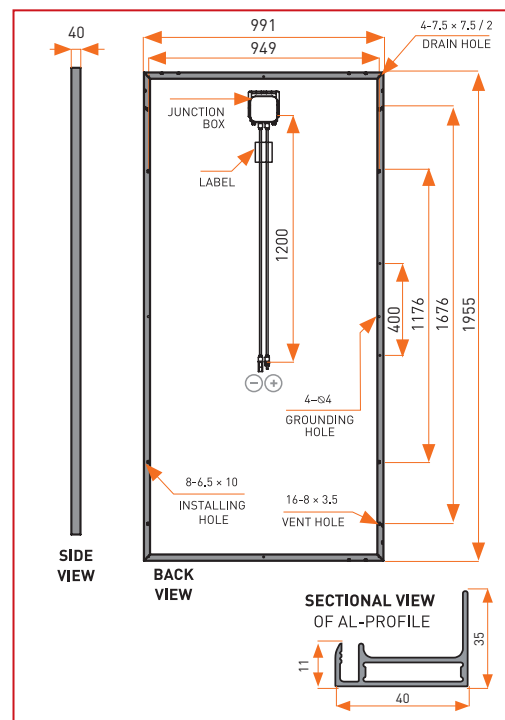
[#] CEC (California) power range upto 325 Wp

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

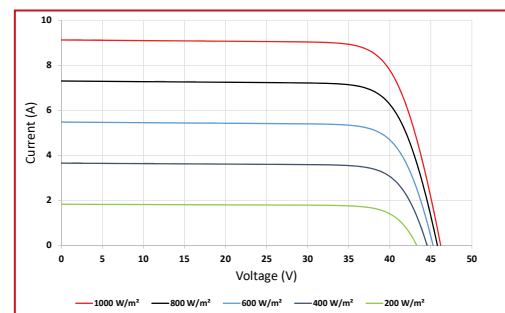
Specifications included in this datasheet are subject to change without notice. Electrical data without guarantee. Please confirm your exact requirement with the company representative while placing your order.

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Dimensions in mm

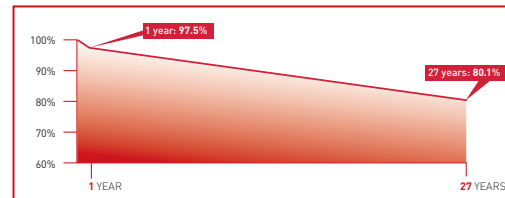


Typical I-V Curves⁴



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)	24
Quantity/Container (40'HC)	600