

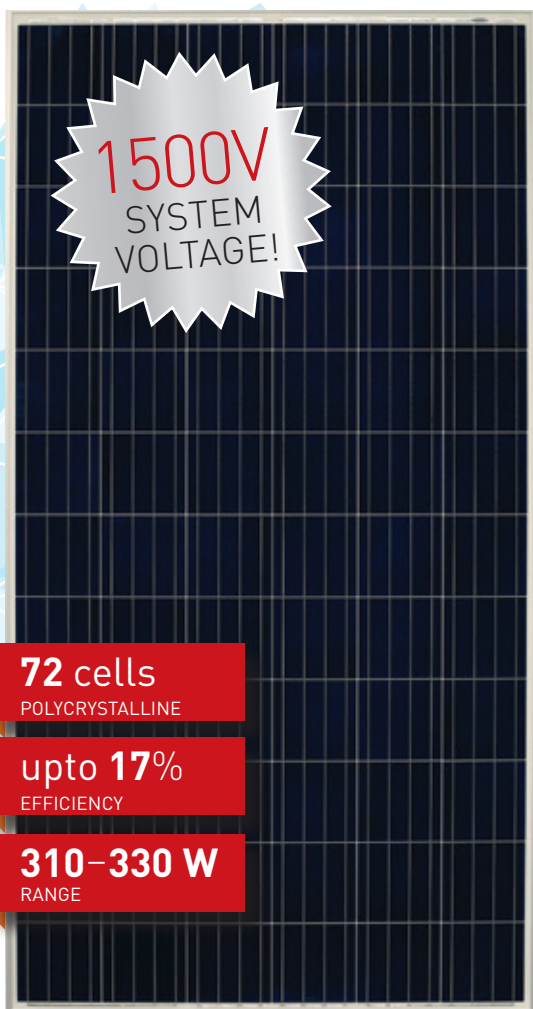
# ELDORA

HIGH EFFICIENCY SOLAR PV MODULES

  
**vikramsolar**  
CREATING CLIMATE FOR CHANGE

ELDORA VSP.72.AAA.05 | POLYCRYSTALLINE SOLAR PV MODULES | 72 CELLS | 310-330 WATT

# ELDORA GRAND ULTIMA SILVER 1500V SERIES



**HIGHER OUTPUT OF MODULE POWER**  
by reducing cell to module power loss



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



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



## QUALITY AND SAFETY

- ◆ 27 years of linear power output warranty \*\*
- ◆ Rigorous quality control meeting the highest international standards
- ◆ 100% EL tested to ensure micro crack free modules
- ◆ Certified for PID resistance\*
- ◆ Certified for salt mist corrosion resistance – severity VI
- ◆ Certified for ammonia resistance
- ◆ 3rd Party PAN file validated\*

## APPLICATIONS

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

# TECHNICAL DATA

## ELDORA GRAND ULTIMA SILVER 1500V SERIES

THIS DATASHEET IS APPLICABLE FOR: ELDORA VSP.72.AAA.05 (AAA=310-330)

### Electrical Data<sup>1</sup> All Data refers to STC

Peak Power P <sub>max</sub> (Wp)	310	312.5	315	317.5	320	322.5	325	327.5	330
Maximum Voltage V <sub>mpp</sub> (V)	37.4	37.4	37.5	37.6	37.7	37.7	37.8	37.9	38.0
Maximum Current I <sub>mpp</sub> (A)	8.3	8.35	8.4	8.45	8.5	8.55	8.6	8.65	8.7
Open Circuit Voltage V <sub>oc</sub> (V)	45.7	45.8	45.8	45.9	46.0	46.1	46.2	46.2	46.3
Short Circuit Current I <sub>sc</sub> (A)	8.81	8.87	8.92	8.98	9.03	9.08	9.13	9.19	9.24
Module Efficiency η(%)	16.0	16.1	16.2	16.4	16.5	16.6	16.7	16.9	17.0

1) STC: 1000 W/m<sup>2</sup> irradiance, 25°C cell temperature, AM 1.5g spectrum according to EN 60904-3. Average relative efficiency reduction of 5% at 200 W/m<sup>2</sup> according to EN 60904-1.

### Electrical Parameters at NOCT<sup>2</sup>

Power (W)	227.3	229.1	231.2	232.8	234.6	236.5	238.3	240.1	242.0
V@P <sub>max</sub> (V)	34.2	34.3	34.4	34.4	34.5	34.6	34.6	34.7	34.8
I@P <sub>max</sub> (A)	6.65	6.69	6.73	6.77	6.80	6.84	6.88	6.92	6.95
V <sub>oc</sub> (V)	42.4	42.5	42.5	42.5	42.6	42.6	42.7	42.7	42.7
I <sub>sc</sub> (A)	7.14	7.18	7.22	7.26	7.30	7.34	7.38	7.42	7.46

2) NOCT irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1 m/sec

### Temperature Coefficients (Tc) permissible operating conditions

Tc of Open Circuit Voltage (β)	-0.31%/°C
Tc of Short Circuit Current (α)	0.052%/°C
Tc of Power (γ)	-0.41%/°C
Maximum System Voltage	1500 V
NOCT	44°C ± 2°C
Temperature Range	-40°C to +85°C

### Mechanical Data

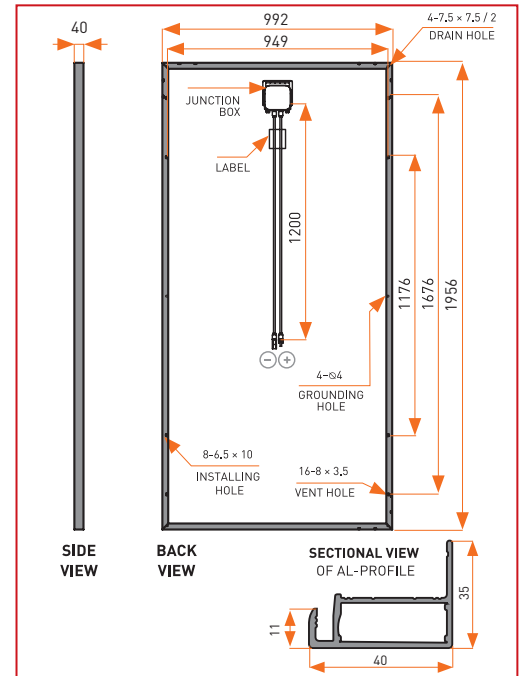
Length × Width × Height	1956 × 992 × 40 mm (77.01 × 39.06 × 1.57 inches)
Weight	27 kg (59.52 lbs)
Junction Box	IP68/67, 3 bypass diodes
Cable & Connectors	1200 mm (47.24 inches) length cables, MC4 Compatible/MC4 Connectors
Application Class	Class A (Safety class II)
Superstrate	4 mm (0.16 inches) high transmission low iron tempered glass, AR coated
Cells	72 polycrystalline 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
Maximum Series Fuse Rating	15 A

### Warranty and Certifications

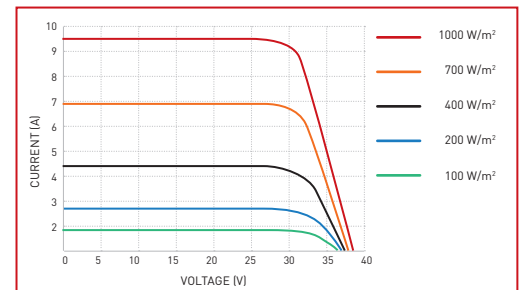
Product Warranty**	10 years
Performance Warranty**	Linear power warranty for 27 years with 2.5% for 1st year degradation and 0.67% from year 2 to year 27
Approvals and Certificates	IEC 61215 Ed2, IEC 61730, IEC 61701, IEC 62716, UL1703, CE, MCS*, CEC*, PV Cycle*, IEC 62804*, CAN/CAS 61730*

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

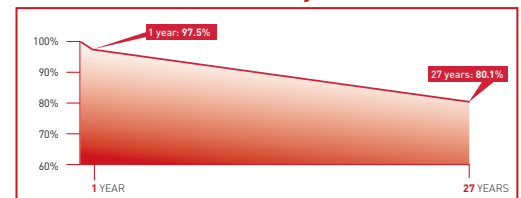
### Dimensions in mm



### Typical I-V Curves



### Performance Warranty



### Packaging Information

Container	40' HC
Pallets/Container	24
Pieces/Container	600

**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.