

ELDORA

HIGH EFFICIENCY POLY-Si PV MODULES



vikramsolar

CREATING CLIMATE FOR CHANGE

ELDORA VSP.60.AAA.05 | POLYCRYSTALLINE SOLAR PV MODULES | 60 CELLS | 265-290 WATT

ELDORA 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



Extremely RELIABLE PRODUCT

suiting all environment conditions



Engineered to provide EXCELLENT LOW LIGHT RESPONSE



Extremely **NARROW POWER** binning
tolerance 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 minimise micro crack
- ◆ Excellent anti-PID performance
- ◆ Certified for salt mist corrosion resistance – severity VI
- ◆ Certified for ammonia resistance
- ◆ 3rd Party validated PAN file

APPLICATIONS

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

TECHNICAL DATA

ELDORA ULTIMA SILVER 1500V SERIES

THIS DATASHEET IS APPLICABLE FOR: ELDORA VSP.60.AAA.05 (AAA=265-290)

Electrical Data^{1,2} All data refers to STC (AM 1.5, 1000 W/m², 25°C)

| | 265 | 270 | 275 | 280 | 285 | 290 |
|---|-------|-------|-------|-------|-------|-------|
| Peak Power P _{max} (Wp) | 265 | 270 | 275 | 280 | 285 | 290 |
| Maximum Voltage V _{mpp} (V) | 30.9 | 31 | 31.2 | 31.3 | 31.5 | 31.7 |
| Maximum Current I _{mpp} (A) | 8.58 | 8.71 | 8.82 | 8.95 | 9.05 | 9.16 |
| Open Circuit Voltage V _{oc} (V) | 38.1 | 38.3 | 38.5 | 38.6 | 38.9 | 39.1 |
| Short Circuit Current I _{sc} (A) | 9.03 | 9.12 | 9.22 | 9.35 | 9.45 | 9.54 |
| Module Efficiency η(%) | 16.29 | 16.60 | 16.90 | 17.21 | 17.52 | 17.83 |

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

| | 196.6 | 200.1 | 204.3 | 207.9 | 211.7 | 215.5 |
|------------------------|-------|-------|-------|-------|-------|-------|
| Power (W) | 196.6 | 200.1 | 204.3 | 207.9 | 211.7 | 215.5 |
| V@P _{max} (V) | 28.5 | 28.6 | 28.8 | 28.9 | 29.1 | 29.2 |
| I@P _{max} (A) | 6.89 | 6.99 | 7.09 | 7.19 | 7.29 | 7.37 |
| V _{oc} (V) | 35.1 | 35.3 | 35.5 | 35.6 | 36.0 | 36.2 |
| I _{sc} (A) | 7.31 | 7.38 | 7.46 | 7.57 | 7.65 | 7.72 |

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 | 45°C±2°C |
| Temperature Range | -40°C to + 85°C |

Mechanical Data

| | |
|----------------------------|---|
| Length × Width × Height | 1640 × 992 × 40 mm (64.57 × 39.06 × 1.57 inches) |
| Weight | 18.50 kg (40.79 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 | 3.2 mm (0.13 inches) high transmission low iron tempered glass, AR coated |
| Cells | 60, 5BB 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 (Snow load), 2400 Pa (Wind load) |
| Maximum Series Fuse Rating | 15 A |

Warranty and Certifications

| | |
|----------------------------|---|
| Product Warranty** | 12 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 60068-2-68, IS 14286, IS/IEC 61730, IEC 61215 Ed2, IEC 61730, IEC 61701, IEC 62716, IEC 62804, UL1703*, CE*, MCS, PV Cycle*, CAN/CSA 61730, CEC (California)* |

* All (*) certifications under progress.

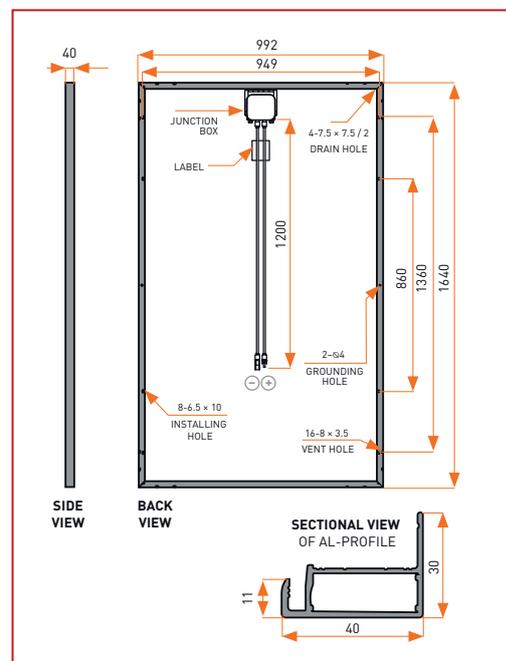
** Refer to Vikram Solar's warranty document for terms and conditions. | * CEC (California) power range upto 275 Wp

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

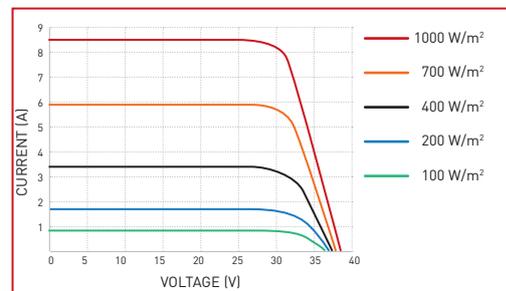
Specifications included in this datasheet are subject to change without notice. Electrical data without guarantee. Please confirm your exact requirement with the company representative while placing your order.

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Dimensions in mm

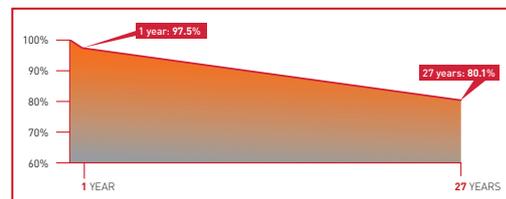


Typical I-V Curves⁴



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) | 28 |
| Quantity/Container (40'HC) | 700 |