

ELDORA

HIGH EFFICIENCY POLY-Si PV MODULES







vikramsolar

CREATING CLIMATE FOR CHANGE

ELDORA VSPBB.60.AAA.03.04 | POLYCRYSTALLINE SOLAR PV MODULES | 60 CELLS | 260-285 WATT

ELDORA ULTIMA ALL BLACK SERIES



-  **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 **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
- ◆ Certified for ammonia resistance

APPLICATIONS

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

TECHNICAL DATA

ELDORA ULTIMA ALL BLACK SERIES

THIS DATASHEET IS APPLICABLE FOR: ELDORA VSPBB.60.AAA.03.04 (AAA=260-285)

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

Parameter	260	265	270	275	280	285
Peak Power P_{max} (0 ~ +2.49 Wp)	260	265	270	275	280	285
Maximum Voltage V_{mpp} (V)	30.8	30.9	31	31.2	31.3	31.5
Maximum Current I_{mpp} (A)	8.43	8.58	8.71	8.82	8.95	9.05
Open Circuit Voltage V_{oc} (V)	37.9	38.1	38.3	38.5	38.6	38.9
Short Circuit Current I_{sc} (A)	8.93	9.03	9.12	9.22	9.35	9.45
Module Efficiency η (%)	15.98	16.29	16.60	16.90	17.21	17.52

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

Electrical Parameters at NOCT³

Parameter	191.9	195.6	199.3	203.5	206.7	210.4
Power (W)	191.9	195.6	199.3	203.5	206.7	210.4
$V@P_{max}$ (V)	28.6	28.7	28.8	29.0	29.1	29.2
$I@P_{max}$ (A)	6.69	6.80	6.90	7.03	7.09	7.19
V_{oc} (V)	34.9	35.1	35.3	35.5	35.6	35.8
I_{sc} (A)	7.26	7.34	7.41	7.49	7.57	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)	-0.31%/°C
Tc of Short Circuit Current (α)	0.058%/°C
Tc of Power (γ)	-0.41%/°C
Maximum System Voltage	1000 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	IP67/IP68, 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 Polycrystalline, 5BB solar cells
Cell Encapsulant	EVA (Ethylene Vinyl Acetate)
Back Sheet	Black Composite film
Frame	Black anodized aluminium frame with twin wall profile
Mechanical Load Test	5400 Pa (Snow load), 2400 Pa (Wind load)
Maximum Series Fuse Rating	15 A

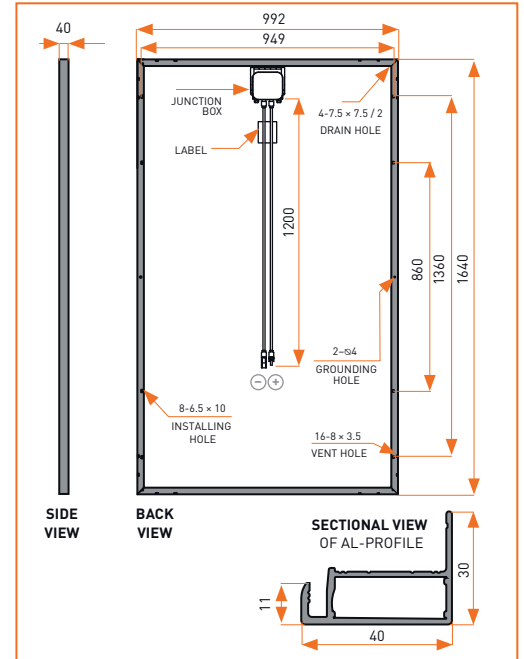
Warranty and Certifications

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 61215 Ed2, IEC 61730, IEC 61701, IEC 62716, MCS, CE, CEC [^] , PV Cycle [^] , JET [^] , UL1703

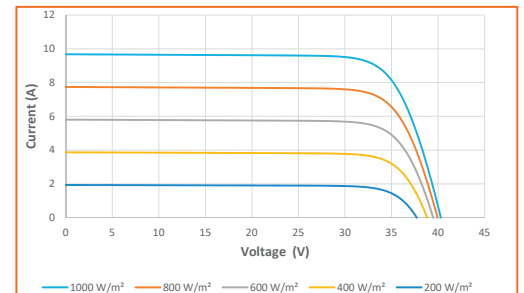
[^] All (*) certifications under progress.

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

Dimensions in mm

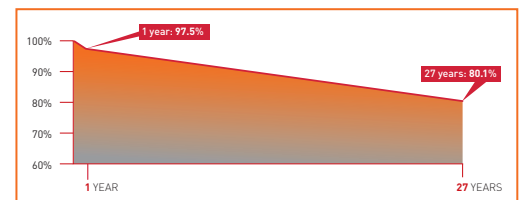


Typical I-V Curves⁴



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

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.

*Vikram Solar and Eldora are Trademarks of Vikram Solar Limited registered in India