ELDORA

HIGH EFFICIENCY SOLAR PV MODULES

vikramsolar

CREATING CLIMATE FOR CHANGE

ELDORA VSPBB.60.AAA.03.04 | POLYCRYSTALLINE SOLAR PV MODULES | 60 CELLS | 255-280 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
- Up to +2.5 Wp **POSITIVE POWER OUTPUT TOLERANCE GUARANTEED** ensuring better ROI
- 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 ensure micro crack free modules
- Certified for salt mist corrosion resistance
- Certified for ammonia resistance
- Compatible with K2, HILTI & Schletter structures for short and long side clamping*
- Approved by OST energy*

APPLICATIONS

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

TECHNICAL DATA

ELDORA ULTIMA ALL BLACK SERIES

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THIS DATASHEET IS APPLICABLE FOR: **ELDORA VSPBB.60.AAA.03.04 (AAA=255-280)**

Electrical Data[1]

All data refers to STC (AM 1.5, 1000 W/m², 25°C)

Peak Power P_{max} (Wp)	255	257.5	260	262.5	265	267.5	270	272.5	275	277.5	280
Maximum Voltage V_{mpp} (V)	30.6	30.7	30.8	30.9	30.9	31.0	31.0	31.1	31.2	31.2	31.3
Maximum Current I_{mpp} (A)	8.33	8.38	8.43	8.50	8.57	8.62	8.70	8.76	8.82	8.89	8.94
Open Circuit Voltage V_{oc} (V)	37.6	37.8	37.9	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7
Short Circuit Current I_{sc} (A)	8.84	8.88	8.93	8.98	9.03	9.09	9.12	9.17	9.22	9.27	9.32
Module Efficiency η(%)	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	17.1	17.2

1) STC:1000 W/m² irradiance, 25°C cell temperature, AM1.5g spectrum according to EN 60904-3.
Average relative efficiency reduction of 5% at 200 W/m² according to EN 60904-1.

Electrical Parameters at NOCT[2]

Power (W)	188.9	191.6	192.8	193.5	194.7	196.0	197.8	199.1	200.7	201.8	203.2
V@P_{max} (V)	27.7	27.8	27.8	27.9	27.9	28.0	28.0	28.0	28.1	28.1	28.2
I@P_{max} (A)	6.82	6.87	6.93	6.96	6.98	7.02	7.06	7.11	7.15	7.18	7.22
V_{oc} (V)	35.3	35.4	35.4	35.4	35.5	35.5	35.6	35.6	35.7	35.7	35.8
I_{sc} (A)	7.16	7.20	7.24	7.31	7.37	7.43	7.49	7.56	7.62	7.67	7.73

2) 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 × 39.05 × 1.57 inches)
Weight	18.50 kg (40.79 lbs)
Junction Box	IP67, 3 Bypass diodes
Cable & Connectors	1200 mm (47.24 inches) length cables, SOLARLOK PV4/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 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
Maximum Series Fuse Rating	15 A

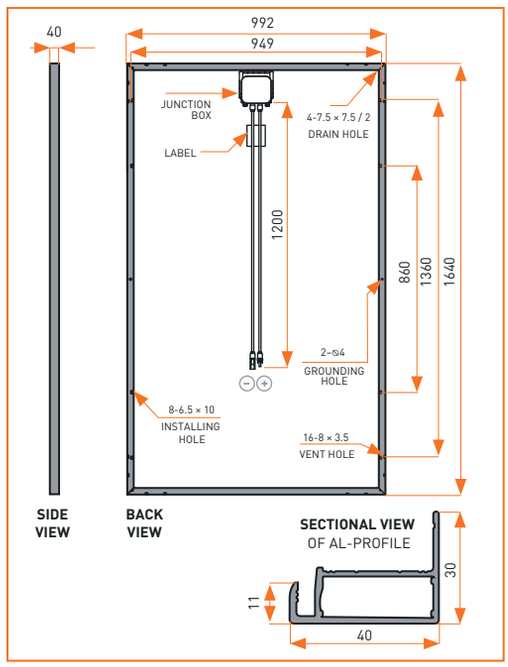
Warranty and Certifications

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, CEC*, PV Cycle*, JET*

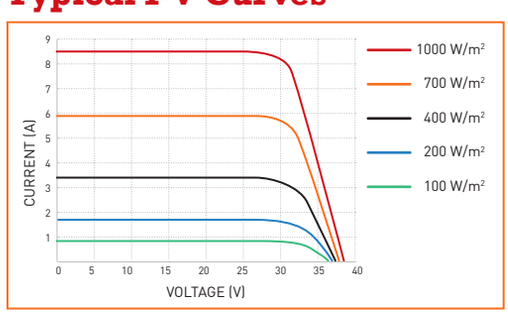
* All (*) certifications under progress.
** Refer to Vikram Solar's warranty document for terms and conditions.

Dimensions

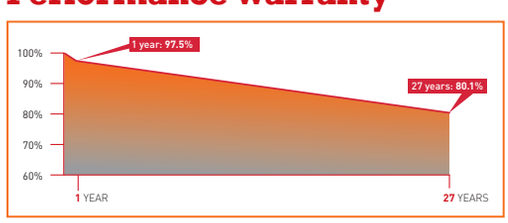
in mm



Typical I-V Curves



Performance Warranty



Packaging Information

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

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