

ELDORA GRAND PLUS - MBB



up to **17.78%**
EFFICIENCY

335-350 W
RANGE

144 POLYCRYSTALLINE
MBB SOLAR CELLS



IMPROVED FIELD RELIABILITY due to multiple contact points on the cell.



BETTER TOLERANCE TO MICRO CRACK
Higher number of busbar makes the PV modules less prone to loss in efficiency due to micro-cracks.



Bypass diodes and innovative series-parallel connections enable the module to perform better in **PARTIAL SHADOW CONDITIONS**

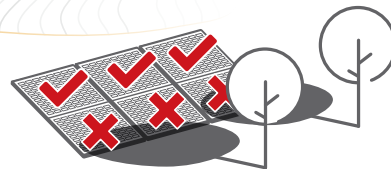


SUPERIOR PRICE PERFORMANCE of half-cell improves module output without adding much to the cost



Low resistance between the cells **REDUCES POWER LOSS**, increases overall power output

INCREASED SHADE TOLERANCE



HALF-CELL MODULE

Functions like two parallel modules, enabling the half-cell string to work in partial shading



IEC 61215
IEC 61730
Regular Production
Surveillance
www.viv.com
ID 1111219270



QUALITY AND SAFETY

- ♦ 27 years of linear power output warranty **
- ♦ Rigorous quality control meeting the highest standards
- ♦ 100% EL tested to minimise micro crack
- ♦ Certified for salt mist corrosion resistance – severity VI
- ♦ Certified for ammonia resistance
- ♦ Certified for sand and dust test

APPLICATIONS

- ♦ On-grid large scale utility systems
- ♦ On-grid rooftop industrial and commercial systems
- ♦ Rooftop residential systems

TECHNICAL DATA

ELDORA GRAND PLUS - MBB

THIS DATASHEET IS APPLICABLE FOR: ELDORA VSPH.72.AAA.05 (AAA=335-350)

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

Peak Power P _{max} (Wp)	335	340	345	350
Maximum Voltage V _{mpp} (V)	39.1	39.2	39.2	39.3
Maximum Current I _{mpp} (A)	8.57	8.68	8.79	8.90
Open Circuit Voltage V _{oc} (V)	46.2	46.3	46.4	46.5
Short Circuit Current I _{sc} (A)	9.07	9.18	9.30	9.41
Module Efficiency η(%)	17.02	17.28	17.53	17.78

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)	247.9	251.6	255.3	259.0
V@P _{max} (V)	36.0	36.0	36.1	36.2
I@P _{max} (A)	6.88	6.97	7.06	7.14
V _{oc} (V)	42.7	42.8	42.9	43.0
I _{sc} (A)	7.26	7.35	7.44	7.52

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	1986 × 991 × 36mm (78.18 × 39.01 × 1.42 inches)
Weight	21 kg (46.29 lbs)
Junction Box	IP68/IP67, Split Junction Box with individual bypass diodes
Cable & Connectors [#]	400 mm length cables, MC4 Compatible/MC4 Connectors
Application Class	Class A (Safety class II)
Superstrate	3.2 mm (0.125 inches) high transmission low iron tempered glass, AR coated
Cells	Polycrystalline (144 half-cells), MBB 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**	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 Ed2:2016, IEC 61730:2016, IEC 61701, IEC 62716, IEC 60068-2-68, IEC 62804, CE, CEC (California), UL 1703, IS/IEC 61730

Packaging Information

Quantity /Pallet: 28	Pallets/Container (40'HC): 30	Quantity/Container (40'HC): 660
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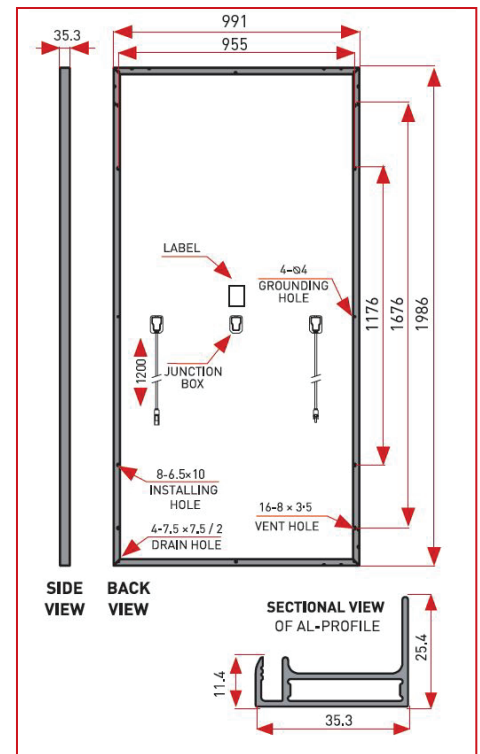
[#] 1200mm (47.24 inches) cable length is also available [^] All (*) certifications under progress.

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

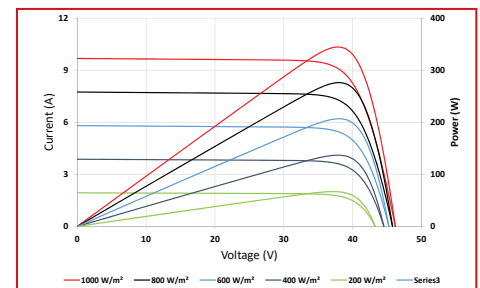
Specifications included in this datasheet are subject to change without notice. Electrical data without guarantee. Please confirm your exact requirement with the company representative while placing your order.

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Dimensions in mm

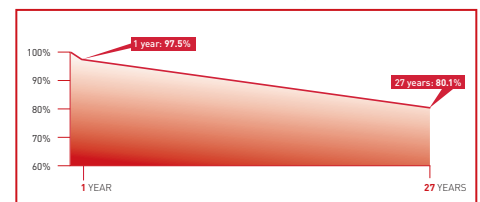


Typical I-V Curves⁴



4) Average relative efficiency reduction of 5% at 200 W/m² according to EN 60904-1.

Performance Warranty



[^] All (*) certifications under progress.

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