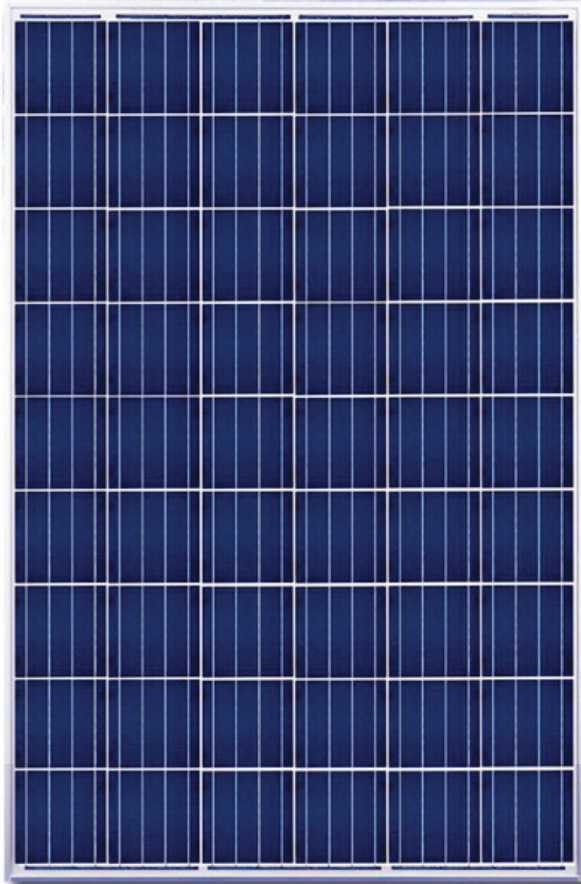


VENUS SERIES

POLYCRYSTALLINE SOLAR PV MODULES | 54 CELLS
KE 225, KE 230, KE 235



HIGH CONVERSION EFFICIENCY

based on leading innovative
Photo Voltaic European Technology



Up to + 3 Wp **POSITIVE POWER
OUTPUT TOLERANCE GUARANTEED**
ensuring Return on Investment



Extremely **RELIABLE PRODUCT**

withstands high wind pressure and snow
load and temprature variations



RIGOROUS QUALITY CONTROL meeting
The Highest International Standards

ABOUT KOSOL

Kalthia Group began its journey in 1960 from infrastructure development business in the State of Gujarat, India. Kalthia Group diversified its wing towards the manufacturing, R&D, and development of innovative products with the excellence under the brands names "KOSOL" and "SunRay". KOSOL covers Solar PV Modules, Solar Rooftop, EPC Solar Power plant, Solar Water Pumps etc and SunRay includesf Domestic and Industrial Solar Water Heating applications and Solar Lights. Already exporting to USA and European countries because of established proven product reliability and sustainable performance. Having plant capacity 150 MW

QUALITY AND SAFETY

- ▲ 25 years of linear power output warranty**
- ▲ Rigorous quality control meeting the highest international standards
- ▲ Certified for PID resistance*
- ▲ Certified for salt mist corrosion resistance - severity VI*

CERTIFIED



TECHNICAL DATA

TYPE	KE 225	KE 230	KE 235
Pmp/W	225	230	235
Imp/A	8.17	8.28	8.34
Vmp/V	27.80	28.01	28.24
Isc/A	8.64	8.73	8.78
Voc/V	33.32	33.53	33.72

* STC : 1000 w/m2, 25°C, AM 1.5

ELECTRICAL PARAMETERS AT NOCT

Pmp/W	166.81	170.67	172.99
Imp/A	6.54	6.62	6.67
Vmp/V	26.02	26.27	26.44
Isc/A	6.99	7.07	7.11
Voc/V	31.19	31.38	31.56

TEMPERATURE COEFFICIENTS

Isc of Open Circuit Voltage	(β) -0.310%/°C
Tc of Short Circuit Current	(α) 0.052%/°C
Tc of Power	(γ) -0.41%/°C
Maximum System Voltage	600V - 1000 V
NOCT	45°C ± 2°C

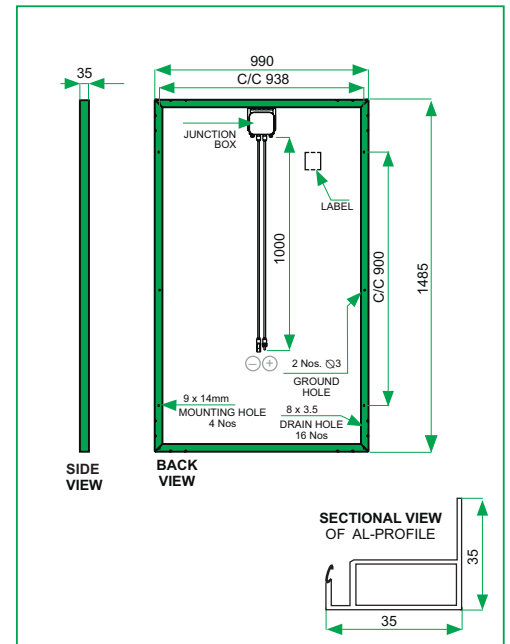
MECHANICAL DATA

Length x Width x Height	1485 mm × 990 mm × 35 mm
Weight	15.5 kg
Junction Box	IP65 & IP67
Cable & Connectors	1000 mm length cables with MC4 type connectors
Superstrate	High transmission low iron tempered glass
Cells	54 polycrystalline solar cells, 4 Bus Bars
Cell Encapsulant	EVA (Ethylene Vinyl Acetate)
Back Sheet	Composite film
Frame	Anodized Aluminium frame
Mechanical Load Test	5400 Pa
Maximum Series Fuse Rating	15 A

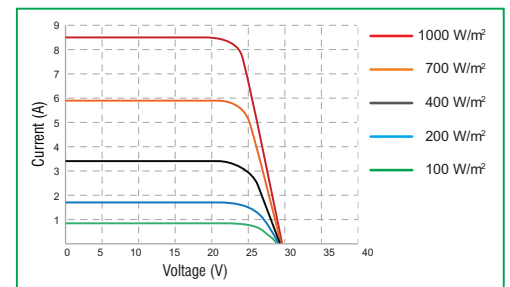
WARRANTY AND CERTIFICATIONS

Product Warranty**	5 years warranty for manufacturing defects
Performance Warranty**	Linear power warranty for 25 years with 2.5% for first year degradation and 0.82% from year 2 to 25
Approvals and Certificates	IEC 61215 Ed2, IEC 61730 - I & II, IEC 61701, IEC 62804, UL1703, CE, CEC, ISO 9001: 2008, ISO 14001: 2004, OHSAS 18001

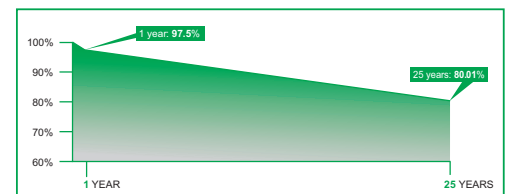
DIMENSIONS in mm



IV CURVES



PERFORMANCE WARRANTY



* All (*) certifications under continuous upgradation in progress.
** Refer to Kosol Energie warranty document for terms and conditions.



KOSOL ENERGIES 'Kalthia House', Satyagrah Chhavani, Opp. ISCON Mall, S.G. Highway, Ahmedabad-380015. Gujarat, India. Ph.: 079-26861339

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Email : info@sunray.co.in | www.sunray.co.in

CAUTION

READ SAFETY AND INSTALLATION MANUAL BEFORE USING THE PRODUCT. Specifications included in this datasheet are subject to change without notice. All electrical data without guarantee. Please confirm your exact requirement with the company representative while placing the order.