



MERCURY SERIES

POLYCRYSTALLINE SOLAR PV MODULES | 36 CELLS
KE 40, KE 50, KE 60, KE 75, KE 100, KE 150, KE 155, KE 160



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 temperature 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 includes 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 40 | KE 50 | KE 60 | KE 75 | KE 100 | KE 150 | KE 155 | KE 160 |
|--------------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|
| Pmp/W | 40 | 50 | 60 | 75 | 100 | 150 | 155 | 160 |
| Imp/A | 2.25 | 2.67 | 3.20 | 4.01 | 5.37 | 8.17 | 8.34 | 8.46 |
| Vmp/V | 18.78 | 18.78 | 18.92 | 18.78 | 18.96 | 18.53 | 18.78 | 18.92 |
| Isc/A | 2.36 | 2.81 | 3.36 | 4.22 | 5.64 | 8.64 | 8.78 | 8.88 |
| Voc/V | 22.42 | 22.42 | 22.57 | 22.42 | 22.64 | 22.21 | 22.42 | 22.57 |
| Module DIM (LxWxH) | 455x660x30 | 525x660x30 | 605x660x30 | 785x660x30 | 965x660x30 | 1485x660x30 | 1485x660x30 | 1485x660x30 |
| Weight | 3.30 | 4.00 | 5.00 | 5.60 | 6.50 | 10.00 | 10.00 | 10.00 |

* STC : 1000 w/m², 25°C, AM 1.5

ELECTRICAL PARAMETERS AT NOCT

| | | | | | | | | |
|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| Pmp/W | 30.97 | 36.87 | 44.47 | 55.31 | 74.70 | 111.20 | 115.03 | 117.57 |
| Imp/A | 1.80 | 2.14 | 2.56 | 3.21 | 4.29 | 6.54 | 6.67 | 6.77 |
| Vmp/V | 17.58 | 17.58 | 17.71 | 17.58 | 17.74 | 17.35 | 17.58 | 17.71 |
| Isc/A | 1.91 | 2.28 | 2.72 | 3.42 | 4.57 | 6.99 | 7.11 | 7.19 |
| Voc/V | 20.99 | 20.99 | 21.12 | 20.99 | 21.19 | 20.79 | 20.99 | 21.12 |

TEMPERATURE COEFFICIENTS

| | |
|-----------------------------|---------------|
| Isc of Open Circuit Voltage | (β) -0.31%/°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 |

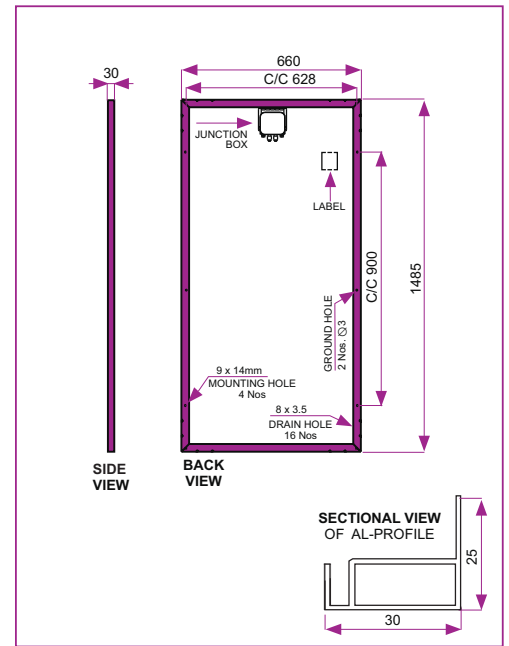
MECHANICAL DATA

| | |
|----------------------------|--|
| Junction Box | IP65 & IP67 |
| Superstrate | High transmission low iron tempered glass |
| Cells | 36 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 |

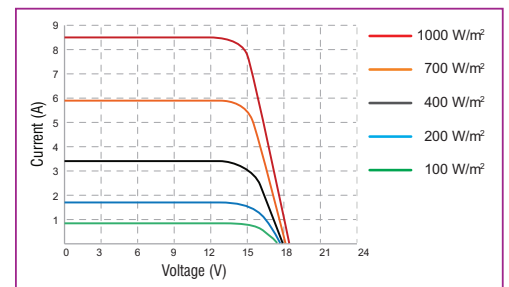
WARRANTY AND CERTIFICATIONS

| | |
|----------------------------|--|
| 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 |

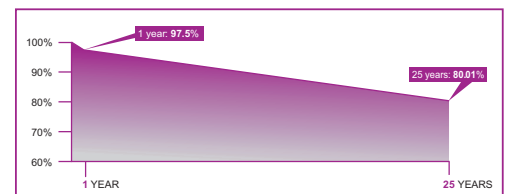
DIMENSIONS in mm



IV CURVES



PERFORMANCE WARRANTY



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



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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.