

**For a Free Quote:**

Web: [EnergyPal.com/solar](http://EnergyPal.com/solar)

Call: 1-800-990-3725

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# EnergyPal

## **Solar Panel Guide Specification Data Sheet**

### **Kosol Energie Mercury Series KE 160**

Also available on the web at  
[EnergyPal.com/kosol-energie-solar-panels/ke-160](http://EnergyPal.com/kosol-energie-solar-panels/ke-160)



# 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/m<sup>2</sup>, 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

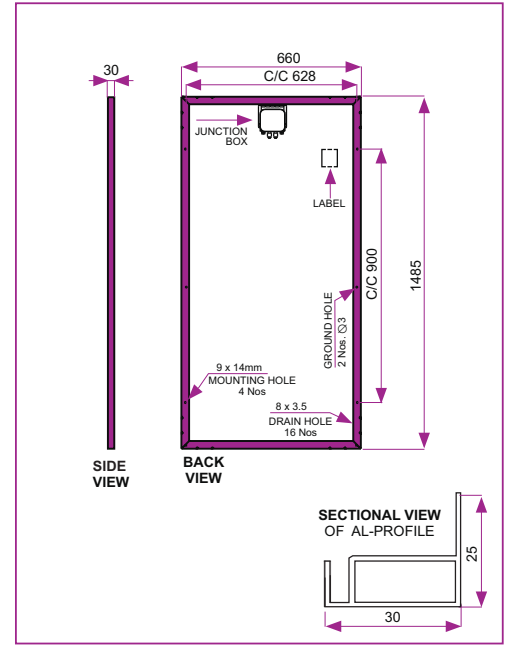
## MECHANICAL DATA

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

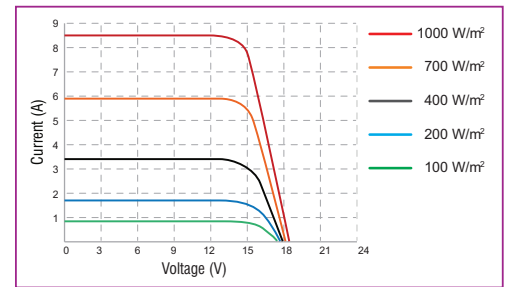
## WARRANTY AND CERTIFICATIONS

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

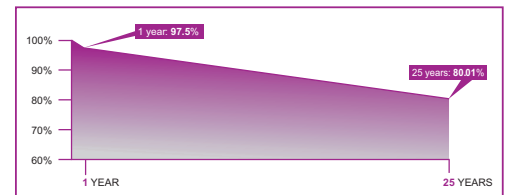
## DIMENSIONS in mm



## 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.