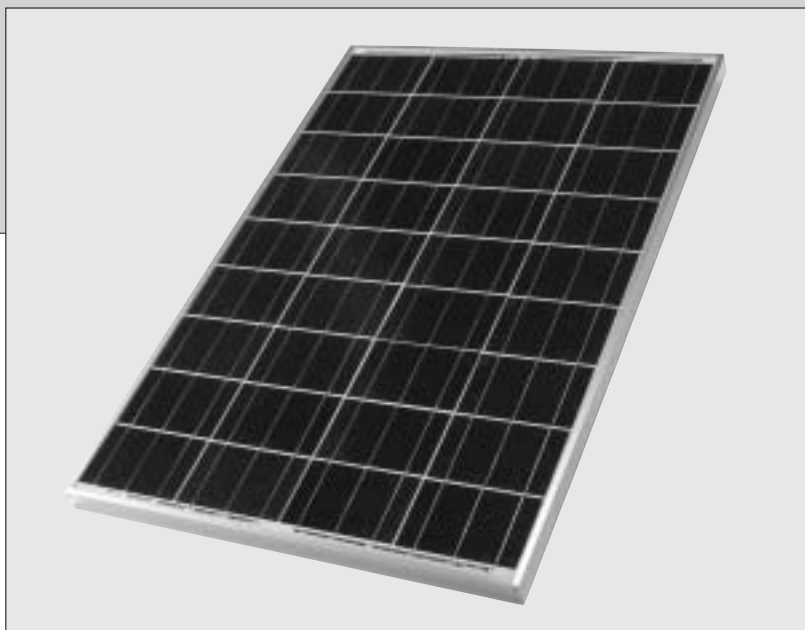


THE NEW VALUE FRONTIER



# KC85T

HIGH EFFICIENCY  
MULTICRYSTAL  
PHOTOVOLTAIC  
MODULE



## HIGHLIGHTS OF KYOCERA PHOTOVOLTAIC MODULES

Kyocera's advanced cell processing technology and automated production facilities produce a highly efficient multicrystal photovoltaic module.

The conversion efficiency of the Kyocera solar cell is over 16%.

These cells are encapsulated between a tempered glass cover and a pottant with back sheet to provide efficient protection from the severest environmental conditions.

The entire laminate is installed in an anodized aluminum frame to provide structural strength and ease of installation.

## APPLICATIONS

- Microwave/Radio repeater stations
- Electrification of villages in remote areas
- Medical facilities in rural areas
- Power source for summer vacation homes
- Emergency communication systems
- Water quality and environmental data monitoring systems
- Navigation lighthouses, and ocean buoys
- Pumping systems for irrigation, rural water supplies and livestock watering
- Aviation obstruction lights
- Cathodic protection systems
- Desalination systems
- Recreational vehicles
- Railroad signals
- Sailboat charging systems

## QUALIFICATIONS

### MODULE

UL1703 certified  
Hazardous Locations Class I, Div 2, Groups A, B, C and D

### FACTORY

ISO9001 and ISO14001

## PERFORMANCE WARRANTY

1 year limited warranty on material and workmanship

25 year\* limited warranty on power output

## SPECIFICATIONS

### Electrical Specifications

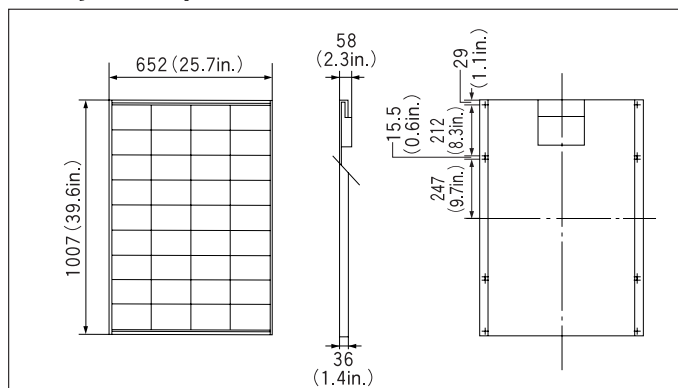
MODEL	KC85T
Maximum Power	87Watts
Tolerance	+10% / -5%
Maximum Power Voltage	17.4Volts
Maximum Power Current	5.02Amps
Open Circuit Voltage	21.7Volts
Short-Circuit Current	5.34Amps
Length	1007mm (39.6in.)
Width	652mm (25.7in.)
Depth	58mm (2.3in.)
Weight	8.3kg (18.3lbs.)

### Thermal parameters

Nominal Operating Cell Temperature	47°C
Isc Current temperature coefficient	(2.12 × 10 <sup>-3</sup> ) A/°C
Voc Voltage temperature coefficient	(-8.21 × 10 <sup>-2</sup> ) V/°C

### Physical Specifications

(Unit: mm)

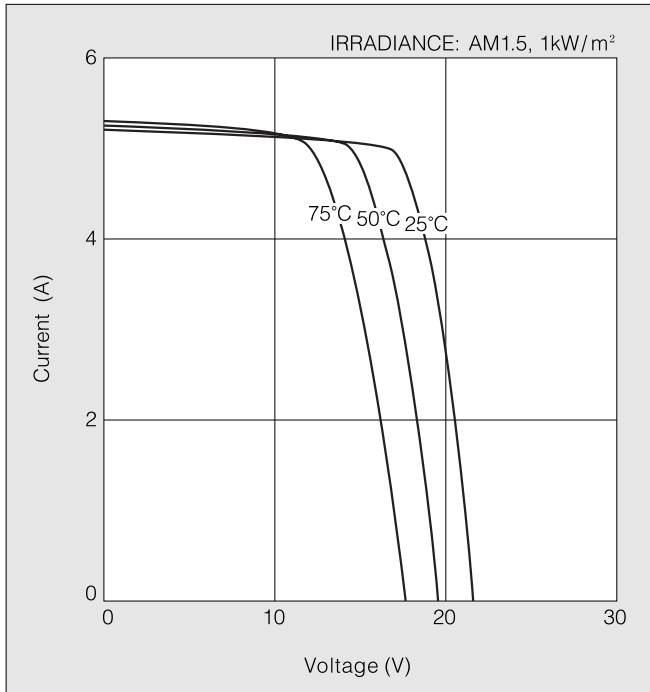


\* (Long term output warranty shall guarantee that loss of output is not more than 10% of the minimum warranty value of the product specifications within 12 years and is not more than 20% within 25 years after the purchase of the product by customer. The output values shall be those measured under Kyocera standard measurement conditions. Regarding the warranty conditions in detail, please refer to Warranty issued by Kyocera.)

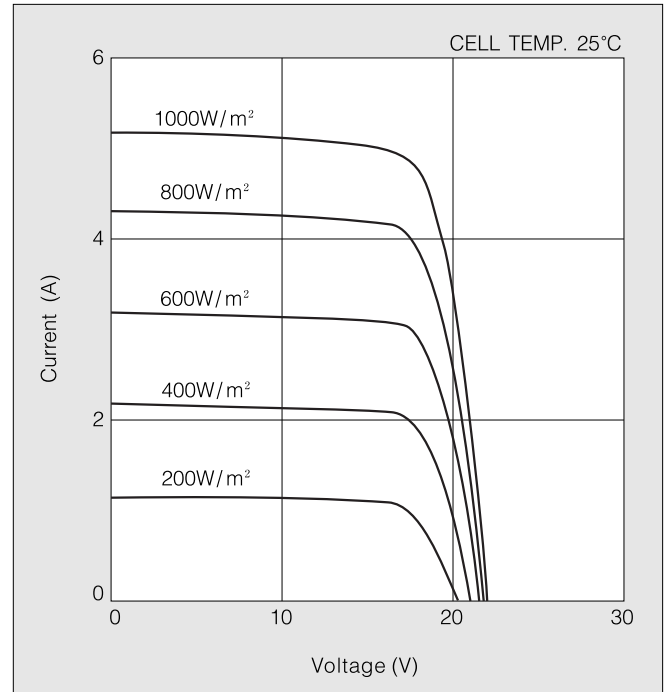


## ELECTRICAL CHARACTERISTICS

Current-Voltage characteristics of Photovoltaic Module KC85T at various cell temperatures



Current-Voltage characteristics of Photovoltaic Module KC85T at various irradiance levels



## QUALITY ASSURANCE

Kyocera multicrystal photovoltaic modules have passed the following tests.

- Thermal cycling test
- Thermal shock test
- Thermal/ Freezing and high humidity cycling test
- Electrical isolation test
- Hail impact test
- Mechanical, wind and twist loading test
- Salt mist test
- Light and water-exposure test
- Field exposure test

Please contact our office to obtain details without hesitation.



KYOCERA Corporation



296 Labrosse Ave., Pointe-Claire, QC, H9R 5L8  
Toll Free 1 866 630-5630 [www.matrixenergy.ca](http://www.matrixenergy.ca)