



MODEL KC50

# KC50

## HIGH EFFICIENCY MULTICRYSTAL PHOTOVOLTAIC MODULE

TYPICAL OUTPUT 50 Wp



### HIGHLIGHTS OF KYOCERA PHOTOVOLTAIC MODULES

Kyocera's advanced cell processing technology and automated production facilities have produced a highly efficient multicrystal photovoltaic modules.

The conversion efficiency of the Kyocera solar cell is over 14%.

These cells are encapsulated between a tempered glass cover and an EVA pottant with PVF back sheet to provide maximum 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

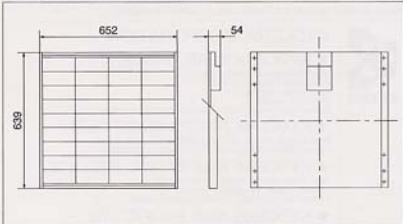
### SPECIFICATIONS

#### Electrical Specifications

MODEL	KC50
Maximum Power	50 Watts
Maximum Power Voltage	16.7 Volts
Maximum Power Current	3.00 Amps
Open Circuit Voltage	21.5 Volts
Short-Circuit Current	3.10 Amps
Length	639mm (25.2in.)
Width	652mm (25.7in.)
Depth	54mm (2.1in.)
Weight	5.0kg (11.0lbs.)

#### Physical Specifications

(Unit: mm)

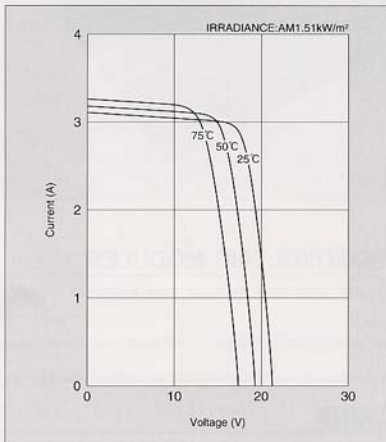


Note: The electrical specifications are under test conditions of Irradiance of 1kW/m<sup>2</sup>, Spectrum of 1.5 air mass and cell temperature of 25°C.

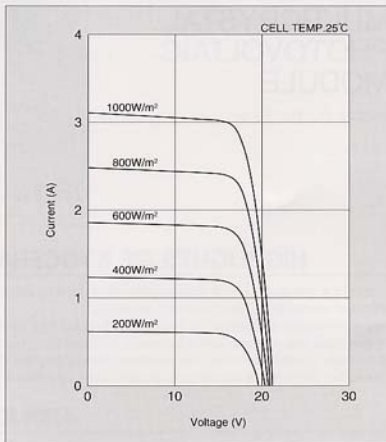
Kyocera reserves the right to modify these specifications without notice.

## ELECTRICAL CHARACTERISTICS

Current-Voltage characteristics of Photovoltaic Module KC50 at various cell temperatures



Current-Voltage characteristics of Photovoltaic Module KC50 at various irradiance levels



## QUALITY ASSURANCE

Kyocera multicrystal photovoltaic modules exceed government specifications for 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

#### ■ KYOCERA HEAD OFFICE

SOLAR ENERGY DIVISION  
5 Taketaki Tobadono-cho  
Fushimi-ku, Kyoto

812-8501 Japan

Phone: (81)75-604-3476 Telefax: (81)75-604-3475

#### ● KYOCERA FINECERAMICS GmbH

Fritz Muller StraÙe 137, D-73730 Esslingen, F.R.G.

Phone: (49)711-9393417 Telefax: (49)711-9393450

#### ● KYOCERA ASIA PACIFIC PTE. LTD.

298 Tiong Bahru Road, # 13-03/04/05

Central Plaza, Singapore 168730

Phone: (65)271-0550 Telefax: (65)271-0600

#### ● KYOCERA ASIA PACIFIC LTD.

Room 803, Tower 1 South Seas Centre, 75 Mody Road,

Tsimshatsui East, Kowloon Hong Kong

Phone: (852)2-7237183 Telefax: (852)2-7244501

#### ● KYOCERA ASIA PACIFIC LTD., TAIPEI BRANCH

Suite 501, Asia Enterprise Center,

No.142-144, Sec. 3, Min Chuan E Road Taipei, Taiwan, R.O.C.

Phone: (886)2-2718-3595 Telefax: (886)2-2718-3587

#### ● Kyocera Solar, Inc.

7812 East Acopia Drive

Scottsdale, AZ 85260

Phone: (480)948-5003 or (800)223-9580 Telefax: (480)483-6431

#### ● Kyocera Solar, Inc. -Sunelco Division

100 Steeles Street

P.O.Box 787

Hamilton, MT 59840

Phone: (406)363-6924 or (800)338-6944 Telefax: (406)363-6046

#### ● Kyocera Solar Pty, Ltd.

36 Windsor Street, Unit 6

Stafford 4053

Queensland, Australia

Phone: (61)7-3856-5368 Telefax: (61)7-3856-5443

#### ● Kyocera Solar Argentina S.A.

Mejico 2145, (16400) Martinez

Provincia de Buenos Aires

Argentina

Phone: (54)114-636-1040 Telefax: (54)114-636-8008

#### ● Kyocera Solar do Brazil

Rua Pres. Carlos de Campos

332-Laranjeiras

22231-080

Rio de Janeiro, RJ Brasil

Phone: (55)2-1554-5554 Telefax: (55)2-1553-4894