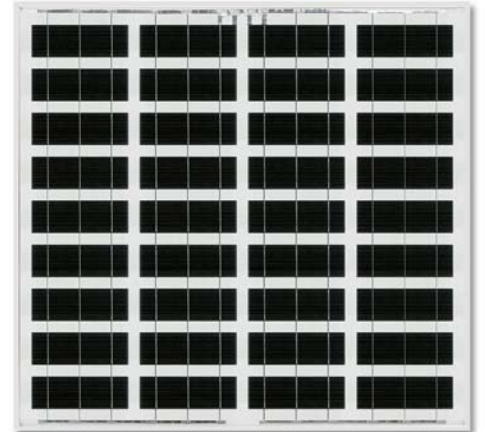




# KD50SE-1P

HIGH EFFICIENCY MULTICRYSTALLINE PHOTOVOLTAIC MODULE



This module is manufactured in **ISO9001** certified factories.  
 Registered No.: JMI0036(Japan), CN07/00321(China),  
 01 100 528 050018 (Czech Republic), FM26856(Mexico)  
 TÜVdotCOM Internet platform for tested quality and service ID 0000023574.

MODEL  
**KD50SE-1P**

## HIGHLIGHTS OF KYOCERA PHOTOVOLTAIC MODULES

Kyocera's advanced cell processing technology and automated production facilities produce highly efficient multicrystalline photovoltaic modules.  
 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 severe environmental conditions.  
 The entire laminate is installed in an anodized aluminum frame to provide structural strength and ease of installation.

## APPLICATIONS

### Grid-Connected Systems

- Residential Solar Power Systems
- Public and Industrial Solar Power Systems

### Stand-Alone Solar Power Systems for

- Villages in remote areas
- Homes and summer cottages
- Microwave / Radio repeater stations
- Medical facilities in rural areas

- Emergency communication
- Water quality and environmental data monitoring
- Drinking water and livestock water pumping
- Small-scale irrigation pumping
- Cathodic protection
- Aviation obstruction lights
- Environmental data monitoring
- Railway signals
- Street lighting
- Small-scale desalination

## LIMITED WARRANTY

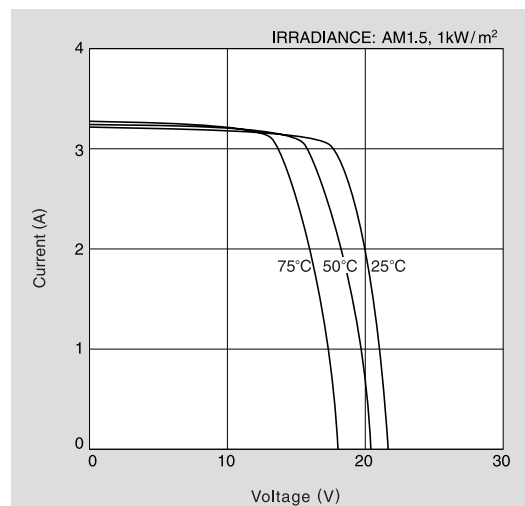
※2 year limited warranty on material and workmanship

※20 years limited warranty on power output: For detail, please refer to "category IV" in Warranty issued by Kyocera

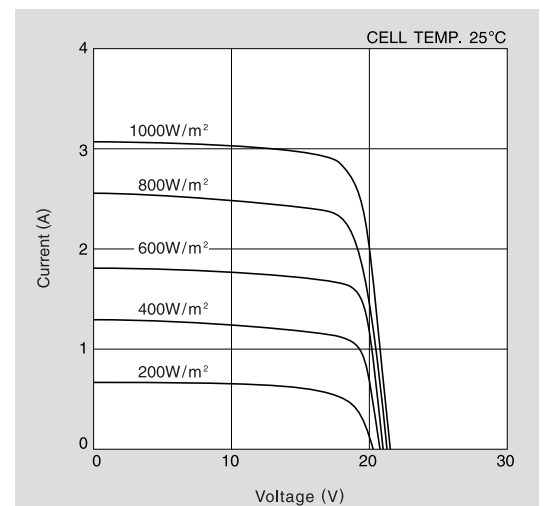
(Long term output warranty shall warrant if PV Module(s) exhibits power output of less than 90% of the original minimum rated power specified at the time of sale within 10 years and less than 80% within 20 years after the date of sale to the Customer. The power output values shall be those measured under Kyocera's standard measurement conditions. Regarding the warranty conditions in detail, please refer to Warranty issued by Kyocera)

## ELECTRICAL CHARACTERISTICS

Current-Voltage characteristics of Photovoltaic Module KD50SE-1P at various cell temperatures at Kyocera Corporation laboratory.

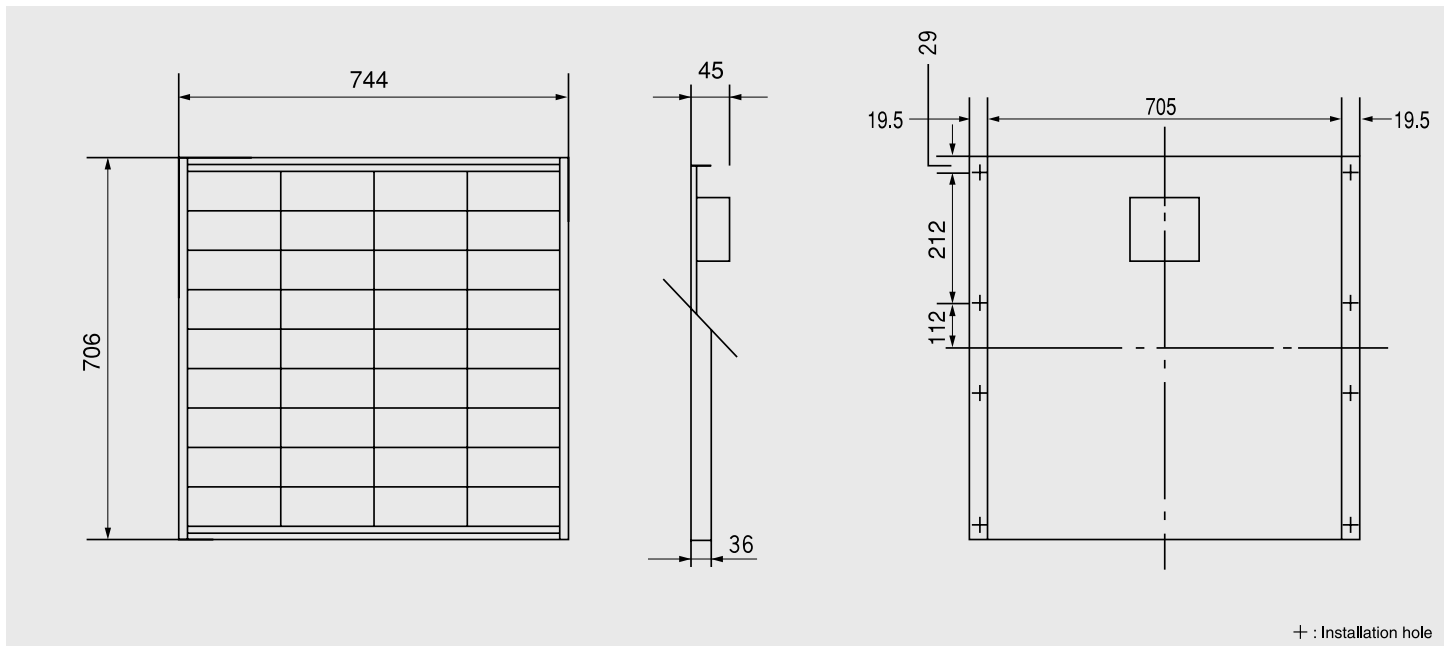


Current-Voltage characteristics of Photovoltaic Module KD50SE-1P at various irradiance levels at Kyocera Corporation laboratory.



**Physical Specifications**

(Unit : mm)



**Specifications**

Electrical Performance under Standard Test Conditions (*STC)	
Maximum Power (Pmax)	50W (+10%/−5%)
Maximum Power Voltage (Vmpp)	17.9V
Maximum Power Current (Impp)	2.80A
Open Circuit Voltage (Voc)	22.1V
Short Circuit Current (Isc)	3.07A
Max System Voltage	750V
Temperature Coefficient of Voc	−8.00×10 <sup>-2</sup> V/°C
Temperature Coefficient of Isc	1.84×10 <sup>-3</sup> A/°C

\*STC : Irradiance 1000W/m<sup>2</sup>, AM1.5 spectrum, module temperature 25°C

Electrical Performance at 800W/m <sup>2</sup> , *NOCT, AM1.5	
Maximum Power (Pmax)	35W
Maximum Power Voltage (Vmpp)	15.8V
Maximum Power Current (Impp)	2.24A
Open Circuit Voltage (Voc)	19.9V
Short Circuit Current (Isc)	2.50A

\*NOCT (Nominal Operating Cell Temperature) : 49°C

Cells	
Number per Module	36
Cell Technology	Multicrystalline
Cell Shape	Rectangular

Module Characteristics	
Length × Width × Depth without Box	706×744×36mm
Weight	6.5kg

Junction Box Characteristics	
Length × Width × Depth	150×140×37mm
IP Code	IP65

Others	
*Reduction of Efficiency under Low Irradiance	4.5%
Limiting Reverse Current	6A

\*Reduction of efficiency from an irradiance of 1000W/m<sup>2</sup> to 200W/m<sup>2</sup> (cell temperature 25°C)

Please contact our office for further information



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