

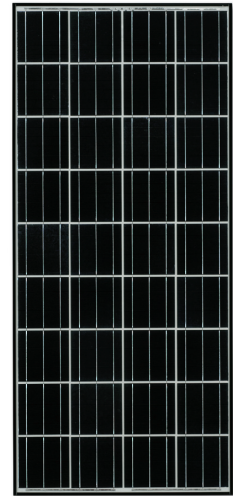


# KD135GH-2P

HIGH EFFICIENCY MULTICRYSTAL PHOTOVOLTAIC MODULE



This module is manufactured in **ISO9001** certified factories.  
 Registered No.: JMI0036(Japan), CN07/00321(China), 01 100 528 050018  
 (Czech Republic)  
 TUVdotCOM Internet platform for tested quality and service ID 0000022509.



MODEL  
**KD135GH-2P**

## 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.  
 Equipped with plug in connectors.

## 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
- Irrigation pumping
- Cathodic protection
- Aviation obstruction lights
- Environmental data monitoring
- Railway signals
- Street lighting
- Desalination
- etc.

## LIMITED WARRANTY

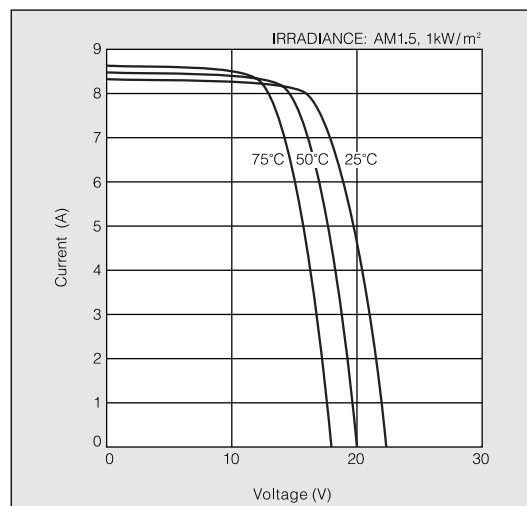
※ Limited warranty on material and workmanship: For warranty period, please refer to Warranty issued by Kyocera

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

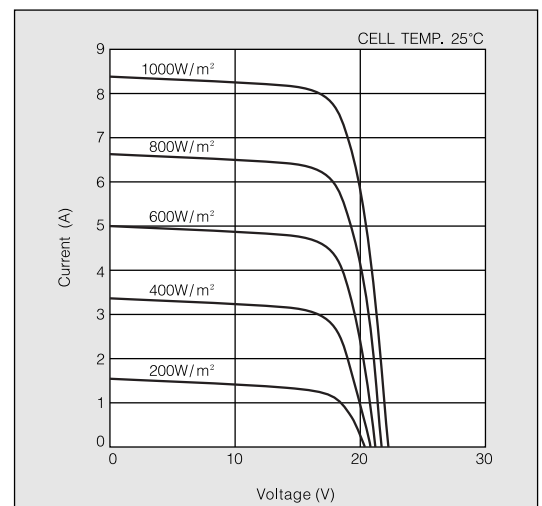
(Long term output warranty shall warrant if PV Module(s) exhibits power output of less than 90% of the original minimum rated power specified at the time of sale within 10 years and less than 80% within 20 years after the date of sale to the Customer. The power output values shall be those measured under 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 KD135GH-2P at various cell temperatures

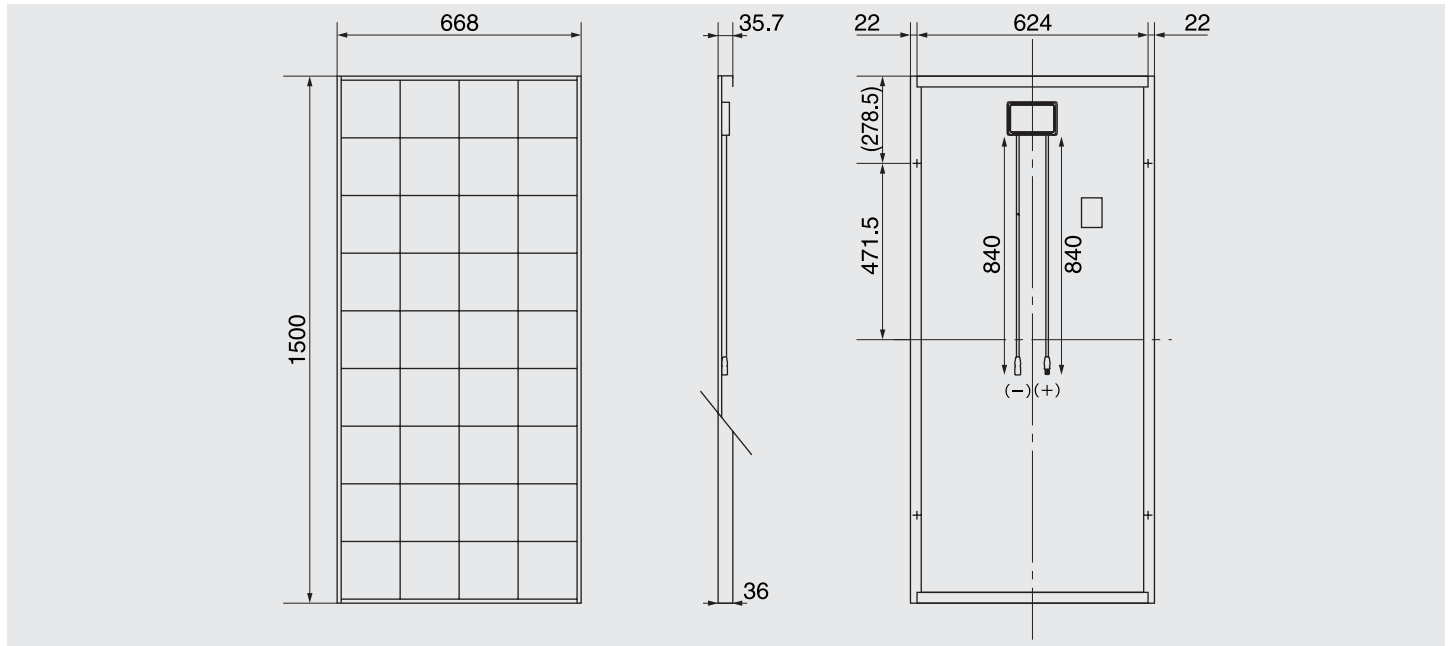


Current-Voltage characteristics of Photovoltaic Module KD135GH-2P at various irradiance levels



**Physical Specifications**

(Unit : mm)



**Specifications**

Electrical Performance under Standard Test Conditions (*STC)	
Maximum Power (P <sub>max</sub> )	135W (+5%/−5%)
Maximum Power Voltage (V <sub>mpp</sub> )	17.7V
Maximum Power Current (I <sub>mpp</sub> )	7.63A
Open Circuit Voltage (V <sub>oc</sub> )	22.1V
Short Circuit Current (I <sub>sc</sub> )	8.37A
Max System Voltage	1000V
Temperature Coefficient of V <sub>oc</sub>	−0.80×10 <sup>-1</sup> V/°C
Temperature Coefficient of I <sub>sc</sub>	5.02×10 <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 (P <sub>max</sub> )	95W
Maximum Power Voltage (V <sub>mpp</sub> )	15.6V
Maximum Power Current (I <sub>mpp</sub> )	6.10A
Open Circuit Voltage (V <sub>oc</sub> )	19.9V
Short Circuit Current (I <sub>sc</sub> )	6.82A

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

Cells	
Number per Module	36
Cell Technology	Multicrystal
Cell Shape	Rectangular

Module Characteristics	
Length × Width × Depth without Box	1500×668×36mm
Weight	13kg
Cable	(+)840/(−)840mm

Junction Box Characteristics	
Length × Width × Depth	100×108×15mm
IP Code	IP65

Reduction of Efficiency under Low Irradiance	
*Reduction	5.8%
Limiting Reverse Current	15A

\*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



**KYOCERA Corporation**

**KYOCERA Corporation Headquarters**

CORPORATE SOLAR ENERGY DIVISION  
6 Takeda Tobadono-cho  
Fushimi-ku, Kyoto  
612-8501, Japan  
TEL:(81)75-604-3476 FAX:(81)75-604-3475  
<http://www.kyocera.com/>

**KYOCERA Solar, Inc.**

7812 East Acoma Drive  
Scottsdale, AZ 85260, USA  
TEL:(1)480-948-8003 or (800)223-9580 FAX:(1)480-483-6431  
<http://www.kyocerasolar.com/>

**KYOCERA Solar do Brasil Ltda.**

Av. Guignard 661, Loja A  
22790-200, Recreio dos Bandeirantes, Rio de Janeiro, Brazil  
TEL:(55)21-2437-8525 FAX:(55)21-2437-2338  
<http://www.kyocerasolar.com.br/>

**KYOCERA Solar Pty Ltd.**

Level 3, 6-10 Talavera Road, North Ryde  
N.S.W, 2113, Australia  
TEL:(61)2-9870-3948 FAX:(61)2-9888-9588  
<http://www.kyocerasolar.com.au/>

**KYOCERA Fin ceramics GmbH**

Fritz-Muller-Strasse 107, 73730 Esslingen Germany  
TEL:(49)711-93934-999 FAX:(49)711-93934-950  
<http://www.kyocerasolar.de/>  
solar@kyocera.de

**KYOCERA Asia Pacific Pte. Ltd.**

298 Tiong Bahru Road, #13-03/05  
Central Plaza, Singapore 168730  
TEL:(65)6271-0500 FAX:(65)6271-0600

**Kyocera Asia Pacific Ltd.**

Room 801-802, Tower 1, South Seas Centre,  
75 Mody Road, Tsimshatsui East, Kowloon, Hong Kong  
TEL:(852)2723-7183 FAX:(852)2724-4501

**KYOCERA Asia Pacific Pte. Ltd., Taipei Office**

10F, No. 66, Nanking West Road, Taipei, Taiwan  
TEL:(886) 2-2555-3609 FAX:(886)2-2559-4131

**KYOCERA (Tianjin) Sales & Trading Corp.**

(Beijing Office)Room 2107, Beijing Huabin International Building,  
No.8 Yong An Dong Li, Jian Guo Men Wai Road, Chao Yang District,  
Beijing, 100022, China  
TEL:(86)10-8528-8838 FAX:(86)10-8528-8839  
<http://www.kyocera.com.cn/>

**KYOCERA Korea Co., Ltd.**

Diplomatic Center Room #406, 1376-1,  
Secho-2Dong, Seocho-Ku, Seoul, 137-072, Korea  
TEL:(82)2-3463-3538 FAX:(82)2-3463-3539  
<http://www.kyocera.co.kr/>