



# KD135GX-LP

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. Equipped with plug-in connectors.



MODEL  
KD135GX-LP

## APPLICATIONS

**KD135GX-LP is ideal for grid tie system applications.**

- Residential roof top systems
- Large commercial grid tie systems
- Water Pumping systems
- High Voltage stand alone systems
- etc.

## QUALIFICATIONS

- **MODULE** : UL1703 listed
- **FACTORY** : ISO9001 and ISO 14001

## 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

## LIMITED WARRANTY

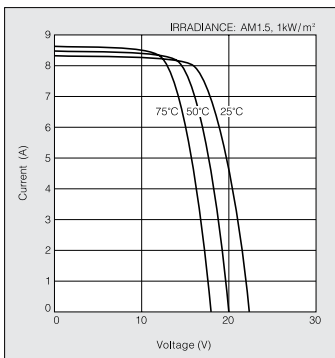
※ 1 year limited warranty on material and workmanship

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

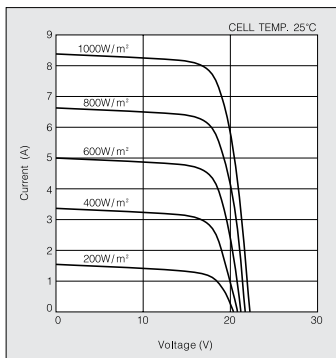
(Long term output warranty shall warrant if PV Module(s) exhibits power output of less than 90% of the original minimum rated power specified at the time of sale within 10 years and less than 80% within 20 years after the date of sale to the Customer. The power output values shall be those measured under 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 KD135GX-LP at various cell temperatures

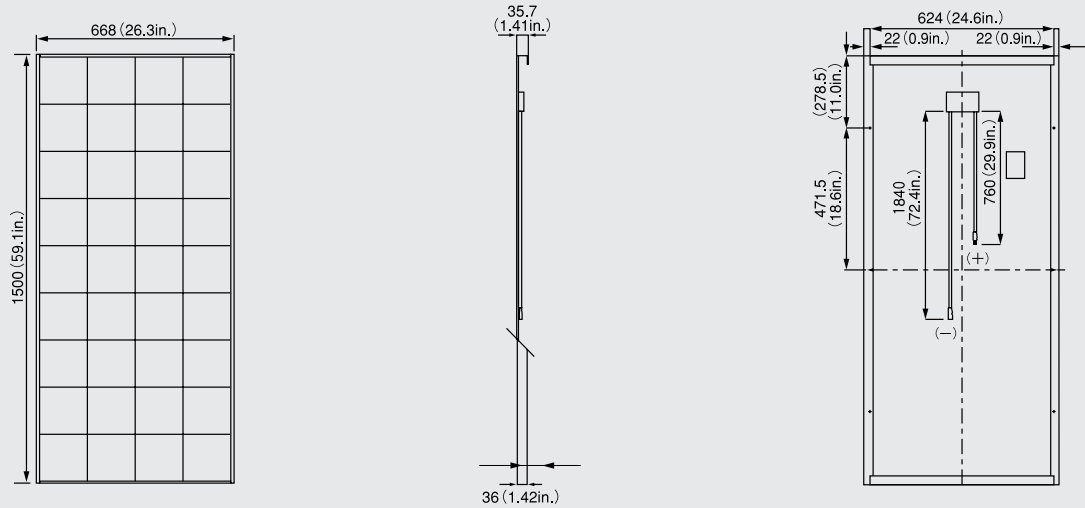


Current-Voltage characteristics of Photovoltaic Module KD135GX-LP at various irradiance levels



**Physical Specifications**

Unit : mm (in.)



**Specifications**

Electrical Performance under Standard Test Conditions (*STC)	
Maximum Power (Pmax)	135W (+5%/−5%)
Maximum Power Voltage (Vmpp)	17.7V
Maximum Power Current (Impp)	7.63A
Open Circuit Voltage (Voc)	22.1V
Short Circuit Current (Isc)	8.37A
Max System Voltage	600V
Temperature Coefficient of Voc	−8.0×10 <sup>-1</sup> V/°C
Temperature Coefficient of Isc	5.02×10 <sup>-3</sup> A/°C

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

Electrical Performance at 800W/m <sup>2</sup> , *NOCT, AM1.5	
Maximum Power (Pmax)	95W
Maximum Power Voltage (Vmpp)	15.6V
Maximum Power Current (Impp)	6.10A
Open Circuit Voltage (Voc)	19.9V
Short Circuit Current (Isc)	6.82A

\*NOCT (Nominal Operating Cell Temperature) : 48°C

Cells	
Number per Module	36

Module Characteristics	
Length × Width × Depth	1500mm(59.1in)×668mm(26.3in)×36mm(1.4in)
Weight	13.0kg(28.7lbs.)
Cable	(+)760mm(29.9in),(-)1840mm(72.4in)

Junction Box Characteristics	
Length × Width × Depth	100mm(3.9in)×108mm(4.3in)×15mm(0.6in)
IP Code	IP65

Others	
*Operating Temperature	−40°C~90°C
Maximum Fuse	15A

\*This temperature is based on cell temperature.

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,  
Seocho-2Dong, Seocho-Ku, Seoul, 137-072, Korea  
TEL:(82)2-3463-3538 FAX:(82)2-3463-3539  
<http://www.kyocera.co.kr/>