



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

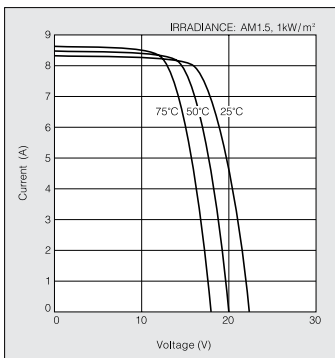
※ 1 year limited warranty on material and workmanship

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

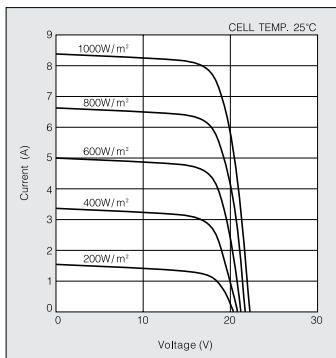
(Long term output warranty shall warrant if PV Module(s) exhibits power output of less than 90% of the original minimum rated power specified at the time of sale within 10 years and less than 80% within 20 years after the date of sale to the Customer. The power output values shall be those measured under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

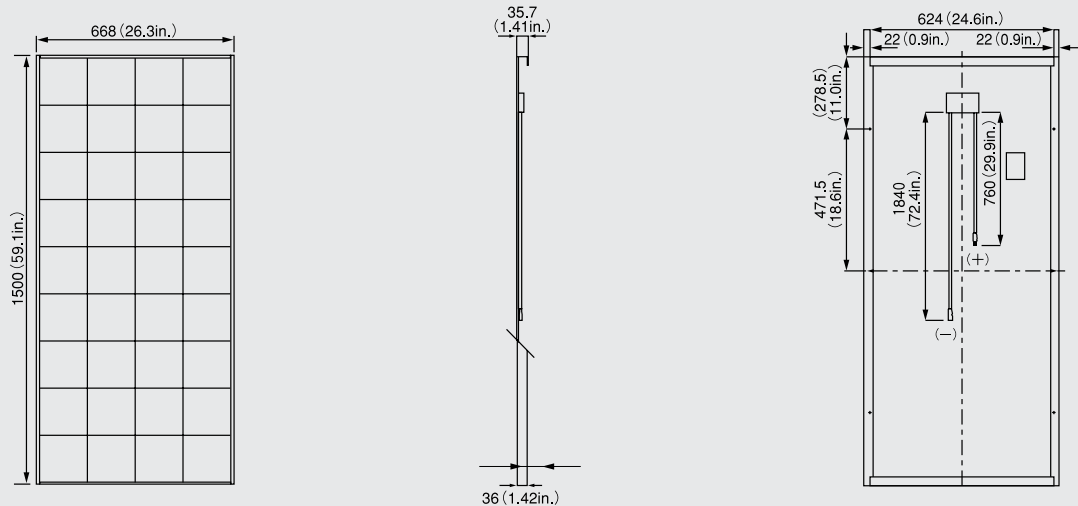


Current-Voltage characteristics of Photovoltaic Module KD135GX-LP at various irradiance levels



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	−.080 V/°C
Temperature Coefficient of Isc	5.02×10 ^{−3} A/°C

*STC : Irradiance 1000W/m², AM1.5 spectrum, cell temperature 25°C

Electrical Performance at 800W/m², *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) : 49°C

Cells

Number per Module	36
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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.