



# KD235GH-2FB

HIGH EFFICIENCY MULTICRYSTALLINE PHOTOVOLTAIC MODULE

IEC 61215Ed.2  
EN61730



This module has passed 5,400Pa mechanical load test based on IEC61215 ed.2

This module is manufactured in **ISO9001** certified factories.

Registered No.: JMI0036(Japan), CN07/00321(China), 01 100 528 050018 (Czech Republic), FM26856(Mexico)

TUVdotCOM Internet platform for tested quality and service ID 0000023299.

MODEL  
KD235GH-2FB

## 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. 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

## LIMITED WARRANTY

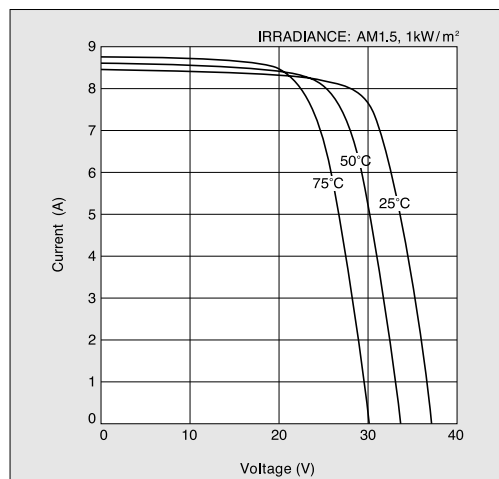
※2 years limited warranty on material and workmanship : For warranty period, please refer to Warranty issued by Kyocera

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

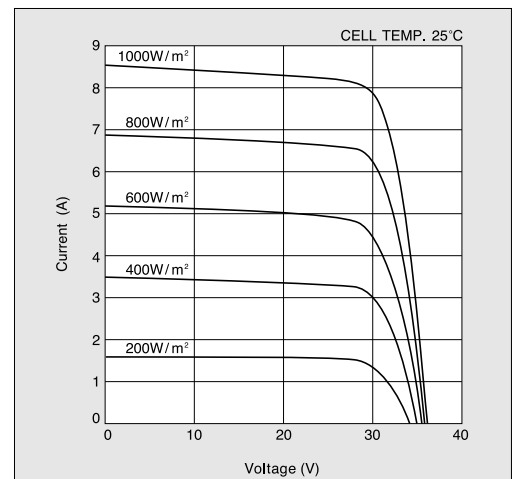
(Long term output warranty shall warrant if PV Module(s) exhibits power output of less than 90% of the original minimum rated power specified at the time of sale within 10 years and less than 80% within 20 years after the date of sale to the Customer. The power output values shall be those measured under 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 KD235GH-2FB at various cell temperatures at Kyocera Corporation laboratory.

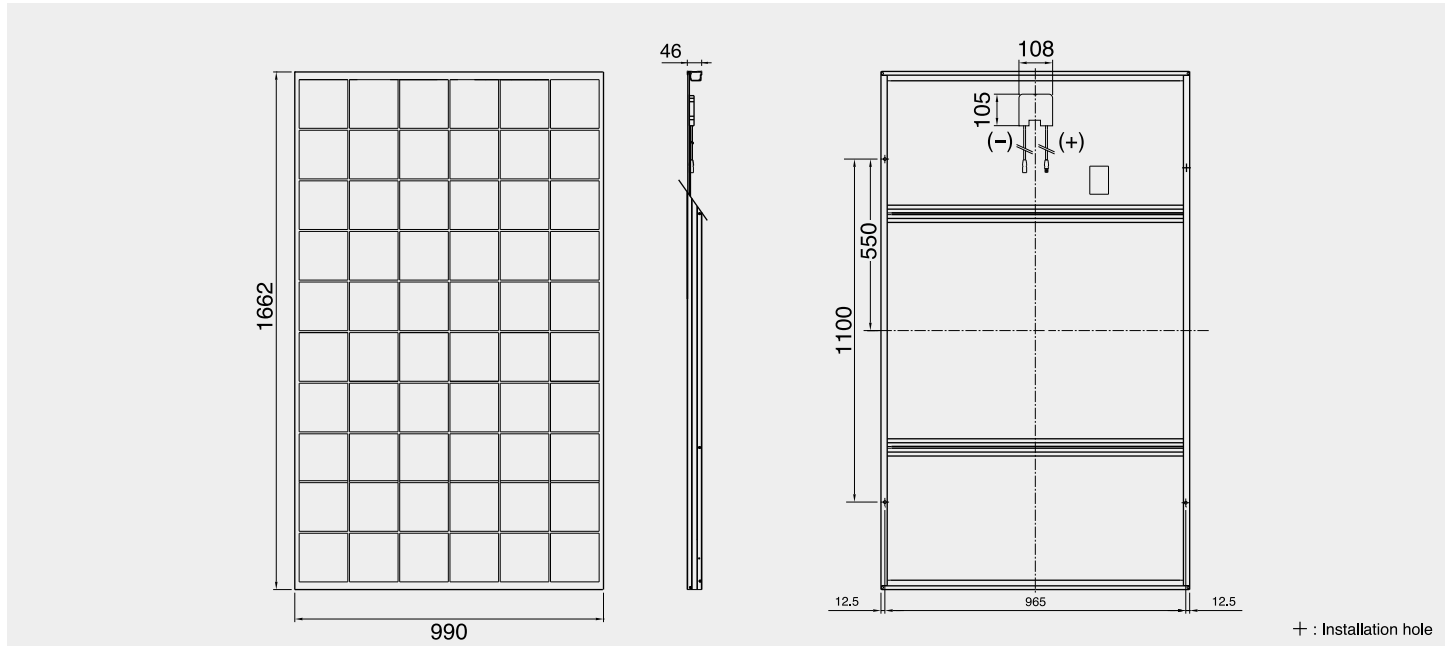


Current-Voltage characteristics of Photovoltaic Module KD235GH-2FB at various irradiance levels at Kyocera Corporation laboratory.



**Physical Specifications**

(Unit : mm)



**Specifications**

Electrical Performance under Standard Test Conditions (*STC)	
Maximum Power (Pmax)	235W (+5%/−3%)
Maximum Power Voltage (Vmpp)	29.8V
Maximum Power Current (Impp)	7.89A
Open Circuit Voltage (Voc)	36.9V
Short Circuit Current (Isc)	8.55A
Max System Voltage	1000V
Temperature Coefficient of Voc	−1.33×10 <sup>-1</sup> V/°C
Temperature Coefficient of Isc	5.13×10 <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)	166W
Maximum Power Voltage (Vmpp)	26.4V
Maximum Power Current (Impp)	6.31A
Open Circuit Voltage (Voc)	33.3V
Short Circuit Current (Isc)	6.93A

\*NOCT (Nominal Operating Cell Temperature) : 47.9°C

Cells	
Number per Module	60
Cell Technology	Multicrystalline
Cell Shape	Square

Module Characteristics	
Length × Width × Depth without Box	1662×990×46mm
Weight	21.0kg
Cable	(+)1030/(-)830mm

Junction Box Characteristics	
Length × Width × Depth	105×108×20mm
IP Code	IP65

Others	
*Reduction	6.0 %
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)

Limit	
Mechanical load(to IEC61215 ed.2)	Pressure 5,400Pa

Please contact our office for further information



**KYOCERA Corporation**

**KYOCERA Corporation Headquarters**

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

**KYOCERA Solar, Inc.**

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

**KYOCERA Solar do Brasil Ltda.**

Av. Guignard 661, Loja A  
Recreio dos Bandeirantes-Rio de Janeiro, 22790-200, Brazil  
TEL: 55-21-3261-7111 FAX: 55-21-3261-7103  
<http://www.kyocerasolar.com.br/>

**KYOCERA Solar Pty Ltd.**

Level 3, 6-10 Talavera Road, North Ryde  
NSW 2113, Australia  
TEL: 61-2-9870-3946 FAX: 61-2-9888-9673  
<http://www.kyocerasolar.com.au/>

**KYOCERA Mexicana, S.A. de C.V.**

Bldv. Buenavista Otay, #2055, Otay Universidad Tijuana,  
Baja California, 22427, Mexico  
TEL: 52-664-682-0111 FAX: 52-664-682-1370

**KYOCERA Solar Fincercer GmbH**

Fritz-Mueller-Strasse 27, 73730 Esslingen, Germany  
TEL: 49-711-93934-999 FAX: 49-711-93934-950  
<http://www.kyocerasolar.eu/>

**KYOCERA Solar Europe s.r.o.**

Královský Vrch 1977  
43201 Kadaň, Czech Republic  
TEL: 420-474-352-100 FAX: 420-474-352-101

**KYOCERA Asia Pacific Pte. Ltd.**

298 Tiong Bahru Road, #13-03/05  
Central Plaza, 168730, Singapore  
TEL: 65-6271-0500 FAX: 65-6271-0600  
<http://www.kyocera.com.sg>

**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 Branch**

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

**KYOCERA(Tianjin) Sales & Trading Corporation**

Room 2107, Ruoyi Chai 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/>

**KYOCERA (Tianjin) Solar Energy Co., Ltd.**

No.16-1 Xiang An Road,  
Tianjin Economic Technological Development Area,  
300457, Tianjin, China  
TEL: 86-22-2532-0953 FAX: 86-22-2532-2813