## **KYOCERA** SOLAR

## We care! Since 1975.

# KD185GH-2PU

High efficiency multicrystal photovoltaic module



Apartment house, Germany

#### CUTTING-EDGE TECHNOLOGY

- Cell:
- 156 mm × 156 mm
- Polycrystalline, 3-busbar
- >16 % efficiency
- $\cdot$  Embedded in EVA film
- Patented RIE process: very little light reflection, homogenous dark coloration

#### Frame:

- $\cdot$  Aluminium, black anodised and coated
- $\cdot$  Screwed and also adhered
- Strength: 5,400 N/m<sup>2</sup>
- Interior drainage openings to protect against frost damage
- Approved for module inlay systems
- Flexible assembly (horizontal and upright)

- Junction box:
- $\cdot$  Incl. bypass diodes
- Encapsulated
- Highest fireproof class 5V-A in accordance with UL94
- Over-voltage proof Si-p/n bypass diodes
- Pre-configured with connection wires
  and original multi-contact plug connectors

#### Pairing:

 Sorting procedure: Nominal output is achieved by two paired modules (≥ 370 Wp for 2×KD185GH-2PU)

#### Production:

- Fully automated and integrated production processes in our own production plants
- No intermediate products are purchased
- 100 % final inspection
- Service:
  - Professional Europe-wide customer service
    in Esslingen/Germany

#### COMPANY

As a pioneer in the photovoltaic sector, Kyocera Solar can look back on over 35 years of experience. We are also involved in numerous future-oriented solutions across the world. Our focus is on innovation and quality.

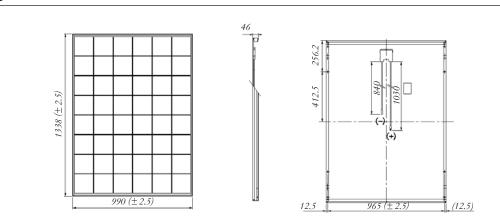
Our vision: To make solar energy accessible to everybody and to ensure a comprehensive sustained energy supply.

TUVdotCOM Service: Internet platform for tested quality and service TUVdotCOM-ID: 0000023299 IEC 61215 ed. 2, IEC 61730 and Safety Class II

Kyocera is ISO 9001, ISO 14001 and OHSAS18001 certified and registered.

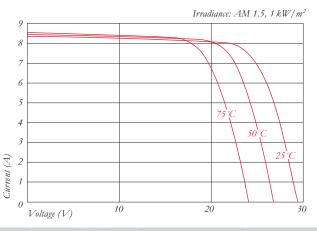


in mm

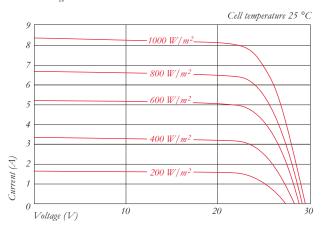


#### ELECTRICAL CHARACTERISTICS

Current-Voltage characteristics at various cell temperatures



Current-Voltage characteristics at various irradiance levels



#### ELECTRICAL PERFORMANCE

PV Module Type	KD185GH-2PU	
At 1000 W/m <sup>2</sup> (STC)*		
Maximum Power	[W]	185
Maximum System Voltage	[V]	1000
Maximum Power Voltage	[V]	23.6
Maximum Power Current	[A]	7.84
Open Circuit Voltage (V <sub>oc</sub> )	[V]	29.5
Short Circuit Current (I <sub>sc</sub> )	[A]	8.58
Efficiency	[%]	13.9

#### At 800 W/m<sup>2</sup> (NOCT)\*\*

Maximum Power	[W]	133
Maximum Power Voltage	[V]	21.3
Maximum Power Current	[A]	6.27
Open Circuit Voltage (V <sub>oc</sub> )	[V]	27.0
Short Circuit Current (I <sub>sc</sub> )	[A]	6.95
NOCT	[°C]	45

Power Tolerance	[%]	+5/-5
Maximum Reverse Current I <sub>R</sub>	[A]	15
Series Fuse Rating	[A]	15
Temperature Coefficient of V <sub>oc</sub>	[%/K]	-0.36
Temperature Coefficient of I <sub>sc</sub>	[%/K]	0.06
Temperature Coefficient of Max. Power	[%/K]	-0.45
Reduction of Efficiency (from 1000 W/m <sup>2</sup> to 200	) W/m²) [%]	5.8

#### DIMENSIONS Length [mm] 1338 (±2.5) 990 (±2.5) Width [mm] Depth/incl. Junction Box 46 [mm] Weight [kg] 16 Cable [mm] (+)1030/(-)840 Connection Type MC PV-KBT3 / MC PV-KST3 113×82×15 Junction Box [mm] Number of bypass diodes 3 IP Code IP65

### CELLS

Number per Module		48
Cell Technology		polycrystalline
Cell Shape (square)	[mm]	156×156
Cell Bonding		3 busbar

GENERAL INFORMATION	
Performance Guarantee	10***/20 years ****
Warranty	5 years *****

\* Electrical values under standard test conditions (STC): irradiation of 1000 W/m<sup>2</sup>, airmass AM 1.5 and cell temperature of 25 °C.
 \*\* Electrical values under normal operating cell temperature (NOCT): irradiation of 800 W/m<sup>2</sup>, airmass AM 1.5, wind speed of 1 m/s and ambient temperature of 20 °C
 \*\*\* 10 years on 90% of the minimally specified power P under standard test conditions (STC)
 \*\*\*\* In the case of Europe

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🔇 КУОСЕRА SOLAR

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### Your local Kyocera dealer: