# **KYOCERA** SOLAR

### We care! Since 1975.

# KD210GH-2PU

High efficiency multicrystal photovoltaic module



Stade de Suisse, Switzerland

#### 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 (≥420 Wp for 2×KD210GH-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

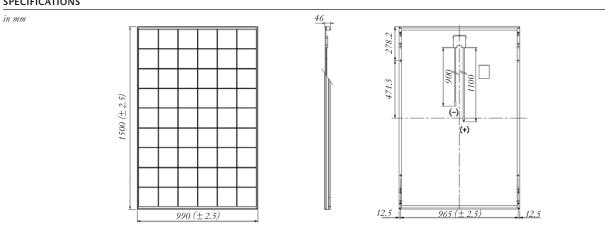
As a pioneer in the photovoltaic sector, Kyocera Solar can look back on over 35 years of experience. We are also involved in numerous future-oriented solutions across the world. Our focus is on innovation and quality.

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

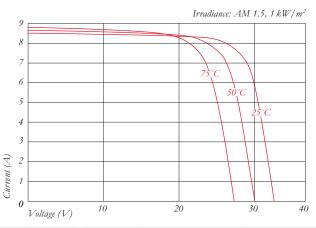
Kyocera is ISO 9001, ISO 14001 and OHSAS18001 certified and registered.





#### ELECTRICAL CHARACTERISTICS

Current-Voltage characteristics at various cell temperatures



#### ELECTRICAL PERFORMANCE

PV Module Type	KD210GH-2PU	
At 1000 W/m² (STC)*		
Maximum Power	[W]	210
Maximum System Voltage	[V]	1000
Maximum Power Voltage	[V]	26.6
Maximum Power Current	[A]	7.9
Open Circuit Voltage (V <sub>oc</sub> )	[V]	33.2
Short Circuit Current (I <sub>sc</sub> )	[A]	8.58
Efficiency	[%]	14.1

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

Maximum Power	[W]	151
Maximum Power Voltage	[V]	24.0
Maximum Power Current	[A]	6.32
Open Circuit Voltage (V <sub>oc</sub> )	[V]	30.4
Short Circuit Current (I <sub>sc</sub> )	[A]	6.95
NOCT	[°C]	45

Power Tolerance	[%]	+5/-3
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]	-0.46
Reduction of Efficiency (from 1000 W/m <sup>2</sup> to 200 W/m <sup>2</sup> ) [%]		6.0

DIMENSIONS Length [mm] 1500 (±2.5) 990 (±2.5) Width [mm] Depth/incl. Junction Box 46 [mm] Weight [kg] 18 Cable [mm] (+)1100 / (-)900 Connection Type MC PV-KBT3 / MC PV-KST3 113 × 82 × 15 Junction Box [mm] Number of bypass diodes 3 IP Code IP65

20

Cell temperature 25 °C

30

40

Current-Voltage characteristics at various irradiance levels

 $1000 \ W/m^2 -$ 

800 W/m<sup>2</sup>

 $600 W/m^2$ 

 $-400 W/m^2$ -

 $200 W/m^2$ 

10

#### CELLS

9

8

7

6

5

4

3

1

0

Voltage (V)

Current (A) 2

Number per Module		54
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: