



KD210GH-2PU

High efficiency multicrystal photovoltaic module



EXAMPLES OF APPLICATION

- Grid-connected systems, for e.g.
- Residential solar power systems
- Public and industrial solar power systems
- \cdot Solar power stations

CUTTING-EDGE TECHNOLOGY

Exhaustive research work and continuous further development of production processes enable the integrated Kyocera high-performance solar cells with a standard size of 156 mm x 156 mm to achieve over 16 % efficiency, guaranteeing an extremely high annual yield of energy from the photovoltaic system.

To protect against the harshest weather conditions, the cells are embedded between a reinforced glass covering and EVA foil, and are sealed with a PET foil backing. The laminate is set in a sturdy aluminium frame which is easy to assemble. The module fulfils test conditions according to IEC 61215 ed. 2 for a surface load of 5,400N/m².

The junction box on the module backside is equipped with bypass diodes that eliminate the risk of the individual solar cells overheating (hot spot effect). Many series-connected photovoltaic modules can be easily wired using pre-assembled solar cables and multi-contact plugs.

Kyocera manufactures all the components at its own production sites – without buying in semifinished products – to ensure consistently high product quality.

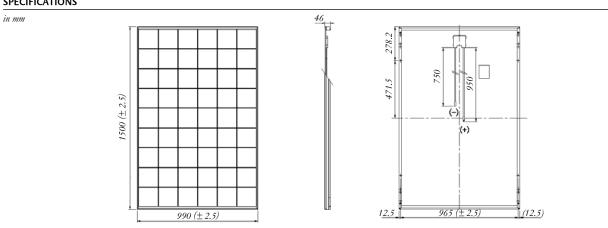
TUVdotCOM Service: Internet platform for tested quality and service TUVdotCom-ID: 0000023299 IEC 61215 ed. 2, IEC 61730 and Safety Class II Kyocera is ISO 9001 and ISO 14001 certified and registered.



KYOCERA SOLAR

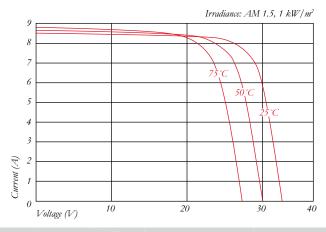
We care!





ELECTRICAL CHARACTERISTICS

Current-Voltage characteristics at various cell temperatures



ELECTRICAL PERFORMANCE

PV Module Type	KD210GH-2PU	
At 1000 W/m ² (STC)*		
Maximum Power	[W]	210
Maximum System Voltage	[V]	1000
Maximum Power Voltage	[V]	26.6
Maximum Power Current	[A]	7.90
Open Circuit Voltage (V _{oc})	[V]	33.2
Short Circuit Current (I _{SC})	[A]	8.58
At 800 W/m ² (NOCT)**		
Maximum Power	[W]	149
Maximum Power Voltage	[V]	23.6
Maximum Power Current	[A]	6.32
Open Circuit Voltage (V _{oc})	[V]	30
Short Circuit Current (I _{SC})	[A]	6.96
NOCT	[°C]	47.9
Power Tolerance	[%]	+5 / -5
Maximum Reverse Current I _R	[A]	15
Series Fuse Rating	[A]	15
Temperature Coefficient of V _{OC}	[V/°C]	-1.20x10 ⁻¹
Temperature Coefficient of I _{SC}	[A/°C]	5.15x10 ⁻³
Temperature Coefficient of Max. Power	[W/°C]	-9.60x10 ⁻¹
Reduction of Efficiency (from 1000 W/m ² to 200 W/m ²)	[%]	6.0

2 Current (A) $200 W/m^2$ 1 0 10 20 30 40 Voltage (V)DIMENSIONS 1500 (±2.5) Length [mm] Width 990 (±2.5) [mm]

Cell temperature 25 °C

Current-Voltage characteristics at various irradiance levels

 $1000 \ W/m^2 -$

800 W/m²

 $600 W/m^2$

 $400 W/m^2$ -

9

8

7

6

5

4

3

Depth / incl. Junction Box	[mm]	46
Weight	[kg]	18
Cable	[mm]	(+)950 / (–)750
Connection Type		MC PV-KBT3 / MC PV-KST3
Junction Box	[mm]	105x108x20
IP Code		IP65

GENERAL INFORMATION

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

CELLS		
Number per Module		54
Cell Technology		polycrystalline
Cell Shape (square)	[mm]	156x156
Cell Bonding		3 busbar

Electrical values under standard test conditions (STC): irradiation of 1000 W/m², airmass AM 1.5 and

Electrical values inner standard iest conditions (STC): irradiation of 1000 W/m², airmass AM 1.5 and cell temperature of 25 °C
** Electrical values under normal operating cell temperature (NOCT): irradiation of 800 W/m², airmass AM 1.5, wind speed of 1m/s and ambient temperature of 20 °C
*** 10 years on 90% of the minimally specified power P under standard test conditions (STC)
**** 20 years on 80% of the minimally specified power P under standard test conditions (STC)
***** In the case of Europe

KYOCERA SOLAR

KYOCERA Fineceramics GmbH Solar Division

We care!

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