

We care! Since 1975.

Y-series

KD145GH-4YU · KD195GH-4YU · KD220GH-4YU
 KD245GH-4YB2 · KD250GH-4YB2 · KD320GH-4YB



Apartment house, Germany

CUTTING-EDGE TECHNOLOGY

▶ Cell:

- 156 mm × 156 mm
- Polycrystalline, 3-busbar
- >16% efficiency
- Embedded in EVA film
- Silicon nitride texturing: little light reflection, homogenous coloration

▶ Frame:

- Aluminium, black anodised and coated
- Screwed and also adhered
- Load capacity: 5,400 N/m²
- Interior drainage openings to protect against frost damage
- Flexible assembly (horizontal and upright)
- Approved for module inlay systems (except 80-cell modules)
- 60-/80-cell modules: reinforced on rear side with 2 support bars

▶ Junction box:

- Incl. bypass diodes
- Encapsulated
- Highest fireproof class 5VA in accordance with UL94
- pre-configured with connection wires and SMK plug connectors

▶ Pairing:

- Sorting procedure: Nominal output is achieved by two paired modules (e.g. ≥500 Wp for 2 × KD250GH-4YB2)

▶ Production:

- Fully automated and integrated production processes in our own production plants
- Vertical integration = 100% control

▶ Service:

- Professional Europe-wide customer service in Esslingen/Germany
- Individual maintenance service increases life expectancy of the photovoltaic system

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.

Kyocera photovoltaic modules meet the highest standards



IEC 61215
IEC 61730



www.tuv.com
ID 0000023299



Kyocera is ISO 9001, ISO 14001 and OHSAS 18001 certified and registered.

ELECTRICAL PERFORMANCE Y-SERIES

PV Module Type	KD145GH-4YU	KD195GH-4YU	KD220GH-4YU	KD245GH-4YB2	KD250GH-4YB2	KD320GH-4YB
At 1000 W/m² (STC)⁽¹⁾						
Maximum Power [W]	145	195	220	245	250	320
Maximum System Voltage [V]	1000	1000	1000	1000	1000	1000
Maximum Power Voltage [V]	17.9	23.6	26.6	29.8	29.8	40.1
Maximum Power Current [A]	8.11	8.27	8.28	8.23	8.39	7.99
Open Circuit Voltage (V _{oc}) [V]	22.3	29.5	33.2	36.9	36.9	49.5
Short Circuit Current (I _{sc}) [A]	8.78	9.05	8.98	8.91	9.09	8.60
Efficiency [%]	14.4	14.7	14.8	14.8	15.1	14.5
At 800 W/m² (NOCT)⁽²⁾						
Maximum Power [W]	104	140	158	176	180	230
Maximum Power Voltage [V]	16.1	21.3	24.0	26.8	26.8	36.1
Maximum Power Current [A]	6.46	6.58	6.63	6.58	6.72	6.40
Open Circuit Voltage (V _{oc}) [V]	20.4	27.0	30.4	33.7	33.7	45.3
Short Circuit Current (I _{sc}) [A]	7.11	7.33	7.27	7.21	7.36	6.96
NOCT [°C]	45	45	45	45	45	45
Power Tolerance [%]	+5/-5	+5/-5	+5/-3	+5/-3	+5/-3	+5/-3
Maximum Reverse Current I _r [A]	15	15	15	15	15	15
Series Fuse Rating [A]	15	15	15	15	15	15
Temperature Coefficient of V _{oc} [%/K]	-0.36	-0.36	-0.36	-0.36	-0.36	-0.36
Temperature Coefficient of I _{sc} [%/K]	0.06	0.06	0.06	0.06	0.06	0.06
Temperature Coefficient of Max. Power [%/K]	-0.46	-0.46	-0.46	-0.46	-0.46	-0.46
Reduction of Efficiency (from 1000 W/m ² to 200 W/m ²) [%]	4.9	5.0	6.0	6.6	6.7	7.1
DIMENSIONS						
Length [mm]	1500 (±2.5)	1338 (±2.5)	1500 (±2.5)	1662 (±2.5)	1662 (±2.5)	1662 (±2.5)
Width [mm]	668 (±2.5)	990 (±2.5)	990 (±2.5)	990 (±2.5)	990 (±2.5)	1320 (±2.5)
Depth / incl. Junction Box [mm]	46	46	46	46	46	46
Weight [kg]	12.5	16	18	20	20	27.5
Cable [mm]	(+)1010 / (-)840	(+)1030 / (-)840	(+)1100 / (-)900	(+)1190 / (-)960	(+)1190 / (-)960	(+)1290 / (-)1040
Connection Type	PV-03 (SMK)	PV-03 (SMK)	PV-03 (SMK)	PV-03 (SMK)	PV-03 (SMK)	PV-03 (SMK)
Junction Box [mm]	123 × 91.6 × 16	123 × 91.6 × 16	123 × 91.6 × 16	123 × 91.6 × 16	123 × 91.6 × 16	133 × 136 × 16.5
Number of bypass diodes	2	3	3	3	3	4
IP Code	IP65 / IP67	IP65 / IP67	IP65 / IP67	IP65 / IP67	IP65 / IP67	IP65 / IP67
CELLS						
Number per Module	36	48	54	60	60	80
Cell Technology	polycrystalline	polycrystalline	polycrystalline	polycrystalline	polycrystalline	polycrystalline
Cell Shape (square) [mm]	156 × 156	156 × 156	156 × 156	156 × 156	156 × 156	156 × 156
Cell Bonding	3-busbar	3-busbar	3-busbar	3-busbar	3-busbar	3-busbar
GENERAL INFORMATION						
Performance Guarantee	10 ⁽³⁾ / 20 years ⁽⁴⁾	10 ⁽³⁾ / 20 years ⁽⁴⁾	10 ⁽³⁾ / 20 years ⁽⁴⁾	10 ⁽³⁾ / 20 years ⁽⁴⁾	10 ⁽³⁾ / 20 years ⁽⁴⁾	10 ⁽³⁾ / 20 years ⁽⁴⁾
Warranty	10 years ⁽⁵⁾	10 years ⁽⁵⁾	10 years ⁽⁵⁾	10 years ⁽⁵⁾	10 years ⁽⁵⁾	10 years ⁽⁵⁾

(1) Electrical values under standard test conditions (STC): irradiation of 1000 W/m², air mass AM 1.5 and cell temperature of 25 °C.

(2) Electrical values under normal operating cell temperature (NOCT): irradiation of 800 W/m², air mass AM 1.5, wind speed of 1 m/s and ambient temperature of 20 °C.

(3) 10 years on 90% of the minimally specified power P under standard test conditions (STC).

(4) 20 years on 80% of the minimally specified power P under standard test conditions (STC).

(5) In the case of Europe.

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