

We care! Since 1975.

Y-series

KD140GH-2YU · KD190GH-2YU · KD220GH-4YU
 KD240GH-4YB2 · KD245GH-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

- 36-/48-cell modules: pre-configured with connection wires and original multi-contact plug connectors
- 54-/60-/80-cell modules: pre-configured with connection wires and SMK plug connectors (MC4 compatible)

Pairing:

- Sorting procedure: Nominal output is achieved by two paired modules (e.g. ≥490 Wp for 2 × KD245GH-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



- Periodic inspection
- Qualified, IEC 61215
- Safety tested, IEC 61730
- Long-term sequential testing



IEC 61701
Salt Mist Corrosion Test



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

ELECTRICAL PERFORMANCE Y-SERIES

PV Module Type	KD140GH-2YU	KD190GH-2YU	KD220GH-4YU	KD240GH-4YB2	KD245GH-4YB2	KD320GH-4YB
At 1000 W/m² (STC)⁽¹⁾						
Maximum Power [W]	140	190	220	240	245	320
Maximum System Voltage [V]	1000	1000	1000	1000	1000	1000
Maximum Power Voltage [V]	17.7	23.6	26.6	29.8	29.8	40.1
Maximum Power Current [A]	7.91	8.06	8.28	8.06	8.23	7.99
Open Circuit Voltage (V _{oc}) [V]	22.1	29.5	33.2	36.9	36.9	49.5
Short Circuit Current (I _{sc}) [A]	8.68	8.82	8.98	8.59	8.91	8.60
Efficiency [%]	13.9	14.3	14.8	14.5	14.8	14.5
At 800 W/m² (NOCT)⁽²⁾						
Maximum Power [W]	101	137	158	172	176	230
Maximum Power Voltage [V]	16.0	21.3	24.0	26.7	26.8	36.1
Maximum Power Current [A]	6.33	6.45	6.63	6.45	6.58	6.40
Open Circuit Voltage (V _{oc}) [V]	20.2	27.0	30.4	33.7	33.7	45.3
Short Circuit Current (I _{sc}) [A]	7.03	7.14	7.27	6.95	7.21	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 1000W/m ² to 200W/m ²) [%]	5.3	5.3	6.0	7.3	6.6	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	MC PV-KBT3 / MC PV-KST3	MC PV-KBT3 / MC PV-KST3	PV-03 (SMK)	PV-03 (SMK)	PV-03 (SMK)	PV-03 (SMK)
Junction Box [mm]	113 × 82 × 15	113 × 82 × 15	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	IP65	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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