

Q.PEAK DUO BLK-G5 300-320

Q.ANTUM SOLAR MODULE

The new **Q.PEAK DUO BLK-G5** solar module from Q CELLS impresses with its outstanding visual appearance and particularly high performance on a small surface thanks to the innovative **Q.ANTUM DUO** Technology. Q.ANTUM's world-record-holding cell concept has now been combined with state-of-the-art circuitry half cells and a six-busbar design, thus achieving outstanding performance under real conditions — both with low-intensity solar radiation as well as on hot, clear summer days.



Q.ANTUM TECHNOLOGY: LOW LEVELISED COST OF ELECTRICITY

Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 19.3%.



INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behaviour.



ENDURING HIGH PERFORMANCE

Long-term yield security with Anti LID Technology, Anti PID Technology¹, Hot-Spot Protect and Traceable Quality Tra.Q™.



EXTREME WEATHER RATING

High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).



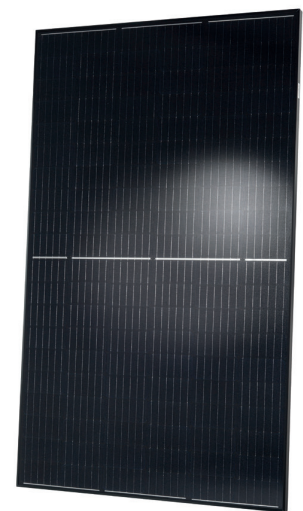
A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance warranty².



STATE OF THE ART MODULE TECHNOLOGY

Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.



www.VDEinfo.com
ID. 40032587



¹ APT test conditions according to IEC/TS 62804-1:2015, method B (-1500V, 168h)

² See data sheet on rear for further information.

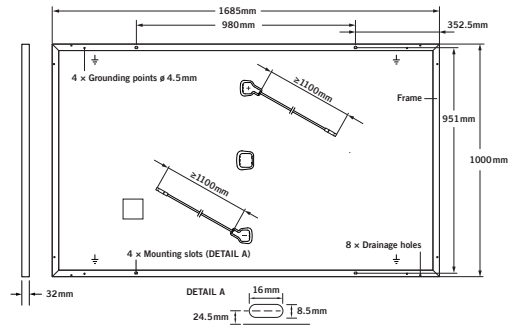
THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings

MECHANICAL SPECIFICATION

Format	1685 mm × 1000 mm × 32 mm (including frame)
Weight	18.7 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodised aluminium
Cell	6 × 20 monocrystalline Q.ANTUM solar half cells
Junction box	70-85 mm × 50-70 mm × 13-21 mm Protection class IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) 1100 mm, (-) 1100 mm
Connector	Multi-Contact MC4, IP65 and IP68



ELECTRICAL CHARACTERISTICS

POWER CLASS			300	305	310	315	320
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5W / -0W)							
Minimum	Power at MPP ²	P_{MPP} [W]	300	305	310	315	320
	Short Circuit Current*	I_{SC} [A]	9.72	9.78	9.83	9.89	9.94
	Open Circuit Voltage*	V_{OC} [V]	39.48	39.75	40.02	40.29	40.56
	Current at MPP*	I_{MPP} [A]	9.25	9.31	9.36	9.41	9.47
	Voltage at MPP*	V_{MPP} [V]	32.43	32.78	33.12	33.46	33.80
	Efficiency ²	η [%]	≥ 17.8	≥ 18.1	≥ 18.4	≥ 18.7	≥ 19.0
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC ³							
Minimum	Power at MPP ²	P_{MPP} [W]	222.3	226.0	229.7	233.5	237.2
	Short Circuit Current*	I_{SC} [A]	7.84	7.88	7.93	7.97	8.02
	Open Circuit Voltage*	V_{OC} [V]	36.93	37.18	37.43	37.69	37.94
	Current at MPP*	I_{MPP} [A]	7.28	7.32	7.36	7.41	7.45
	Voltage at MPP*	V_{MPP} [V]	30.55	30.88	31.20	31.52	31.84

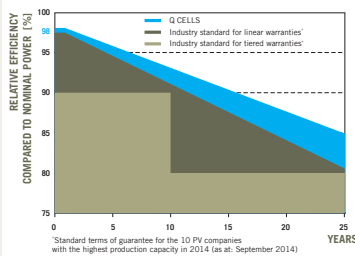
¹1000W/m², 25 °C, spectrum AM 1.5G

² Measurement tolerances STC ±3%; NOC ±5%

³800W/m², NOCT, spectrum AM 1.5G

* typical values, actual values may differ

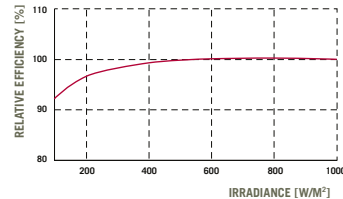
Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.54% degradation per year. At least 93.1% of nominal power up to 10 years. At least 85% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000W/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I_{SC}	α [%/K]	+0.04	Temperature Coefficient of V_{OC}	β [%/K]	-0.28
Temperature Coefficient of P_{MPP}	γ [%/K]	-0.37	Normal Operating Cell Temperature	NOCT [°C]	45

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	V_{SYS} [V]	1000	Safety Class	II
Maximum Reverse Current	I_r [A]	20	Fire Rating	C
Push/Pull Load (Test-load in accordance with IEC 61215)	[Pa]	5400/4000	Permitted Module Temperature On Continuous Duty	-40 °C up to +85 °C

QUALIFICATIONS AND CERTIFICATES

VDE Quality Tested, IEC 61215 (Ed. 2); IEC 61730 (Ed. 1), Application class A
This data sheet complies with DIN EN 50380.



PARTNER

NOTE: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

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Engineered in Germany

Q CELLS