Q.PEAK DUO BLK-G5 305-320

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 Technology[1], 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 warranty[2].

STATE OF THE ART MODULE TECHNOLOGY
Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.

EUPD RESEARCH TOP BRAND PV MODULES EUROPE 2017

Q CELLS TRIPLE SECURITY: ANTI PID TECHNOLOGY (APT) · HOT-SPOT PROTECT (HSP) · TRACEABLE QUALITY (TRA.Q™) · ANTI LID TECHNOLOGY (ALT)

VDE 11/2016 Quality Tested: high reliability · low degradation · confirmed durability · continuous line monitoring — www.VDEinfo.com ID: 40032587

pv magazine award 2017 Top Innovation

[1] APT test conditions according to IEC/TS 62804-1:2015, method B (–1500 V, 168 h)
[2] See data sheet on rear for further information.

THE IDEAL SOLUTION FOR:

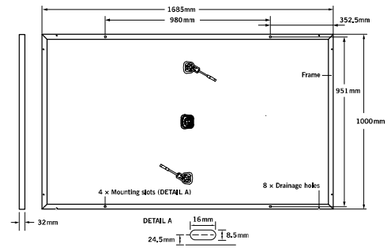
Rooftop arrays on residential buildings

Engineered in **Germany**

Q CELLS

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 mm² Solar cable; (+) 1100 mm, (–) 1100 mm
Connector	Multi-Contact MC4, IP65 and IP68

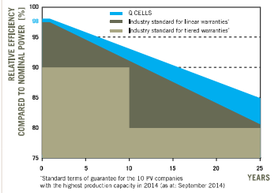


ELECTRICAL CHARACTERISTICS

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

[1] 1000 W/m², 25 °C, spectrum AM 1.5G [2] Measurement tolerances STC ±3%; NOC ±5% [3] 800 W/m², NOCT, spectrum AM 1.5G * typical values, actual values may differ

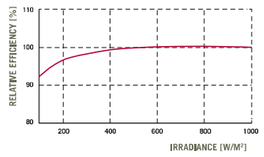
Q CELLS PERFORMANCE WARRANTY



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, 1000 W/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.

Hanwha Q CELLS GmbH
Sonnenallee 17-21, 06766 Bitterfeld-Wolfen, Germany I TEL +49 (0)3494 66 99-23444 I FAX +49 (0)3494 66 99-23000 I EMAIL sales@q-cells.com I WEB www.q-cells.com

Engineered in **Germany**

Q CELLS