

# 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 Technology<sup>1</sup>, 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<sup>2</sup>.



### STATE OF THE ART MODULE TECHNOLOGY

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



www.VDEinfo.com  
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### THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings

Engineered in **Germany**

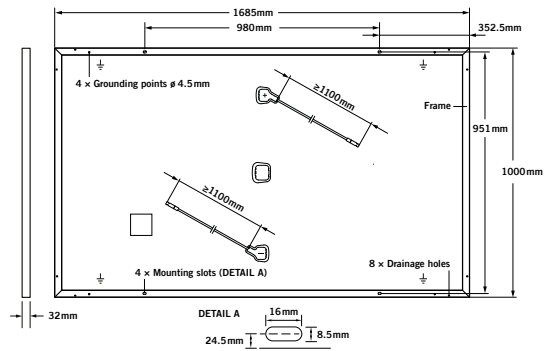
**Q CELLS**

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

<sup>2</sup> See data sheet on rear for further information.

## MECHANICAL SPECIFICATION

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

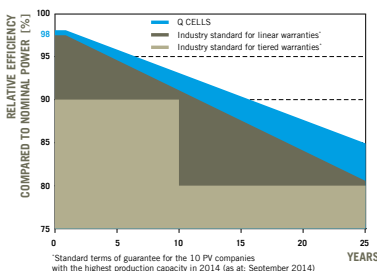


## ELECTRICAL CHARACTERISTICS

POWER CLASS			300	305	310	315	320
<b>MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC<sup>1</sup> (POWER TOLERANCE +5W / -0W)</b>							
Minimum	<b>Power at MPP<sup>1</sup></b>	<b>P<sub>MPP</sub></b> [W]	300	305	310	315	320
	<b>Short Circuit Current<sup>1</sup></b>	<b>I<sub>SC</sub></b> [A]	9.72	9.78	9.83	9.89	9.94
	<b>Open Circuit Voltage<sup>1</sup></b>	<b>V<sub>OC</sub></b> [V]	39.48	39.75	40.02	40.29	40.56
	<b>Current at MPP</b>	<b>I<sub>MPP</sub></b> [A]	9.25	9.31	9.36	9.41	9.47
	<b>Voltage at MPP</b>	<b>V<sub>MPP</sub></b> [V]	32.43	32.78	33.12	33.46	33.80
	<b>Efficiency<sup>1</sup></b>	<b>η</b> [%]	≥17.8	≥18.1	≥18.4	≥18.7	≥19.0
<b>MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT<sup>2</sup></b>							
Minimum	<b>Power at MPP</b>	<b>P<sub>MPP</sub></b> [W]	224.1	227.8	231.6	235.3	239.1
	<b>Short Circuit Current</b>	<b>I<sub>SC</sub></b> [A]	7.83	7.88	7.92	7.97	8.01
	<b>Open Circuit Voltage</b>	<b>V<sub>OC</sub></b> [V]	37.15	37.40	37.66	37.91	38.17
	<b>Current at MPP</b>	<b>I<sub>MPP</sub></b> [A]	7.28	7.32	7.37	7.41	7.45
	<b>Voltage at MPP</b>	<b>V<sub>MPP</sub></b> [V]	30.78	31.11	31.44	31.76	32.08

<sup>1</sup>Measurement tolerances P<sub>MPP</sub> ±3%; I<sub>SC</sub>, V<sub>OC</sub> ±5% at STC: 1000W/m<sup>2</sup>, 25±2°C, AM 1.5G according to IEC 60904-3 - <sup>2</sup>800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5G

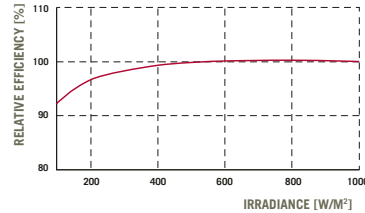
## Q CELLS PERFORMANCE WARRANTY



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/m<sup>2</sup>).

## TEMPERATURE COEFFICIENTS

<b>Temperature Coefficient of I<sub>SC</sub></b>	<b>α</b> [%/K]	+0.04	<b>Temperature Coefficient of V<sub>OC</sub></b>	<b>β</b> [%/K]	-0.28
<b>Temperature Coefficient of P<sub>MPP</sub></b>	<b>γ</b> [%/K]	-0.37	<b>Normal Module Operating Temperature</b>	<b>NMOT</b> [°C]	43±3

## PROPERTIES FOR SYSTEM DESIGN

<b>Maximum System Voltage**</b>	<b>V<sub>SYS</sub></b> [V]	1000	<b>Safety Class</b>	II
<b>Maximum Reverse Current</b>	<b>I<sub>R</sub></b> [A]	20	<b>Fire Rating</b>	C
<b>Max. Design Load, Push / Pull</b>	[Pa]	3600/2667	<b>Permitted Module Temperature on Continuous Duty</b>	-40°C up to +85°C
<b>Max. Test load, Push / Pull</b>	[Pa]	5400/4000		

## 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

