

# 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<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>.



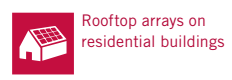
**STATE OF THE ART MODULE TECHNOLOGY**  
 Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.



www.VDEinfo.com  
 ID: 40032587

<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.

**THE IDEAL SOLUTION FOR:**

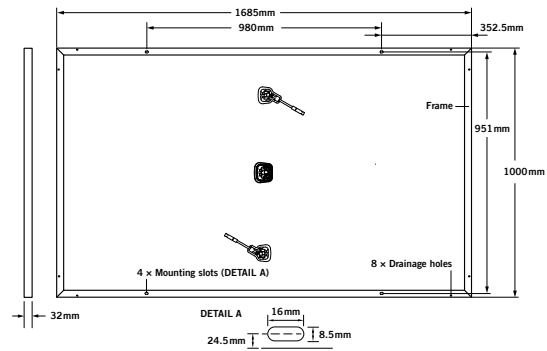


Engineered in **Germany**



## MECHANICAL SPECIFICATION

<b>Format</b>	1685mm × 1000mm × 32mm (including frame)
<b>Weight</b>	18.7 kg
<b>Front Cover</b>	3.2 mm 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, IP65 and IP68

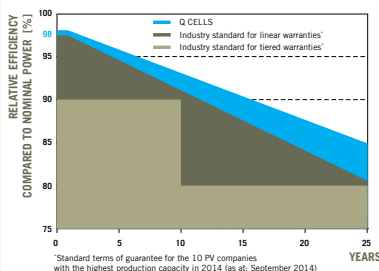


## ELECTRICAL CHARACTERISTICS

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

<sup>1</sup>1000W/m<sup>2</sup>, 25 °C, spectrum AM 1.5G    <sup>2</sup>Measurement tolerances STC ±3%; NOC ±5%    <sup>3</sup>800W/m<sup>2</sup>, NOCT, spectrum AM 1.5G    \* typical values, actual values may differ

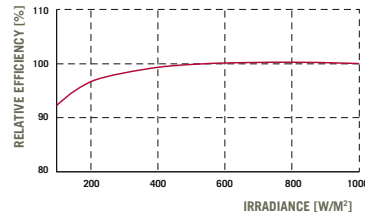
## Q CELLS PERFORMANCE WARRANTY



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/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 Operating Cell Temperature</b>	<b>NOCT</b> [°C]	45

## 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>Push/Pull Load (Test-load in accordance with IEC 61215)</b>	[Pa]	5400/4000	<b>Permitted Module Temperature On Continuous Duty</b>	-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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**Q CELLS**