

Q.PEAK DUO-G5 315-330

Q.ANTUM SOLAR MODULE

The new Q.PEAK DUO-G5 solar module from Q CELLS impresses thanks to innovative Q.ANTUM DUO Technology, which enables particularly high performance on a small surface. 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 19.9%.



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.



THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings



Rooftop arrays on commercial/industrial buildings

Engineered in **Germany**

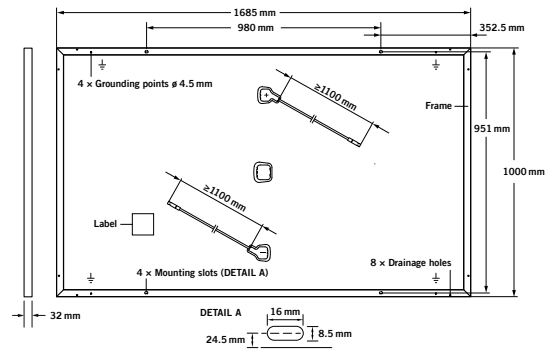
Q CELLS

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

² See data sheet on rear for further information.

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, IP68

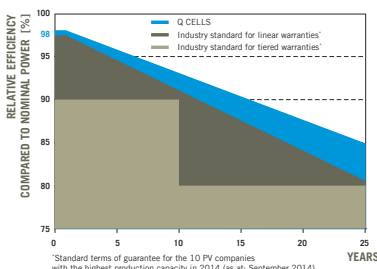


ELECTRICAL CHARACTERISTICS

POWER CLASS			315	320	325	330
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5W / -0W)						
Minimum	Power at MPP¹	P_{MPP} [W]	315	320	325	330
	Short Circuit Current¹	I_{SC} [A]	10.04	10.09	10.14	10.20
	Open Circuit Voltage¹	V_{OC} [V]	39.87	40.13	40.40	40.66
	Current at MPP	I_{MPP} [A]	9.55	9.60	9.66	9.71
	Voltage at MPP	V_{MPP} [V]	32.98	33.32	33.65	33.98
	Efficiency¹	η [%]	≥ 18.7	≥ 19.0	≥ 19.3	≥ 19.6
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²						
Minimum	Power at MPP	P_{MPP} [W]	235.3	239.0	242.8	246.5
	Short Circuit Current	I_{SC} [A]	8.09	8.13	8.17	8.22
	Open Circuit Voltage	V_{OC} [V]	37.52	37.77	38.02	38.27
	Current at MPP	I_{MPP} [A]	7.52	7.56	7.60	7.64
	Voltage at MPP	V_{MPP} [V]	31.30	31.62	31.94	32.25

¹Measurement tolerances P_{MPP} ±3%; I_{SC}, V_{OC} ±5% at STC: 1000W/m², 25±2°C, AM 1.5G according to IEC 60904-3 - ²800 W/m², NMOT, spectrum AM 1.5G

Q CELLS PERFORMANCE WARRANTY

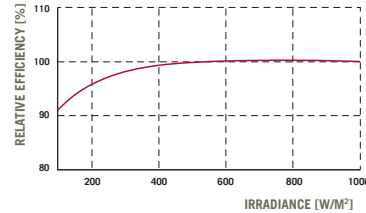


At least 98% of nominal power during first year. Thereafter max. 0.54% degradation per year. At least 93.1% of nominal power up to 10 years. At least 85% of nominal power up to 25 years.

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

¹Standard terms of guarantee for the 10 PV companies with the highest production capacity in 2014 (as at: September 2014)

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 Module Operating Temperature	NMOT [°C]	43±3

PROPERTIES FOR SYSTEM DESIGN

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

QUALIFICATIONS AND CERTIFICATES

VDE Quality Tested, IEC 61215:2016; IEC 61730:2016, Application class A
This data sheet complies with DIN EN 50380.



PACKAGING INFORMATION

Number of Modules per Pallet	32
Number of Pallets per 40' High Cube Container	26
Number of Modules per 40' High Cube Container	832

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.

Made in Korea

Hanwha Q CELLS Australia Pty Ltd

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Engineered in Germany

Q CELLS