

Q.PEAK-G5 295-310

Q.ANTUM SOLAR MODULE

The new high-performance module **Q.PEAK-G5** is the ideal solution for residential buildings thanks to its innovative cell technology **Q.ANTUM**. The world-record cell design was developed to achieve the best performance under real conditions – even with low radiation intensity and on clear, hot summer days.



Q.ANTUM TECHNOLOGY: LOW LEVELIZED COST OF ELECTRICITY

Higher yield per surface area and lower BOS costs and 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).



MAXIMUM COST REDUCTIONS

Up to 10% lower logistics costs due to higher module capacity per box.



A RELIABLE INVESTMENT

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



THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings

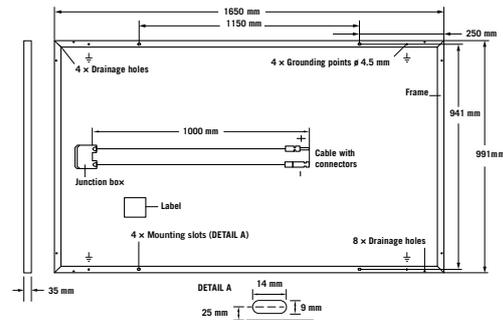
Engineered in **Germany**

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	1650 mm × 991 mm × 35 mm (including frame)
Weight	18 kg ± 5 %
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodised aluminium
Cell	6 × 10 monocrystalline Q.ANTUM solar cells
Junction box	66-77 mm × 90-115 mm × 15-20 mm Protection class ≥ IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥ 1000 mm, (-) ≥ 1000 mm
Connector	Intermateable connector with H4, MC4, IP67 or IP68

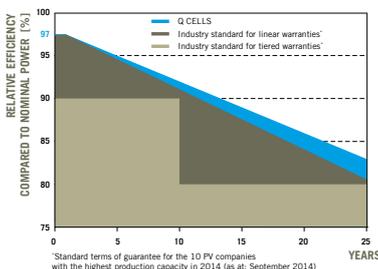


ELECTRICAL CHARACTERISTICS

POWER CLASS			295	300	305	310
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5W / -0W)						
Minimum	Power at MPP²	P_{MPP} [W]	295	300	305	310
	Short Circuit Current*	I_{SC} [A]	9.64	9.71	9.78	9.85
	Open Circuit Voltage*	V_{OC} [V]	39.58	39.87	40.15	40.44
	Current at MPP*	I_{MPP} [A]	9.12	9.21	9.30	9.40
	Voltage at MPP*	V_{MPP} [V]	32.35	32.57	32.78	32.99
	Efficiency²	η [%]	≥ 18.0	≥ 18.3	≥ 18.7	≥ 19.0
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC³						
Minimum	Power at MPP²	P_{MPP} [W]	218.2	221.9	225.6	229.3
	Short Circuit Current*	I_{SC} [A]	7.78	7.83	7.89	7.94
	Open Circuit Voltage*	V_{OC} [V]	37.02	37.29	37.56	37.83
	Current at MPP*	I_{MPP} [A]	7.16	7.24	7.32	7.40
	Voltage at MPP*	V_{MPP} [V]	30.47	30.65	30.83	31.01

¹1000 W/m², 25 °C, spectrum AM 1.5G ²Measurement tolerances STC ± 3%; NOC ± 5% ³800 W/m², NOCT, spectrum AM 1.5G * typical values, actual values may differ

Q CELLS PERFORMANCE WARRANTY

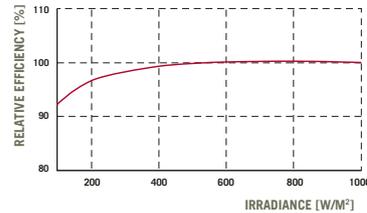


At least 97% of nominal power during first year. Thereafter max. 0.6% degradation per year.
At least 92% of nominal power up to 10 years.
At least 83% of nominal power up to 25 years.

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, 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]	-0.39	Normal Operating Cell Temperature	NOCT [°C]	45 ± 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
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

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