

powered by

Q.ANTUM

Q.PEAK-G5.1 305-315

ENDURING HIGH
PERFORMANCE



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 19.2%.



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, 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 warranty¹.

¹ See data sheet on rear for further information.

THE IDEAL SOLUTION FOR:



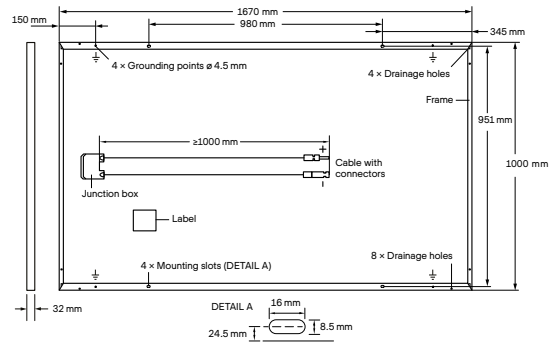
Rooftop arrays on residential buildings



Rooftop arrays on commercial / industrial buildings

MECHANICAL SPECIFICATION

Format	1670 mm × 1000 mm × 32 mm (including frame)
Weight	18.5 kg ± 5%
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black 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	Stäubli MC4, Hanwha Q CELLS HQC4, Tonglin TL-Cable01S, Amphenol UTX; IP68

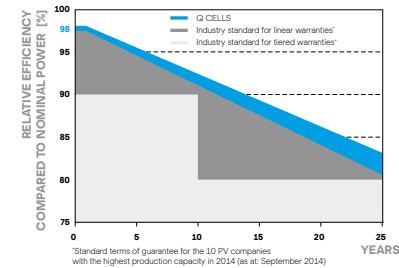


ELECTRICAL CHARACTERISTICS

POWER CLASS		305	310	315	
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5 W / -0 W)					
Minimum	Power at MPP ¹	P_{MPP} [W]	305	310	315
	Short Circuit Current ¹	I_{SC} [A]	9.82	9.89	9.96
	Open Circuit Voltage ¹	V_{OC} [V]	40.08	40.37	40.65
	Current at MPP	I_{MPP} [A]	9.33	9.42	9.52
	Voltage at MPP	V_{MPP} [V]	32.68	32.89	33.10
	Efficiency ¹	η [%]	≥ 18.3	≥ 18.6	≥ 18.9
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ²					
Minimum	Power at MPP	P_{MPP} [W]	227.6	231.3	235.0
	Short Circuit Current	I_{SC} [A]	7.91	7.97	8.02
	Open Circuit Voltage	V_{OC} [V]	37.72	37.99	38.26
	Current at MPP	I_{MPP} [A]	7.34	7.42	7.50
	Voltage at MPP	V_{MPP} [V]	30.99	31.17	31.34

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

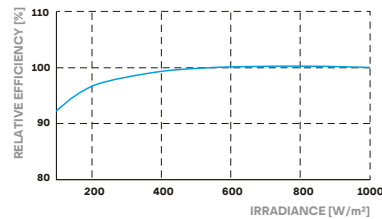
Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.6% degradation per year. At least 92.6% of nominal power up to 10 years. At least 83.6% 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]	-0.39	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 - +85°C
Max. Test Load, Push/Pull	[Pa]	5400/4000		

QUALIFICATIONS AND CERTIFICATES

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



PACKAGING INFORMATION

Number of Modules per Pallet	32
Number of Pallets per 40' HC-Container (26t)	26
Pallet Dimensions (L × W × H)	1725 × 1118 × 1170 mm
Pallet Weight	632 kg

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