



Q.MAXX-G5+ SERIES



405-415 Wp | 108 Cells
21.3% Maximum Module Efficiency

MODEL Q.MAXX-G5+



A reliable investment

Inclusive 25-year product warranty and 25-year linear performance warranty¹.



Enduring high performance

Long-term yield security with Anti LeTID Technology and Hot-Spot Protect.



The most thorough testing programme in the industry

Qcells is the first solar module manufacturer to pass the most comprehensive quality programme in the industry. The new "Quality Controlled PV" of the independent certification institute TÜV Rheinland.



More suitable size for residential installation

With its length less than 1722 mm, Q.MAXX-G5+ provides with easier system designs and installations.



Breaking the 21% efficiency barrier

Q.ANTUM DUO Technology with optimized module layout boosts module power.



Extreme weather rating

High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (3600 Pa).



Innovative all-weather technology

Optimal yields, whatever the weather with excellent low-light and temperature behaviour.

¹ See data sheet on rear for further information.

The ideal solution for:



Rooftop arrays on residential buildings

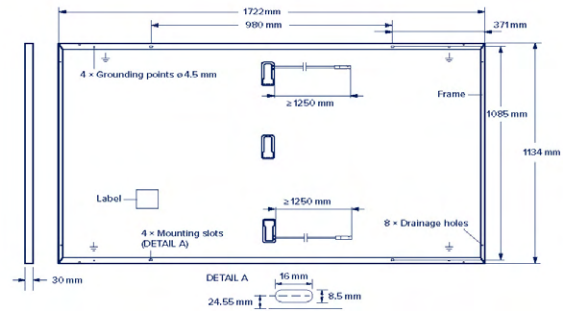




Q.MAXX-G5+ SERIES

Mechanical Specification

Format	1722 mm × 1134 mm × 30 mm (including frame)
Weight	21.1 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodised aluminium
Cell	6 × 18 monocrystalline Q.ANTUM solar half cells
Junction box	53-101 mm × 32-60 mm × 15-18 mm Protection class IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥ 1250 mm, (-) ≥ 1250 mm
Connector	Stäubli MC4, Hanwha Q CELLS HQC4; IP68

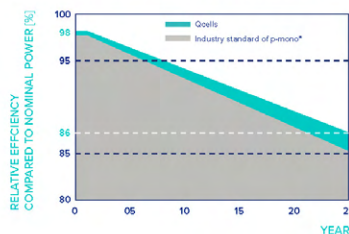


Electrical Characteristics

POWER CLASS			405	410	415
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5 W/-0 W)					
Minimum	Power at MPP ¹	P _{MPP} [W]	405	410	415
	Short Circuit Current ¹	I _{SC} [A]	13.91	13.95	13.99
	Open Circuit Voltage ¹	V _{OC} [V]	37.09	37.11	37.14
	Current at MPP	I _{MPP} [A]	13.23	13.30	13.37
	Voltage at MPP	V _{MPP} [V]	30.62	30.83	31.05
	Efficiency ¹	η [%]	≥ 20.7	≥ 21.0	≥ 21.3
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ²					
Minimum	Power at MPP	P _{MPP} [W]	303.8	307.6	311.3
	Short Circuit Current	I _{SC} [A]	11.21	11.24	11.27
	Open Circuit Voltage	V _{OC} [V]	34.97	35.00	35.03
	Current at MPP	I _{MPP} [A]	10.41	10.47	10.53
	Voltage at MPP	V _{MPP} [V]	29.20	29.38	29.56

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

Qcells PERFORMANCE WARRANTY

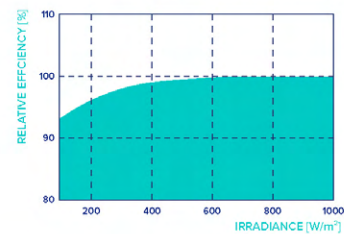


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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

^{*}Standard terms of guarantee for the 5 PV companies with the highest production capacity in 2021 (February 2021)

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]	-0.27
Temperature Coefficient of P _{MPP}	γ [%/K]	-0.34	Nominal Module Operating Temperature	NMOT [°C]	43 ± 3

Properties for System Design

Maximum System Voltage	V _{sys} [V]	1000	PV module classification	Class II
Maximum Reverse Current	I _r [A]	25	Fire Rating based on ANSI/UL 61730	C/TYPE 2
Max. Design Load, Push/Pull	[Pa]	3600/2400	Permitted Module Temperature on Continuous Duty	-40 °C - +85 °C
Max. Test Load, Push/Pull	[Pa]	5400/3600		

Qualifications and Certificates

Quality Controlled PV - TÜV Rheinland; IEC 61215:2016; IEC 61730:2016. This data sheet complies with DIN EN 50380.



Made in China

Packaging Information



Qcells pursues minimizing paper output in consideration of the global environment.

Note: Installation instructions must be followed. Contact our technical service for further information on approved installation of this product. Hanwha Q CELLS Australia Pty Ltd. Suite 1, Level 1, 15 Blue Street, North Sydney, NSW 2060, Australia | TEL +61 02 9016 3083 | EMAIL inquiry.aus@qcells.com | WEB www.qcells.com/au/



Specifications subject to technical changes © Qcells Q.MAXX_G5+_series_405-415_2022-1L_Rev01_AU