

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:



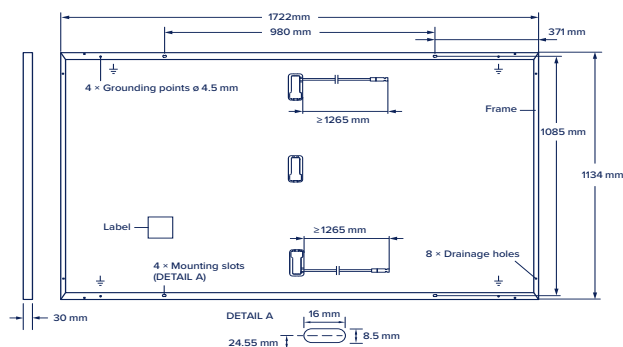
Rooftop arrays on residential buildings



Q.MAXX-G5+ SERIES

Mechanical Specification

| | |
|--------------|--|
| Format | 1722 mm × 1134 mm × 30 mm (including frame) |
| Weight | 21.1kg |
| 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; (+) ≥1265 mm, (-) ≥1265 mm |
| Connector | Stäubli MC4, Hanwha Q CELLS HQC4; IP68 |

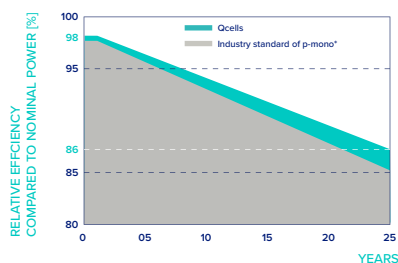


Electrical Characteristics

| POWER CLASS | | | 405 | 415 |
|---|------------------------------------|---------------|-------|-------|
| MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5W/-5W) | | | | |
| Minimum | Power at MPP ¹ | P_{MPP} [W] | 405 | 415 |
| | Short Circuit Current ¹ | I_{SC} [A] | 13.91 | 13.99 |
| | Open Circuit Voltage ¹ | V_{OC} [V] | 37.09 | 37.14 |
| | Current at MPP | I_{MPP} [A] | 13.23 | 13.37 |
| | Voltage at MPP | V_{MPP} [V] | 30.62 | 31.05 |
| | Efficiency ¹ | η [%] | ≥20.7 | ≥21.3 |
| MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ² | | | | |
| Minimum | Power at MPP | P_{MPP} [W] | 303.8 | 311.3 |
| | Short Circuit Current | I_{SC} [A] | 11.21 | 11.27 |
| | Open Circuit Voltage | V_{OC} [V] | 34.97 | 35.03 |
| | Current at MPP | I_{MPP} [A] | 10.41 | 10.53 |
| | Voltage at MPP | V_{MPP} [V] | 29.20 | 29.56 |

¹Measurement tolerances $P_{MPP} \pm 3\%$; I_{SC} ; $V_{OC} \pm 5\%$ 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

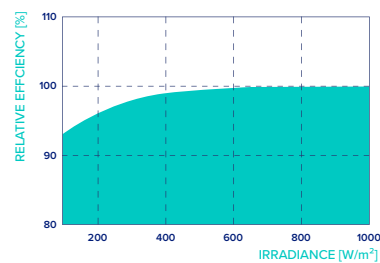


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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 | | |

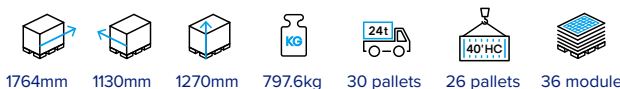
Qualifications and Certificates

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.

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