

Q.TRON M-G2+ SERIES



430 - 440 Wp | 108 Cells
22.5% Maximum Module Efficiency

MODEL Q.TRON M-G2.4+



High performance Qcells N-type solar cells

Q.ANTUM NEO solar cell technology with optimized module layout boosts module efficiency up to 22.5%.



A reliable investment

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



Enduring high performance

Long-term yield security with Hot-Spot Protect.



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:



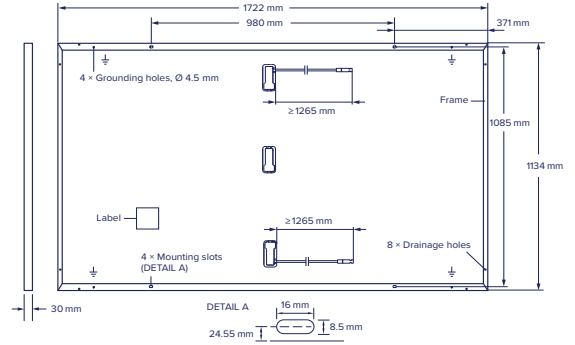
Rooftop arrays on
residential buildings



Q.TRON M-G2+ SERIES

Mechanical Specification

Format	1722 mm × 1134 mm × 30 mm (including frame)
Weight	21.2 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 NEO 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; (+) ≥1265mm, (-) ≥1265 mm
Connector	Stäubli MC4, Hanwha Q CELLS HQC4; IP68

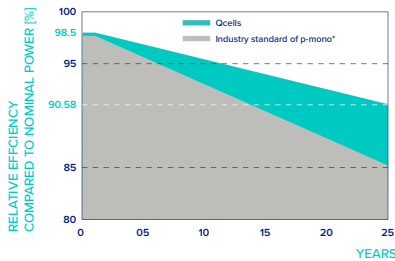


Electrical Characteristics

POWER CLASS			430	440
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5W/-5W)				
Minimum	Power at MPP ¹	P_{MPP} [W]	430	440
	Short Circuit Current ¹	I_{SC} [A]	13.89	14.06
	Open Circuit Voltage ¹	V_{OC} [V]	39.04	39.60
	Current at MPP	I_{MPP} [A]	13.18	13.33
	Voltage at MPP	V_{MPP} [V]	32.62	33.01
	Efficiency ¹	η [%]	≥22.0	≥22.5
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ²				
Minimum	Power at MPP	P_{MPP} [W]	325.0	332.6
	Short Circuit Current	I_{SC} [A]	11.19	11.33
	Open Circuit Voltage	V_{OC} [V]	37.04	37.58
	Current at MPP	I_{MPP} [A]	10.37	10.48
	Voltage at MPP	V_{MPP} [V]	31.35	31.73

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

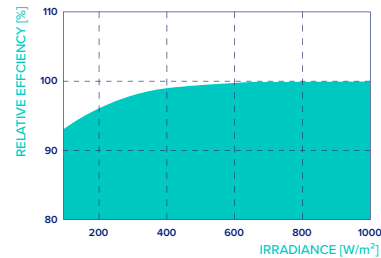


At least 98.5% of nominal power during first year. Thereafter max. 0.33% degradation per year. At least 95.53% of nominal power up to 10 years. At least 90.58% of nominal power up to 25 years.

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]	-0.24
Temperature Coefficient of P_{MPP}	γ [%/K]	-0.30	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/TYP2
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		

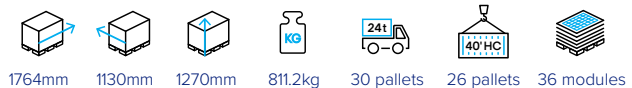
Qualifications and Certificates

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 3033 | EMAIL enquiry@qcells.com.au | WEB www.qcells.com.au
Hanwha Q CELLS GmbH Sonnenallee 17-21, 06766 Bitterfeld-Wolfen, Germany | TEL +49 (0)3494 66 99-23444 | EMAIL sales@q-cells.com | WEB www.qcells.com

qcells