

Q.TRON BLK M-G2+ SERIES



410-450 Wp | 108 Cells
22.5% Maximum Module Efficiency
Domestic Content Option Available



MODEL Q.TRON BLK M-G2+
Q.TRON BLK M-G2.C+,

Q.TRON BLK M-G2.F+,
Q.TRON BLK M-G2.H+



Includes Domestic Content

Q.TRON BLK M-G2.X+ solar modules ("X" can be "C, F, H") contain U.S. manufactured components which can contribute to qualifying for the 10% domestic content bonus to applicable tax credits under the Inflation Reduction Act of 2022.¹



High performance Qcells N-type solar cells

Q.ANTUM NEO 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 warranty.²



Enduring high performance

Long-term yield security with Anti LeTID Technology, Anti PID Technology³, Hot-Spot Protect.



Extreme weather rating

High-tech aluminum alloy frame, certified for high snow (8100 Pa) and wind loads (3600 Pa).



Innovative all-weather technology

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



Far beyond the standard

Qcells' comprehensive quality program ensures high long-term yields and the reliability of your solar system.

¹ This statement should not be relied on as tax advice and is subject to change based on changes made to the Inflation Reduction Act and its implementing rules and regulations. Please consult a qualified tax professional for specific guidance.

² See data sheet on rear for further information.

³ APT test conditions according to IEC/TS 62804-1:2015, method A (~1500V, 96h)

The ideal solution for:



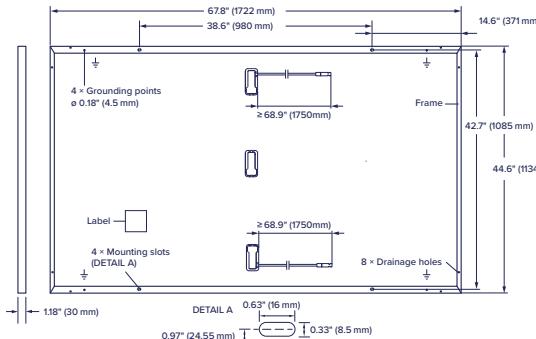
Rooftop arrays on residential buildings



Q.TRON BLK M-G2+ SERIES

■ Mechanical Specification

Format	67.8 in \times 44.6 in \times 1.18 in (including frame) (1722 mm \times 1134 mm \times 30 mm)
Weight	46.7 lbs (21.2 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodized aluminum
Cell	6 \times 18 monocrystalline Q.ANTUM NEO solar half cells
Junction box	2.09-3.98 in \times 1.26-2.36 in \times 0.59-0.71 in (53-101 mm \times 32-60 mm \times 15-18 mm), Protection class IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) \geq 68.9 in (1750 mm), (-) \geq 68.9 in (1750 mm)
Connector	Stäubli MC4; IP68



■ Electrical Characteristics

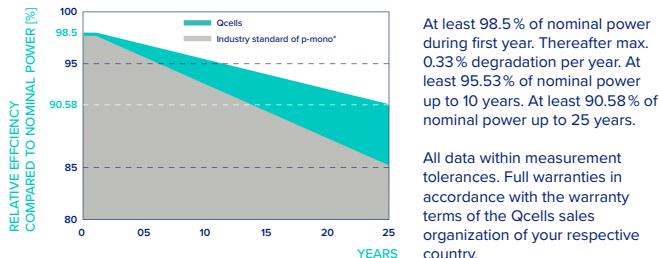
Power Class		410	415	420	425	430	435	440	445	450
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5W/-0W)										
Power at MPP ¹	P _{MPP} [W]	410	415	420	425	430	435	440	445	450
Short Circuit Current ¹	I _{SC} [A]	13.41	13.49	13.58	13.66	13.74	13.82	13.90	13.98	14.07
Open Circuit Voltage ¹	V _{OC} [V]	38.19	38.47	38.75	39.03	39.32	39.60	39.88	40.16	40.44
Current at MPP	I _{MPP} [A]	12.76	12.83	12.91	12.98	13.05	13.13	13.20	13.27	13.35
Voltage at MPP	V _{MPP} [V]	32.13	32.34	32.54	32.74	32.94	33.14	33.33	33.52	33.71
Efficiency ¹	η [%]	\geq 21.0	\geq 21.3	\geq 21.5	\geq 21.8	\geq 22.0	\geq 22.3	\geq 22.5	\geq 22.8	\geq 23.0

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

Power at MPP	P _{MPP} [W]	309.9	313.7	317.5	321.2	325.0	328.8	332.6	336.4	340.1
Short Circuit Current	I _{SC} [A]	10.81	10.87	10.94	11.00	11.07	11.14	11.20	11.27	11.33
Open Circuit Voltage	V _{OC} [V]	36.23	36.50	36.77	37.04	37.31	37.58	37.84	38.11	38.38
Current at MPP	I _{MPP} [A]	10.04	10.10	10.15	10.21	10.27	10.33	10.38	10.44	10.50
Voltage at MPP	V _{MPP} [V]	30.87	31.07	31.26	31.46	31.65	31.84	32.03	32.22	32.41

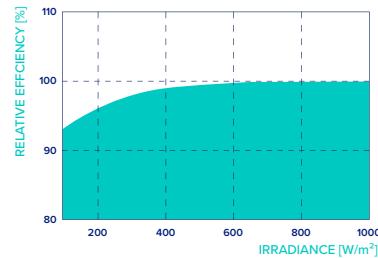
¹Measurement tolerances P_{MPP} \pm 3%; I_{SC}; V_{OC} \pm 5% at STC: 1000 W/m², 25 \pm 2°C, AM 1.5 according to IEC 60904-3 • ²800 W/m², NMOT, spectrum AM 1.5

Qcells Performance Warranty



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

Performance at low Irradiance



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	109 \pm 5.4 (43 \pm 3°C)

■ Properties for System Design

Maximum System Voltage	V _{SYS} [V]	1000 (IEC)/1000 (UL)
Maximum Series Fuse Rating	[A DC]	25
Max. Design Load, Push/Pull ³	[lbs./ft ²]	113 (5400 Pa)/50 (2400 Pa)
Max. Test Load, Push/Pull ³	[lbs./ft ²]	169 (8100 Pa)/75 (3600 Pa)

PV module classification

Class II

Fire Rating based on ANSI/UL 61730 C / TYPE 2

Permitted Module Temperature on Continuous Duty -40°F up to $+158^{\circ}\text{F}$ (-40°C up to $+70^{\circ}\text{C}$)

³ See Installation Manual

■ Qualifications and Certificates

UL61730-1 & UL61730-2, CE-compliant, IEC 61215:2021, IEC 61730:2023,



*Contact your Qcells Sales Representative for details regarding the module's eligibility to be Buy American Act (BAA) compliant.

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 America Inc. 300 Spectrum Center Drive, Suite 500, Irvine, CA 92618, USA | TEL +1 (949) 748-5996 | EMAIL na.support@qcells.com | WEB www.qcells.com/us



Find product recycling details at QR code above

qcells