

Q.TRON BLK M-G2+ SERIES



420 - 440 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.D+ Q.TRON BLK M-G2.H+
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Includes Domestic Content

Q.TRON BLK M-G2.Y+ solar modules ("Y" can be "C, D, H") contain U.S. manufactured components which can contribute to qualifying for the 10% domestic content bonus to applicable tax credits.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 applicable law and/or implementing rules, regulations or guidance. Please consult a qualified tax professional for specific advice.

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:



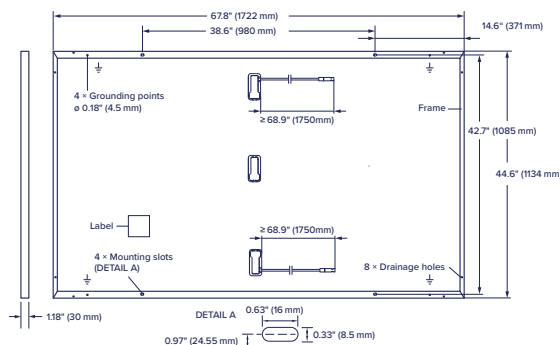
Rooftop arrays on residential buildings



Q.TRON BLK M-G2+ SERIES

Mechanical Specification

Format	67.8 in × 44.6 in × 1.18 in (including frame) (1722 mm × 1134 mm × 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 × 18 monocrystalline Q.ANTUM NEO solar half cells
Junction box	2.09-3.98 in × 1.26-2.36 in × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), Protection class IP68, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥ 68.9 in (1750 mm), (-) ≥ 68.9 in (1750 mm)
Connector	Stäubli MC4; IP68



Electrical Characteristics

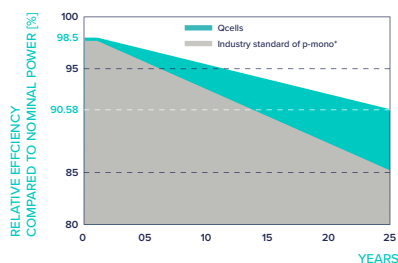
Power Class		420	425	430	435	440	
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5 W/-0 W)							
Minimum	Power at MPP ¹	P_{MPP} [W]	420	425	430	435	440
	Short Circuit Current ¹	I_{SC} [A]	13.58	13.66	13.74	13.82	13.90
	Open Circuit Voltage ¹	V_{OC} [V]	38.75	39.03	39.32	39.60	39.88
	Current at MPP	I_{MPP} [A]	12.91	12.98	13.05	13.13	13.20
	Voltage at MPP	V_{MPP} [V]	32.54	32.74	32.94	33.14	33.33
	Efficiency ¹	η [%]	≥ 21.5	≥ 21.8	≥ 22.0	≥ 22.3	≥ 22.5

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

Minimum	Power at MPP	P_{MPP} [W]	318.2	322.0	325.8	329.5	333.3
	Short Circuit Current	I_{SC} [A]	10.94	11.00	11.07	11.14	11.20
	Open Circuit Voltage	V_{OC} [V]	36.77	37.04	37.31	37.58	37.84
	Current at MPP	I_{MPP} [A]	10.15	10.21	10.27	10.33	10.38
	Voltage at MPP	V_{MPP} [V]	31.33	31.53	31.72	31.92	32.11

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

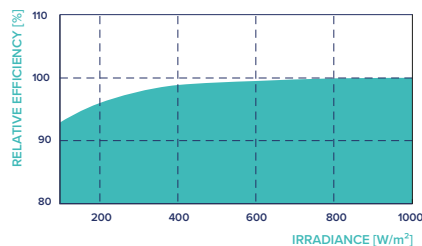


At least 98.5% of nominal power during first year. Thereafter max. 0.33% degradation per year. At least 95.53% of nominal power up to 10 years. At least 90.58% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Qcells sales organization 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]	-0.29	Nominal Module Operating Temperature	NMOT [°F]	109 ± 5.4 (43 ± 3°C)

Properties for System Design

Maximum System Voltage	V_{SYS} [V]	1000 (IEC)/1000 (UL)	PV module classification	Class II
Maximum Series Fuse Rating	[A DC]	25	Fire Rating based on ANSI/UL 61730	C / TYPE 2
Max. Design Load, Push/Pull ³	[lbs/ft ²]	113 (5400 Pa)/50 (2400 Pa)	Permitted Module Temperature on Continuous Duty, ($T_{98\ max}$)	-40°F up to +158°F (-40°C up to +70°C)
Max. Test Load, Push/Pull ³	[lbs/ft ²]	169 (8100 Pa)/75 (3600 Pa)		

³ See Installation Manual

Qualifications and Certificates

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



Find product recycling details at QR code above

^{*}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.

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