

Q.PEAK DUO BLK ML-G10+ SERIES



qcells

395-420 Wp | 132 Cells
21.4 % Maximum Module Efficiency
Domestic Content Option Available



MODEL Q.PEAK DUO BLK ML-G10+
Q.PEAK DUO BLK ML-G10.C+

Q.PEAK DUO BLK ML-G10.D+



Includes Domestic Content

Q.PEAK DUO BLK ML-G10.Y+ solar modules ("Y" can be "C, D") and Q.PEAK DUO BLK ML-G10+ DCA 17 solar module (has material code "MD06G100A-017" printed on the module power label) contain U.S. manufactured components which can contribute to qualifying for the 10% domestic content bonus to applicable tax credits.¹



Breaking the 21% efficiency barrier

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 21.4%.



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 and Hot-Spot Protect.



Extreme weather rating

High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).



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 61215-2:2021 (MGT 21) with extended test duration (192 hours)

The ideal solution for:



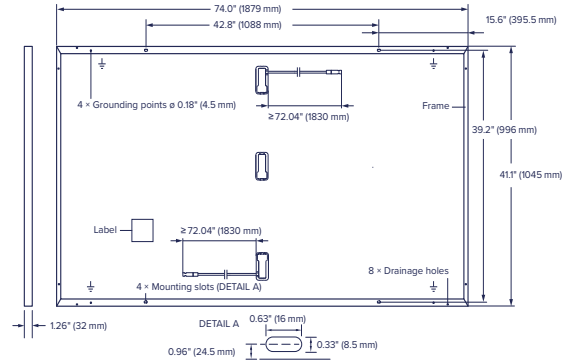
Rooftop arrays on residential buildings



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Mechanical Specification

Format	74.0 in × 41.1 in × 1.26 in (including frame) (1879 mm × 1045 mm × 32 mm)
Weight	48.5 lbs (22.0 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 × 22 monocrystalline Q.ANTUM 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), IP68, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥ 72.04 in (1830 mm), (-) ≥ 72.04 in (1830 mm)
Connector	Stäubli MC4; IP68



Electrical Characteristics

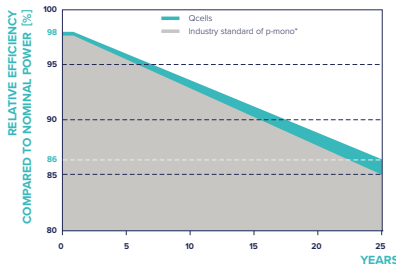
Power Class		395	400	405	410	415	420		
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5 W/-0 W)									
Minimum	Power at MPP ¹	P_{MPP}	[W]	395	400	405	410	415	420
	Short Circuit Current ¹	I_{SC}	[A]	11.10	11.14	11.17	11.20	11.23	11.27
	Open Circuit Voltage ¹	V_{OC}	[V]	45.27	45.30	45.34	45.37	45.41	45.45
	Current at MPP	I_{MPP}	[A]	10.71	10.77	10.83	10.89	10.95	11.01
	Voltage at MPP	V_{MPP}	[V]	36.88	37.13	37.39	37.64	37.89	38.13
	Efficiency ¹	η	[%]	≥ 20.1	≥ 20.4	≥ 20.6	≥ 20.9	≥ 21.1	≥ 21.4

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

Minimum	Power at MPP	P_{MPP}	[W]	296.3	300.1	303.8	307.6	311.3	315.1
	Short Circuit Current	I_{SC}	[A]	8.95	8.97	9.00	9.03	9.05	9.08
	Open Circuit Voltage	V_{OC}	[V]	42.69	42.72	42.76	42.79	42.83	42.86
	Current at MPP	I_{MPP}	[A]	8.46	8.51	8.57	8.62	8.68	8.73
	Voltage at MPP	V_{MPP}	[V]	35.03	35.25	35.46	35.68	35.89	36.09

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

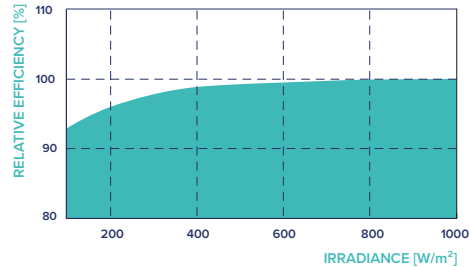


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Qcells sales 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]	-0.27
Temperature Coefficient of P_{MPP}	γ	[%/K]	-0.34	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]	20	Fire Rating based on ANSI/UL 61730	C/TYP E 2
Max. Design Load, Push/Pull ³		[lbs/ft ²]	75 (3600 Pa)/55 (2660 Pa)	Permitted Module Temperature on Continuous Duty, ($T_{98 \text{ max}}$)	-40 °F up to +158 °F (-40 °C up to +70 °C)
Max. Test Load, Push/Pull ³		[lbs/ft ²]	113 (5400 Pa)/84 (4000 Pa)		

³ See Installation Manual

Qualifications and Certificates

UL61730-1 & UL61730-2,
IEC 61215:2021, IEC 61730:2023,
CE-compliant,
U.S. Patent No. 9,893,215
(solar cells),



^{*}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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