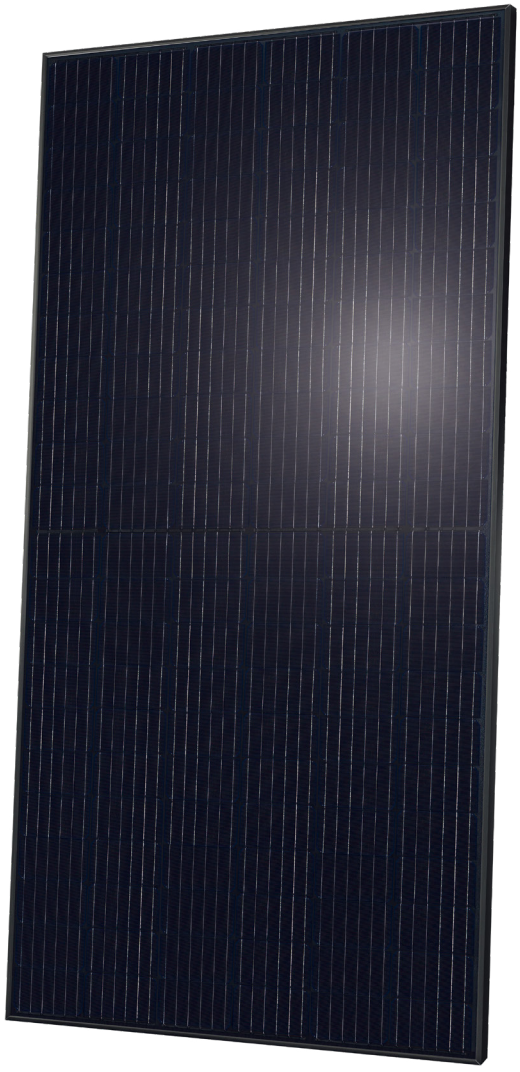
Q.PEAK DUO BLK ML-G10+ SERIES

395 - 415 Wp | 132 Cells
21.1 % Maximum Module Efficiency
Domestic Content Option Available

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



Includes Domestic Content

This product contains 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]

Breaking the 21% efficiency barrier

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 21.1%.

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 Technology[3] and Hot-Spot Protect.

Extreme weather rating

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

The most thorough testing program in the industry

Qcells is the first solar module manufacturer to pass the most comprehensive quality programme in the industry: “Quality Controlled PV” of the independent certification institute TÜV Rheinland.

[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 (−1500 V, 96 h)

The ideal solution for:

Rooftop arrays on residential buildings

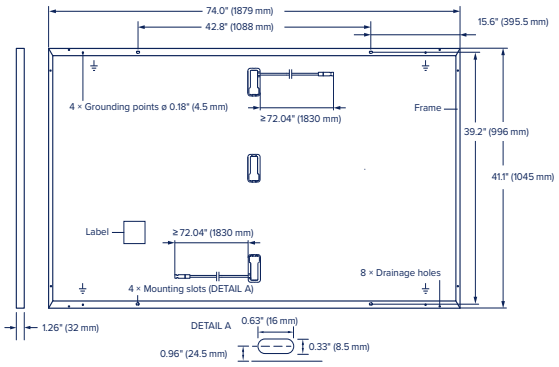
DCA Module Option:

DCA 17 module has material code 'MD06G100A-017' printed on the module power label.

Q.PEAK DUO BLK ML-G10+ SERIES

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 anodised aluminium
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), IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥72.04 in (1830 mm), (−) ≥72.04 in (1830 mm)
Connector	Stäubli MC4; IP68

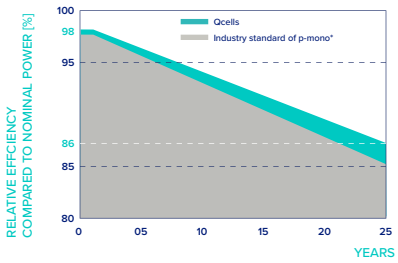


Electrical Characteristics

POWER CLASS				395	400	405	410	415
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
	Short Circuit Current[1]	I_{SC}	[A]	11.10	11.14	11.17	11.20	11.23
	Open Circuit Voltage[1]	V_{OC}	[V]	45.27	45.30	45.34	45.37	45.41
	Current at MPP	I_{MPP}	[A]	10.71	10.77	10.83	10.89	10.95
	Voltage at MPP	V_{MPP}	[V]	36.88	37.13	37.39	37.64	37.89
	Efficiency[1]	η	[%]	≥20.1	≥20.4	≥20.6	≥20.9	≥21.1
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT[2]								
Minimum	Power at MPP	P_{MPP}	[W]	296.3	300.1	303.8	307.6	311.3
	Short Circuit Current	I_{SC}	[A]	8.95	8.97	9.00	9.03	9.05
	Open Circuit Voltage	V_{OC}	[V]	42.69	42.72	42.76	42.79	42.83
	Current at MPP	I_{MPP}	[A]	8.46	8.51	8.57	8.62	8.68
	Voltage at MPP	V_{MPP}	[V]	35.03	35.25	35.46	35.68	35.89

[1]Measurement tolerances P_{MPP} ±3%; I_{SC}; V_{OC} ±5% at STC: 1000 W/m², 25±2 °C, AM 1.5 according to IEC 60904-3 • [2]800 W/m², NMOT, spectrum AM 1.5

Qcells PERFORMANCE WARRANTY

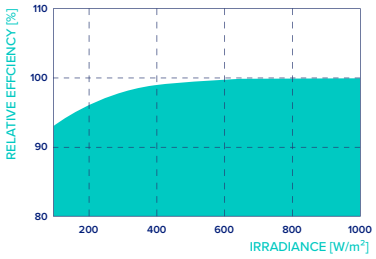


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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	[°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	TYPE 2
Max. Design Load, Push / Pull[3]		[lbs / ft²]	75 (3600 Pa) / 55 (2660 Pa)	Permitted Module Temperature on Continuous Duty	−40 °F up to +185 °F (−40 °C up to +85 °C)
Max. Test Load, Push / Pull[3]		[lbs / ft²]	113 (5400 Pa) / 84 (4000 Pa)		

[3] See Installation Manual

Qualifications and Certificates

UL61730-1 & UL61730-2, CE-compliant,
Quality Controlled PV - TÜV Rheinland,
IEC 61215:2016, IEC 61730:2016,
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.

Hanwha Q CELLS America Inc. 300 Spectrum Center Drive, Suite 500, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL hqc-inquiry@qcells.com | WEB www.qcells.com

Specifications subject to technical changes © Qcells Q.PEAK_DUO_BLK_ML-G10+_series_DCA_395-415_DA_202502_Rev06_NA