Q.PEAK DUO BLK ML-G10+ SERIES



385-410 Wp | 132 Cells 20.9 % Maximum Module Efficiency

MODEL Q.PEAK DUO BLK ML-G10+







12 busbar cell technology



Breaking the 20% efficiency barrier

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to $20.9\,\%$.



A reliable investment

Inclusive 25-year product warranty and 25-year linear performance warranty $^{\mbox{\scriptsize 1}}$.



Enduring high performance

Long-term yield security with Anti LeTID Technology, Anti PID Technology² and Hot-Spot Protect.



Extreme weather rating

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



Innovative all-weather technology

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



The most thorough testing programme in the industry

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











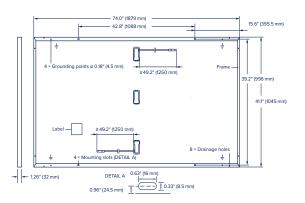
¹ See data sheet on rear for further information.

² APT test conditions according to IEC/TS 62804-1:2015, method A (–1500 V, 96 h)

Q.PEAK DUO BLK ML-G10+ SERIES

■ Mechanical Specification

Format	74.0 in \times 41.1 in \times 1.26 in (including frame) (1879 mm \times 1045 mm \times 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	4mm^2 Solar cable; (+) $\geq 49.2 \text{in}$ (1250 mm), (-) $\geq 49.2 \text{in}$ (1250 mm)
Connector	Stäubli MC4; IP68



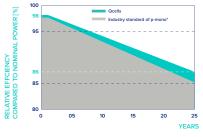
■ Electrical Characteristics

	Power at MPP ¹	P _{MPP}	[W]	385	390	395	400	405	410
	Short Circuit Current ¹	I _{sc}	[A]	11.04	11.07	11.10	11.14	11.17	11.20
	Open Circuit Voltage ¹	V _{oc}	[V]	45.19	45.23	45.27	45.30	45.34	45.37
	Current at MPP	I _{MPP}	[A]	10.59	10.65	10.71	10.77	10.83	10.89
Ξ.	Voltage at MPP	V_{MPP}	[V]	36.36	36.62	36.88	37.13	37.39	37.64
	Efficiency ¹	η	[%]	≥19.6	≥19.9	≥20.1	≥20.4	≥20.6	≥20.9

Short Circuit Current [A] 8.90 8.92 8.95 8.97 9.00 9.03 **Open Circuit Voltage** V_{oc} [V] 42.62 42.65 42.69 42.72 42.76 42.79 **Current at MPP** [A] 8.35 8.41 8.46 8.51 8.57 8.62 I_{MPP} Voltage at MPP V_{MPP} [V] 34.59 34.81 35.03 35.25 35.46 35.68

¹Measurement 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 • ²800 W/m², NMOT, spectrum AM 1.5

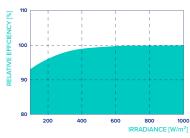
Qcells PERFORMANCE WARRANTY



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 organisation of your respective country.

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions ($25\,^{\circ}\text{C}$, $1000\,\text{W/m}^2$).

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

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

TEMPERATURE COEFFICIENTS

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	-40°F up to +185°F
May Test Load Push / Pull3		[lbs/ft2]	113 (5400 Pa) / 84 (4000 Pa)	on Continuous Duty	(-40°C up to +85°C)

³ See Installation Manual

Qualifications and Certificates

UL 61730, CE-compliant, Quality Controlled PV - TÜV Rheinland, IEC 61215:2016, IEC 61730:2016, U.S. Patent No. 9,893,215 (solar cells),











