Q.PEAK DUO BLK ML-G10 SERIES



385-405 Wp | 132 Cells 20.6% Maximum Module Efficiency

MODEL Q.PEAK DUO BLK ML-G10





Breaking the 20% efficiency barrier

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 20.6%.



Enduring high performance

Long-term yield security with Anti LeTID Technology, Anti PID Technology¹, 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.



A reliable investment

Inclusive 12-year product warranty and 25-year linear performance warranty².



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.

 $^{\rm 1}$ APT test conditions according to IEC/TS 62804-1:2015, method A (–1500 V, 96 h)





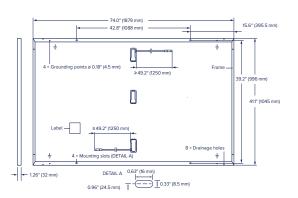


² See data sheet on rear for further information

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 \times 1.26-2.36 in \times 0.59-0.71 in (53-101 mm \times 32-60 mm \times 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

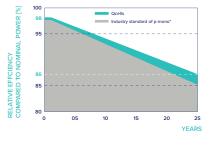
POWER CLASS		385	390	395	400	405
MINIMUM PERFORMANCE AT STANDARD T	EST CONDITIONS, STC1 (POWE	R TOLERANCE +5 W/-0) W)			
Power at MPP ¹	P _{MPP}	385	390	395	400	405
Short Circuit Current ¹	I _{sc}	11.04	11.07	11.10	11.14	11.17
Open Circuit Voltage ¹	V _{oc}	45.19	45.23	45.27	45.30	45.34
Current at MPP	I _{MPP}	10.59	10.65	10.71	10.77	10.83
Voltage at MPP	V_{MPP}	36.36	36.62	36.88	37.13	37.39
Efficiency ¹	η	≥19.6	≥19.9	≥20.1	≥20.4	≥20.6
MINIMUM PERFORMANCE AT NORMAL OPE	RATING CONDITIONS, NMOT ²					
Power at MPP	P _{MPP}	288.8	292.6	296.3	300.1	303.8
Short Circuit Current	I _{sc}	8.90	8.92	8.95	8.97	9.00
Open Circuit Voltage	V _{oc}	42.62	42.65	42.69	42.72	42.76
Current at MPP	I _{MPP}	8.35	8.41	8.46	8.51	8.57

34.59

 $\label{eq:local_equation} $$ \mbox{Measurement tolerances P}_{\mbox{MPP}} \pm 3\%; \mbox{I}_{\mbox{Sc}}; \mbox{V}_{\mbox{OC}} \pm 5\% \mbox{ at STC: } 1000 \mbox{W/m}^2, 25 \pm 2\mbox{°C}, \mbox{AM 1.5 according to IEC } 60904-3 \cdot ^2800 \mbox{W/m}^2, \mbox{NMOT}, \mbox{spectrum AM 1.5 according to IEC } 60904-3 \cdot ^2800 \mbox{W/m}^2, \mbox{NMOT}, \mbox{spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{NM$

Qcells PERFORMANCE WARRANTY

Voltage at MPP



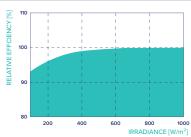
At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Ocells 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

34.81



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

■ Properties for System Design

Maximum System Voltage	V_{SYS}	[V]	1000 (IEC)/1000 (UL)	PV module classification
Maximum Series Fuse Rating		[A DC]	20	Fire Rating based on ANSI/UL 617
Max. Design Load, Push/Pull ³		[lbs/ft²]	75 (3600 Pa)/55 (2660 Pa)	Permitted Module Temperature
Max. Test Load. Push/Pull ³		[lbs/ft ²]	113 (5400 Pa)/84 (4000 Pa)	on Continuous Duty

³ See Installation Manual

PV module classification	Class II
Fire Rating based on ANSI/UL 61730	TYPE 2
Permitted Module Temperature on Continuous Duty	-40°F up to +185°F (-40°C up to +85°C)

35.03

35.25

35.46

■ Qualifications and Certificates

Quality Controlled PV -TÜV Rheinland; IEC 61215:2016; IEC 61730:2016 This data sheet complies with DIN EN 50380.











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