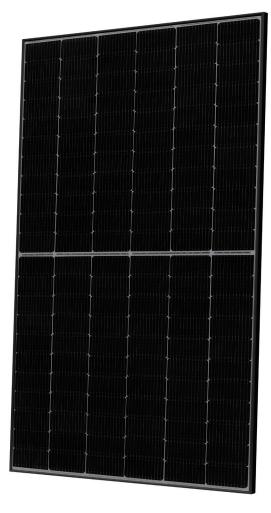
Q.PEAK DUO ML-G10 SERIES



395-415 Wp | 132 Cells 21.1% Maximum Module Efficiency

MODEL Q.PEAK DUO ML-G10





Breaking the 21% efficiency barrier

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



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 warranty 2 .



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) $^{\rm 2}$ See data sheet on rear for further information.

The ideal solution for:



Rooftop arrays on residential buildings

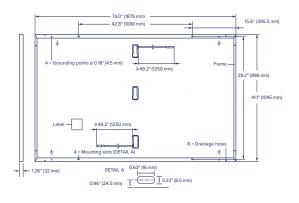




Q.PEAK DUO ML-G10 SERIES

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), Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥49.2 in (1250 mm), (−) ≥49.2 in (1250 mm)
Connector	Stäubli MC4, Hanwha Q CELLS HQC4; IP68



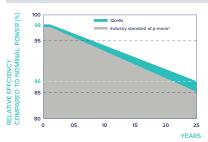
Electrical Characteristics

			395	400	405	410	415			
MIN	IINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5 W/-0 W)									
	Power at MPP ¹	P _{MPP}	395	400	405	410	415			
_ `	Short Circuit Current ¹	I _{sc}	11.13	11.16	11.19	11.22	11.26			
nur -	Open Circuit Voltage ¹	V _{oc}	45.03	45.06	45.09	45.13	45.16			
i ii	Current at MPP	I _{MPP}	10.58	10.64	10.70	10.76	10.82			
2 -	Voltage at MPP	V _{MPP}	37.32	37.59	37.85	38.11	38.37			
	Efficiency ¹	η	≥20.1	≥20.4	≥20.6	≥20.9	≥21.1			

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

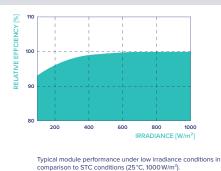
	Power at MPP	P _{MPP}	296.4	300.1	303.9	307.6	311.4
Ę	Short Circuit Current	I _{sc}	8.97	8.99	9.02	9.04	9.07
j <u>i</u>	Open Circuit Voltage	V _{oc}	42.46	42.49	42.52	42.56	42.59
ž	Current at MPP	I _{MPP}	8.33	8.38	8.43	8.48	8.53
	Voltage at MPP	V _{MPP}	35.59	35.82	36.04	36.27	36.49

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



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)

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I _{sc}	α	[%/K]	+0.04	Temperature Coefficient of V _{oc}	β	[%/K]	-0.27
Temperature Coefficient of P	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/ft ²]	75 (3600 Pa)/55 (2660 Pa)	Permitted Module Temperature	–40 °F up to +185 °F
Max. Test Load, Push/Pull ³		[lbs/ft ²]	113 (5400 Pa)/84 (4000 Pa)	on Continuous Duty	(-40°C up to +85°C)
³ See Installation Manual					

Qualifications and Certificates

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





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. Harwha Q CELLS America Inc. 400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA I TEL +1 949 748 59 96 I EMAIL hqc-inquiry@qcells.com I WEB www.qcells.com Conselfications at the set to show and showing and

ocells