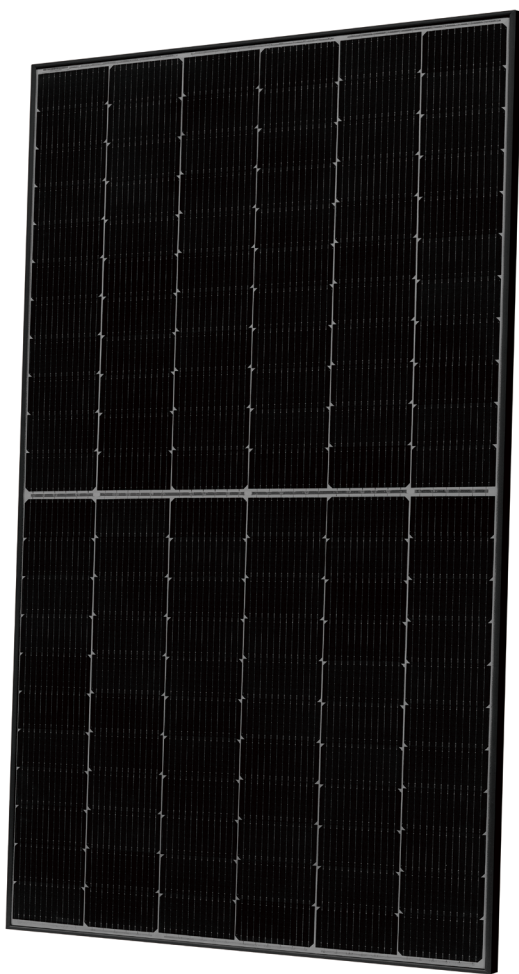


# Q.PEAK DUO ML-G10+ SERIES



405 - 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%.



## A reliable investment

Inclusive 25-year product warranty and 25-year linear performance warranty<sup>1</sup>.



## Enduring high performance

Long-term yield security with Anti LeTID Technology 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.

<sup>1</sup> See data sheet on rear for further information.

### The ideal solution for:



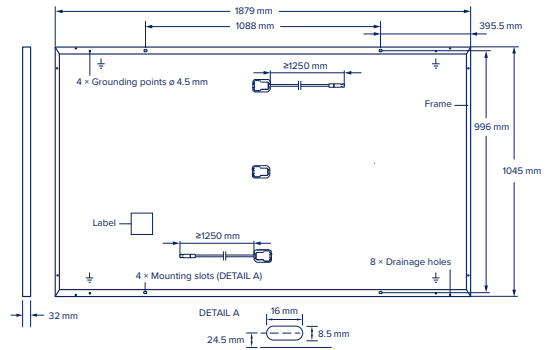
Rooftop arrays on residential buildings



# Q.PEAK DUO ML-G10+ SERIES

## Mechanical Specification

Format	1879 mm × 1045 mm × 32 mm (including frame)
Weight	22.0 kg
Front Cover	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	53-101 mm × 32-60 mm × 15-18 mm Protection class IP67, with bypass diodes
Cable	4 mm <sup>2</sup> Solar cable; (+) ≥1250 mm, (-) ≥1250 mm
Connector	Stäubli MC4; IP68

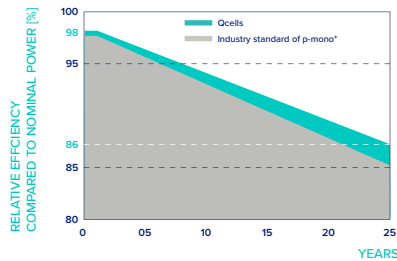


## Electrical Characteristics

POWER CLASS			405	415
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC <sup>1</sup> (POWER TOLERANCE +5 W/-0 W)				
Minimum	Power at MPP <sup>1</sup>	$P_{MPP}$ [W]	405	415
	Short Circuit Current <sup>1</sup>	$I_{SC}$ [A]	11.19	11.26
	Open Circuit Voltage <sup>1</sup>	$V_{OC}$ [V]	45.09	45.16
	Current at MPP	$I_{MPP}$ [A]	10.70	10.82
	Voltage at MPP	$V_{MPP}$ [V]	37.85	38.37
	Efficiency <sup>1</sup>	$\eta$ [%]	≥20.6	≥21.1
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT <sup>2</sup>				
Minimum	Power at MPP	$P_{MPP}$ [W]	303.9	311.4
	Short Circuit Current	$I_{SC}$ [A]	9.02	9.07
	Open Circuit Voltage	$V_{OC}$ [V]	42.52	42.59
	Current at MPP	$I_{MPP}$ [A]	8.43	8.53
	Voltage at MPP	$V_{MPP}$ [V]	36.04	36.49

<sup>1</sup>Measurement tolerances  $P_{MPP} \pm 3\%$ ;  $I_{SC}$ ;  $V_{OC} \pm 5\%$  at STC: 1000 W/m<sup>2</sup>, 25 ± 2 °C, AM 1.5 according to IEC 60904-3 • <sup>2</sup>800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5

## Qcells PERFORMANCE WARRANTY

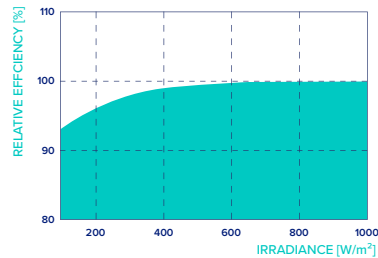


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86.00% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Qcells sales organisation of your respective country.

<sup>\*</sup>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/m<sup>2</sup>).

## TEMPERATURE COEFFICIENTS

Temperature Coefficient of $I_{SC}$	$\alpha$ [%/K]	+0.04	Temperature Coefficient of $V_{OC}$	$\beta$ [%/K]	-0.27
Temperature Coefficient of $P_{MPP}$	$\gamma$ [%/K]	-0.34	Nominal Module Operating Temperature	NMOT [°C]	43 ± 3

## Properties for System Design

Maximum System Voltage	$V_{SYS}$ [V]	1000	PV module classification	Class II
Maximum Reverse Current	$I_R$ [A]	20	Fire Rating based on ANSI/UL 61730	C/TYPE 2
Max. Design Load, Push/Pull	[Pa]	3600/2660	Permitted Module Temperature on Continuous Duty	-40 °C - +85 °C
Max. Test Load, Push/Pull	[Pa]	5400/4000		

## Qualifications and Certificates

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



## Packaging Information

1950mm	1130mm	1211mm	810kg	26 pallets	24 pallets	33 modules



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 Australia Pty Ltd. Suite 1, Level 1, 15 Blue Street, North Sydney, NSW 2060, Australia | TEL +61 02 9016 3033 | EMAIL inquiry.aus@qcells.com | WEB www.qcells.com/au/

qcells