# 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.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<sup>1</sup>



## **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>2</sup>



## **Enduring high performance**

Long-term yield security with Anti LeTID Technology, Anti PID Technology<sup>3</sup> and Hot-Spot Protect.



## **Extreme weather rating**

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



# Far beyond the standard

Qcells' comprehensive quality program ensures high long-term yields and the reliability of your solar system.

#### 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.







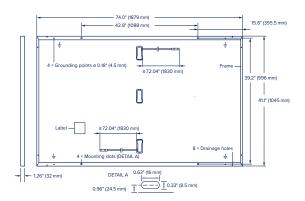
<sup>&</sup>lt;sup>1</sup> This statement should not be relied on as tax advice and is subject to change based on changes made to the Inflation Reduction Act and its implementing rules and regulations. Please consult a qualified tax professional for specific guidance.

See data sheet on rear for further information.

 $<sup>^{3}</sup>$  APT test conditions according to IEC/TS 62804-1:2015, method A (–1500 V, 96 h)

# ■ 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 anodized aluminum
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	$4 \text{ mm}^2 \text{ Solar cable; (+)} \ge 72.04 \text{ in (1830 mm), (-)} \ge 72.04 \text{ in (1830 mm)}$
Connector	Stäubli MC4; IP68

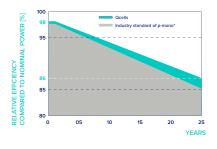


#### ■ Electrical Characteristics

PO	WER CLASS			395	400	405	410	415
MIN	MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC1 (POWER TOLERANCE +5 W/-0 W)							
	Power at MPP <sup>1</sup>	$P_{MPP}$	[W]	395	400	405	410	415
_	Short Circuit Current <sup>1</sup>	I <sub>SC</sub>	[A]	11.10	11.14	11.17	11.20	11.23
m _	Open Circuit Voltage <sup>1</sup>	V <sub>oc</sub>	[V]	45.27	45.30	45.34	45.37	45.41
Minimu -	Current at MPP	I <sub>MPP</sub>	[A]	10.71	10.77	10.83	10.89	10.95
2 -	Voltage at MPP	V <sub>MPP</sub>	[V]	36.88	37.13	37.39	37.64	37.89
	Efficiency <sup>1</sup>	η	[%]	≥20.1	≥20.4	≥20.6	≥20.9	≥ 21.1
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT <sup>2</sup>								
	Power at MPP	$P_{MPP}$	[W]	296.3	300.1	303.8	307.6	311.3
Ę _	Short Circuit Current	I <sub>sc</sub>	[A]	8.95	8.97	9.00	9.03	9.05
ij.	Open Circuit Voltage	V <sub>oc</sub>	[V]	42.69	42.72	42.76	42.79	42.83
Ē	Current at MPP	I <sub>MPP</sub>	[A]	8.46	8.51	8.57	8.62	8.68
	Voltage at MPP	V <sub>MPP</sub>	[V]	35.03	35.25	35.46	35.68	35.89

 $^{1}\text{Measurement tolerances P}_{\text{MPP}}\pm3\%; I_{\text{SC}}; V_{\text{OC}}\pm5\% \text{ at STC: } 1000\,\text{W/m}^{2}, 25\pm2\,^{\circ}\text{C}, \text{AM 1.5 according to IEC 60904-3} \bullet ^{2}\text{800 W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}\text{NMOT} = 1000\,\text{M/m}^{2}, 1000\,$ 

#### **Qcells PERFORMANCE WARRANTY**

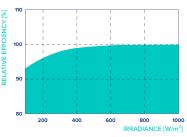


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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

 $^*\mbox{Standard terms}$  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  $^{\circ}$ C, 1000 W/m $^{2}$ ).

TEMPERATURE COEFFICIENTS								
	Temperature Coefficient of I <sub>sc</sub>	α	[%/K]	+0.04	Temperature Coefficient of V <sub>oc</sub>	β	[%/K]	-0.27
	Temperature Coefficient of P <sub>MPP</sub>	γ	[%/K]	-0.34	Nominal Module Operating Temperature	NMOT	[°F]	109±5.4 (43±3°C)

## ■ Properties for System Design

•		•			
Maximum System Voltage	$\mathbf{V}_{sys}$	[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 <sup>3</sup>		[lbs/ft²]	75 (3600 Pa)/55 (2660 Pa)	Permitted Module Temperature	-40°F up to +185°F
Max. Test Load, Push/Pull <sup>3</sup>		[lbs/ft²]	113 (5400 Pa)/84 (4000 Pa)	on Continuous Duty	(-40°C up to +85°C)

<sup>&</sup>lt;sup>3</sup> 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),





