

Q.PEAK DUO BLK ML-G10+ SERIES



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

MODEL Q.PEAK DUO BLK ML-G10+



6 busbar
cell technology



12 busbar
cell technology



Breaking the 20% efficiency barrier

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



Warranty
Product & Performance

A reliable investment

Inclusive 25-year product warranty and 25-year linear performance warranty¹.



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, 96h)

The ideal solution for:



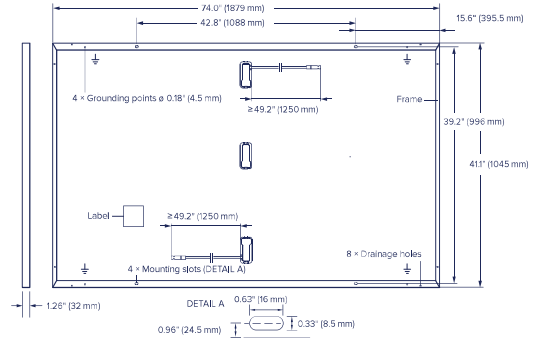
Rooftop arrays on
residential buildings



Q.PEAK DUO BLK 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), IP67, with bypass diodes |
| Cable | 4 mm ² Solar cable; (+) ≥ 49.2 in (1250 mm), (-) ≥ 49.2 in (1250 mm) |
| Connector | Stäubli MC4; IP68 |



Electrical Characteristics

| POWER CLASS | 385 | 390 | 395 | 400 | 405 |
|-------------|-----|-----|-----|-----|-----|
|-------------|-----|-----|-----|-----|-----|

MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W/-0 W)

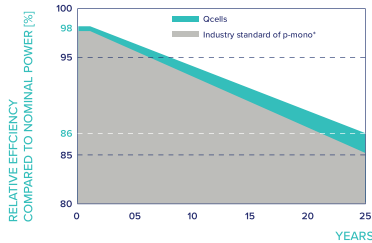
| Minimum | Power at MPP ¹ | P_{MPP} [W] | 385 | 390 | 395 | 400 | 405 |
|---------|------------------------------------|---------------|--------|--------|--------|--------|--------|
| | Short Circuit Current ¹ | I_{SC} [A] | 11.04 | 11.07 | 11.10 | 11.14 | 11.17 |
| | Open Circuit Voltage ¹ | V_{OC} [V] | 45.19 | 45.23 | 45.27 | 45.3 | 45.34 |
| | Current at MPP | I_{MPP} [A] | 10.59 | 10.65 | 10.71 | 10.77 | 10.83 |
| | Voltage at MPP | V_{MPP} [V] | 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 OPERATING CONDITIONS, NMOT²

| Minimum | Power at MPP | P_{MPP} [W] | 288.8 | 292.6 | 296.3 | 300.1 | 303.8 |
|---------|-----------------------|---------------|-------|-------|-------|-------|-------|
| | Short Circuit Current | I_{SC} [A] | 8.90 | 8.92 | 8.95 | 8.97 | 9.00 |
| | Open Circuit Voltage | V_{OC} [V] | 42.62 | 42.65 | 42.69 | 42.72 | 42.76 |
| | Current at MPP | I_{MPP} [A] | 8.35 | 8.41 | 8.46 | 8.51 | 8.57 |
| | Voltage at MPP | V_{MPP} [V] | 34.59 | 34.81 | 35.03 | 35.25 | 35.46 |

¹Measurement tolerances $P_{MPP} \pm 3\%$; I_{SC} ; $V_{OC} \pm 5\%$ 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

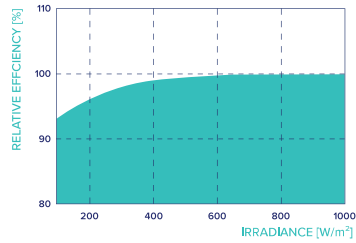


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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

^{*}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/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 (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 on Continuous Duty | -40 °F up to +185 °F (-40 °C up to +85 °C) |
| Max. Test Load, Push/Pull ³ | [lbs/ft ²] | 113 (5400 Pa)/84 (4000 Pa) | | |

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),



Specifications subject to technical changes © Qcells Q.PEAK DUO BLK ML-G10+ series_385-405_2022.07_Rev02_NA



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.
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