

Q.PEAK DUO BLK ML-G10+ SERIES



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

MODEL Q.PEAK DUO BLK ML-G10.a+
Q.PEAK DUO BLK 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 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 (~1500V, 96 h)

The ideal solution for:



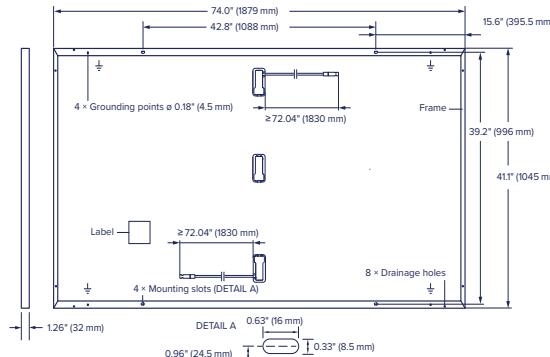
Rooftop arrays on residential buildings



Q.PEAK DUO BLK ML-G10+ SERIES

■ Mechanical Specification

| | |
|--------------|---|
| Format | 74.0 in x 41.1 in x 1.26 in (including frame) (1879 mm x 1045 mm x 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 x 22 monocrystalline Q.ANTUM solar half cells |
| Junction box | 2.09-3.98 in x 1.26-2.36 in x 0.59-0.71 in (53-101 mm x 32-60 mm x 15-18 mm), IP67, with bypass diodes |
| Cable | 4 mm ² Solar cable; (+) ≥ 72.04 in (1830 mm), (-) ≥ 72.04 in (1830 mm) |
| Connector | Stäubli MC4; IP68 |

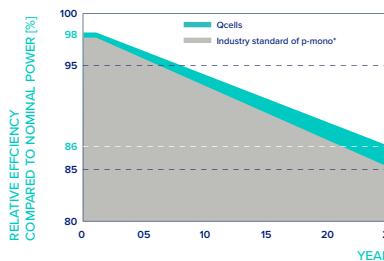


■ Electrical Characteristics

| POWER CLASS | | 395 | 400 | 405 | 410 | 415 |
|---|----------------------|-------|-------|-------|-------|-------|
| MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5W/-0W) | | | | | | |
| Power at MPP ¹ | P _{MPP} [W] | 395 | 400 | 405 | 410 | 415 |
| Short Circuit Current ¹ | I _{SC} [A] | 11.02 | 11.05 | 11.08 | 11.11 | 11.14 |
| Open Circuit Voltage ¹ | V _{OC} [V] | 45.20 | 45.24 | 45.27 | 45.31 | 45.34 |
| Current at MPP | I _{MPP} [A] | 10.48 | 10.54 | 10.60 | 10.65 | 10.71 |
| Voltage at MPP | V _{MPP} [V] | 37.68 | 37.95 | 38.22 | 38.48 | 38.74 |
| Efficiency ¹ | η [%] | ≥20.1 | ≥20.4 | ≥20.6 | ≥20.9 | ≥21.1 |
| MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ² | | | | | | |
| Power at MPP | P _{MPP} [W] | 296.4 | 300.1 | 303.9 | 307.6 | 311.4 |
| Short Circuit Current | I _{SC} [A] | 8.88 | 8.91 | 8.93 | 8.95 | 8.98 |
| Open Circuit Voltage | V _{OC} [V] | 42.63 | 42.66 | 42.69 | 42.73 | 42.76 |
| Current at MPP | I _{MPP} [A] | 8.25 | 8.30 | 8.35 | 8.40 | 8.45 |
| Voltage at MPP | V _{MPP} [V] | 35.93 | 36.16 | 36.39 | 36.61 | 36.84 |

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

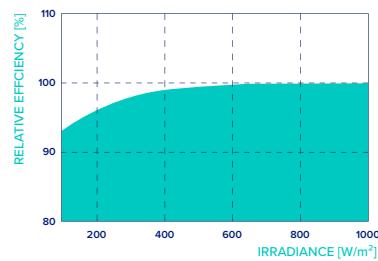
Qcells PERFORMANCE WARRANTY



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.

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} | a [%/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

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),



*Contact your Qcells Sales Representative for details regarding the module's eligibility to be Buy American Act (BAA) compliant.

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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