

Q.PEAK DUO BLK ML-G10+ 385-405

ENDURING HIGH
PERFORMANCE



BREAKING THE 20% EFFICIENCY BARRIER

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 20.9%.



THE MOST THOROUGH TESTING PROGRAMME IN THE INDUSTRY

Q CELLS 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.



INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behavior.



ENDURING HIGH PERFORMANCE

Long-term yield security with Anti LID Technology, Anti PID Technology¹, Hot-Spot Protect and Traceable Quality Tra.Q™.



EXTREME WEATHER RATING

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



A RELIABLE INVESTMENT

Inclusive 25-year product warranty and 25-year linear performance warranty².



6 BUSBAR
CELL TECHNOLOGY

12 BUSBAR
CELL TECHNOLOGY

¹ APT test conditions according to IEC / TS 62804-1:2015, method A (-1500V, 96h)
² See data sheet on rear for further information.

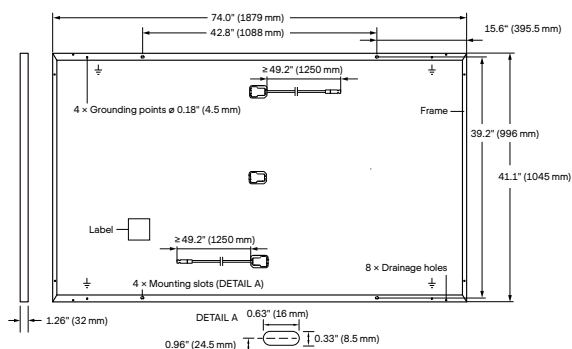
THE IDEAL SOLUTION FOR:



Rooftop arrays on
residential buildings

MECHANICAL SPECIFICATION

| | |
|--------------|---|
| Format | 74.0in × 41.1in × 1.26in (including frame) (1879mm × 1045mm × 32mm) |
| Weight | 48.5lbs (22.0kg) |
| Front Cover | 0.13in (3.2mm) 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 | 2.09-3.98in × 1.26-2.36in × 0.59-0.71in (53-101mm × 32-60mm × 15-18mm), IP67, with bypass diodes |
| Cable | 4mm ² Solar cable; (+) ≥49.2in (1250mm), (-) ≥49.2in (1250mm) |
| Connector | Stäubli MC4; IP68 |

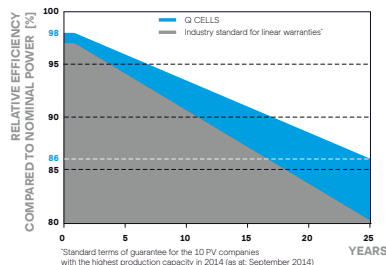


ELECTRICAL CHARACTERISTICS

| POWER CLASS | | | 385 | 390 | 395 | 400 | 405 |
|---|------------------------------------|----------------------|-------|-------|-------|-------|-------|
| MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5W / -0W) | | | | | | | |
| 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 | 45.30 | 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, NMOT ² | | | | | | | |
| 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} ±3%; I_{SC}; V_{OC} ±5% at STC: 1000 W/m², 25 ±2°C, AM 1.5 according to IEC 60904-3 • *800 W/m², NMOT, spectrum AM 1.5

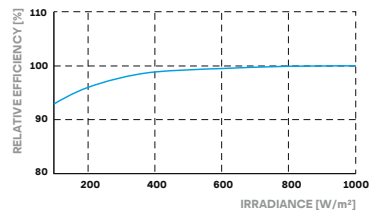
Q CELLS PERFORMANCE WARRANTY



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 Q CELLS 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} | 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),



PACKAGING INFORMATION

| | | | | | | | |
|----------------------|------------------|------------------|------------------|------------------|---------------|---------------|---------------|
| | | | | | | | |
| Horizontal packaging | 76.4in 1940mm | 43.3in 1100mm | 48.0in 1220mm | 1656lbs 751kg | 24 pallets | 24 pallets | 32 modules |

Note: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Hanwha Q CELLS America Inc.

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