

powered by

**Q.ANTUM DUO Z**

# Q.PEAK DUO BLK ML-G9+ 365-385

ENDURING HIGH  
PERFORMANCE



#### BREAKING THE 20% EFFICIENCY BARRIER

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



#### 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 Technology<sup>1</sup>, Hot-Spot Protect and Traceable Quality Tra.Q™.



#### EXTREME WEATHER RATING

High-tech aluminum alloy frame, certified for high snow (6000 Pa) and wind loads (4000 Pa).



#### A RELIABLE INVESTMENT

Inclusive 25-year product warranty and 25-year linear performance warranty<sup>2</sup>.



#### STATE OF THE ART MODULE TECHNOLOGY

Q.ANTUM DUO combines cutting edge cell separation and innovative 12-busbar design with Q.ANTUM Technology.

<sup>1</sup> APT test conditions according to IEC/TS 62804-1:2015, method B (-1500 V, 168h)

<sup>2</sup> See data sheet on rear for further information.



#### THE IDEAL SOLUTION FOR:



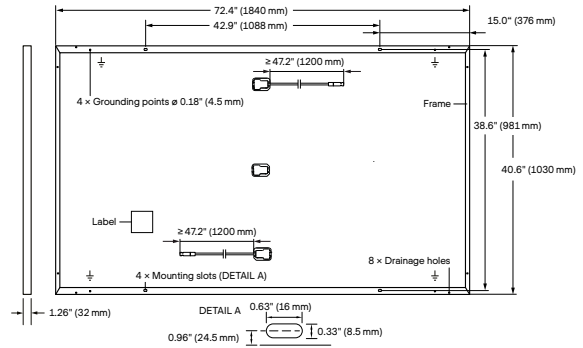
Rooftop arrays on  
residential buildings

Engineered in Germany

**Q CELLS**

## MECHANICAL SPECIFICATION

Format	72.4 in × 40.6 in × 1.26 in (including frame) (1840 mm × 1030 mm × 32 mm)
Weight	43.0 lbs (19.5 kg)
Front Cover	0.11 in (2.8 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 mm <sup>2</sup> Solar cable; (+) ≥ 47.2 in (1200 mm), (-) ≥ 47.2 in (1200 mm)
Connector	Stäubli MC4; IP68



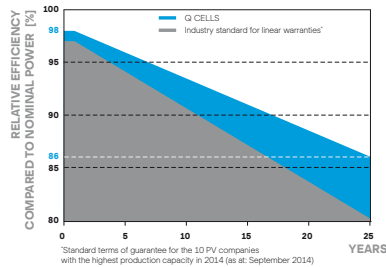
## ELECTRICAL CHARACTERISTICS

POWER CLASS			365	370	375	380	385
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC <sup>1</sup> (POWER TOLERANCE +5 W / -0 W)							
Minimum	Power at MPP <sup>1</sup>	P <sub>MPP</sub> [W]	365	370	375	380	385
	Short Circuit Current <sup>1</sup>	I <sub>SC</sub> [A]	10.40	10.44	10.47	10.50	10.53
	Open Circuit Voltage <sup>1</sup>	V <sub>OC</sub> [V]	44.93	44.97	45.01	45.04	45.08
	Current at MPP	I <sub>MPP</sub> [A]	9.87	9.92	9.98	10.04	10.10
	Voltage at MPP	V <sub>MPP</sub> [V]	36.99	37.28	37.57	37.85	38.13
	Efficiency <sup>1</sup>	η [%]	≥19.3	≥19.5	≥19.8	≥20.1	≥20.3
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT <sup>2</sup>							
Minimum	Power at MPP	P <sub>MPP</sub> [W]	273.3	277.1	280.8	284.6	288.3
	Short Circuit Current	I <sub>SC</sub> [A]	8.38	8.41	8.43	8.46	8.48
	Open Circuit Voltage	V <sub>OC</sub> [V]	42.37	42.41	42.44	42.48	42.51
	Current at MPP	I <sub>MPP</sub> [A]	7.76	7.81	7.86	7.91	7.96
	Voltage at MPP	V <sub>MPP</sub> [V]	35.23	35.48	35.72	35.96	36.20

<sup>1</sup>Measurement tolerances P<sub>MPP</sub> ± 3%; I<sub>SC</sub>; V<sub>OC</sub> ± 5% at STC: 1000 W/m<sup>2</sup>, 25 ± 2 °C, AM 1.5 according to IEC 60904-3 • 800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5

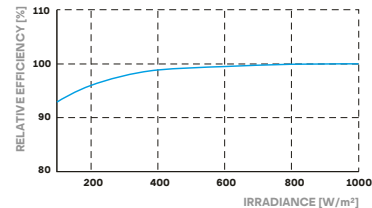
### Q CELLS PERFORMANCE WARRANTY

### PERFORMANCE AT LOW IRRADIANCE



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.



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 <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]	-0.35	Nominal Module Operating Temperature	NMOT [°F]	109 ± 5.4 (43 ± 3 °C)

## PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V <sub>sys</sub>	[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 / ft <sup>2</sup> ]	84 (4000 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 <sup>3</sup>	[lbs / ft <sup>2</sup> ]	125 (6000 Pa) / 84 (4000 Pa)		

<sup>3</sup> See Installation Manual

## QUALIFICATIONS AND CERTIFICATES

UL 61730, CE-compliant,  
IEC 61215:2016,  
IEC 61730:2016,  
U.S. Patent No. 9,893,215  
(solar cells)



## PACKAGING AND TRANSPORT INFORMATION

Horizontal packaging	74.4 in 1890 mm	42.5 in 1080 mm	47.6 in 1208 mm	1458 lbs 661 kg	28 pallets	24 pallets	32 modules
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**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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