

# Q.PLUS DUO L-G5.2 360-375

## Q.ANTUM SOLAR MODULE

The new high-performance module **Q.PLUS DUO L-G5.2** is the ideal solution for commercial and utility applications thanks to a combination of its innovative cell technology **Q.ANTUM** and cutting edge cell interconnection. This 1500V IEC/UL solar module with its 6 busbar cell design ensures superior yields with up to 375Wp while having a very low LCOE.



### LOW ELECTRICITY GENERATION COSTS

Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 19.1%.



### 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 (5400 Pa) and wind loads (2400 Pa).



### A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance warranty<sup>2</sup>.



### THE IDEAL SOLUTION FOR:



Rooftop arrays on commercial/industrial buildings



Ground-mounted solar power plants

Engineered in **Germany**

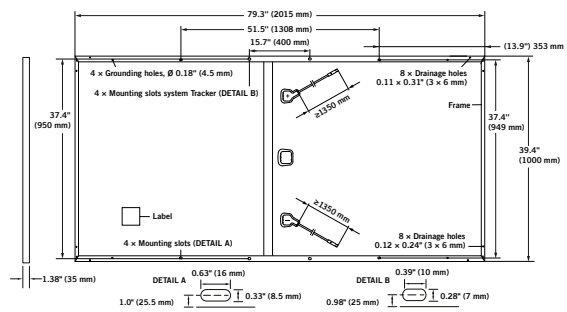
**Q CELLS**

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

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

## MECHANICAL SPECIFICATION

<b>Format</b>	79.3 in × 39.4 in × 1.38 in (including frame) (2015 mm × 1000 mm × 35 mm)
<b>Weight</b>	51.8 lbs (23.5 kg)
<b>Front Cover</b>	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
<b>Back Cover</b>	Composite film
<b>Frame</b>	Anodized aluminum
<b>Cell</b>	6 × 24 multicrystalline Q.ANTUM solar half-cells
<b>Junction box</b>	2.76-3.35 in × 1.97-2.76 in × 0.51-0.83 in (70-85 mm × 50-70 mm × 13-21 mm), Protection class IP67, with bypass diodes
<b>Cable</b>	4 mm <sup>2</sup> Solar cable; (+) ≥ 53.1 in (1350 mm), (-) ≥ 53.1 in (1350 mm)
<b>Connector</b>	Multi-Contact MC4-EVO2, JMTHY PV-JM601A, IP68 or Renhe O5-8, IP67

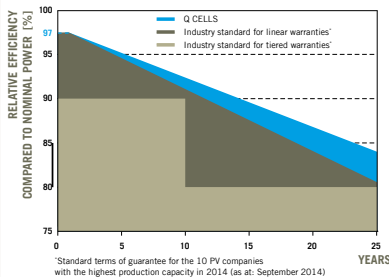


## ELECTRICAL CHARACTERISTICS

POWER CLASS		360	365	370	375	
<b>MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC<sup>1</sup> (POWER TOLERANCE +5 W / -0 W)</b>						
Minimum	Power at MPP <sup>1</sup>	$P_{MPP}$ [W]	360	365	370	375
	Short Circuit Current <sup>1</sup>	$I_{SC}$ [A]	9.87	9.92	9.96	10.01
	Open Circuit Voltage <sup>1</sup>	$V_{OC}$ [V]	46.80	47.03	47.26	47.49
	Current at MPP	$I_{MPP}$ [A]	9.35	9.41	9.47	9.54
	Voltage at MPP	$V_{MPP}$ [V]	38.52	38.79	39.05	39.32
	Efficiency <sup>1</sup>	$\eta$ [%]	≥ 18.1	≥ 18.3	≥ 18.6	≥ 18.8
<b>MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT<sup>2</sup></b>						
Minimum	Power at MPP	$P_{MPP}$ [W]	267.7	271.4	275.2	278.9
	Short Circuit Current	$I_{SC}$ [A]	7.95	7.99	8.03	8.06
	Open Circuit Voltage	$V_{OC}$ [V]	43.94	44.16	44.38	44.59
	Current at MPP	$I_{MPP}$ [A]	7.35	7.40	7.46	7.51
	Voltage at MPP	$V_{MPP}$ [V]	36.44	36.68	36.91	37.14

<sup>1</sup>Measurement tolerances  $P_{MPP} \pm 3\%$ ;  $I_{SC}, V_{OC} \pm 5\%$  at STC: 1000 W/m<sup>2</sup>, 25 ± 2 °C, AM 1.5G according to IEC 60904-3 - <sup>2</sup>800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5G

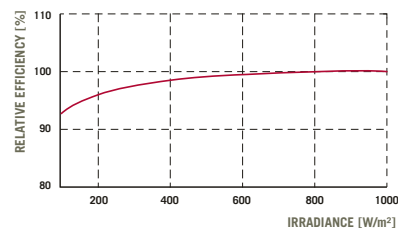
## Q CELLS PERFORMANCE WARRANTY



At least 97% of nominal power during first year. Thereafter max. 0.54% degradation per year. At least 92% of nominal power up to 10 years. At least 84% 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 organization of your respective country.

## PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m<sup>2</sup>).

## TEMPERATURE COEFFICIENTS

<b>Temperature Coefficient of <math>I_{SC}</math></b>	$\alpha$	[%/K]	+0.04	<b>Temperature Coefficient of <math>V_{OC}</math></b>	$\beta$	[%/K]	-0.29
<b>Temperature Coefficient of <math>P_{MPP}</math></b>	$\gamma$	[%/K]	-0.39	<b>Normal Operating Module Temperature</b>	<b>NMOT</b>	[°F]	109 ± 5.4 (43 ± 3 °C)

## PROPERTIES FOR SYSTEM DESIGN

<b>Maximum System Voltage <math>V_{SYS}</math></b>	[V]	1500 (IEC) / 1500 (UL)	<b>Safety Class</b>	II
<b>Maximum Series Fuse Rating</b>	[A DC]	20	<b>Fire Rating</b>	C (IEC) / TYPE 1 (UL)
<b>Max. Design Load, Push / Pull (UL)<sup>2</sup></b>	[lbs/ft <sup>2</sup> ]	75 (3600 Pa) / 33 (1600 Pa)	<b>Permitted module temperature on continuous duty</b>	-40 °F up to +185 °F (-40 °C up to +85 °C)
<b>Max. Test Load, Push / Pull (UL)<sup>2</sup></b>	[lbs/ft <sup>2</sup> ]	113 (5400 Pa) / 50 (2400 Pa)	<sup>2</sup> see installation manual	

## QUALIFICATIONS AND CERTIFICATES

UL 1703; CE-compliant;  
IEC 61215:2016, IEC 61730:2016 application class A



## PACKAGING INFORMATION

<b>Number of Modules per Pallet</b>	29
<b>Number of Pallets per 53' Trailer</b>	26
<b>Number of Pallets per 40' High Cube Container</b>	22
<b>Pallet Dimensions (L × W × H)</b>	81.9 in × 45.3 in × 46.7 in (2080 mm × 1150 mm × 1190 mm)
<b>Pallet Weight</b>	1635 lbs (742 kg)

**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.

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