

powered by

**Q.ANTUM DUO**

# Q.PEAK DUO L-G5 380-400

ENDURING HIGH  
PERFORMANCE



### LOW ELECTRICITY GENERATION COSTS

Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 20.1%.



### INNOVATIVE ALL-WEATHER TECHNOLOGY

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



### 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 aluminium 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>.



### STATE OF THE ART MODULE TECHNOLOGY

Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.

<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.

### THE IDEAL SOLUTION FOR:



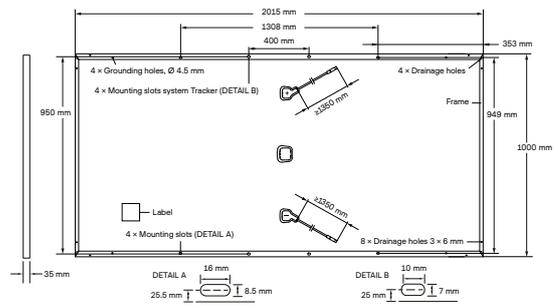
Rooftop arrays on commercial / industrial buildings



Ground-mounted solar power plants

## MECHANICAL SPECIFICATION

Format	2015 mm × 1000 mm × 35 mm (including frame)
Weight	23 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodised aluminium
Cell	6 × 24 monocrystalline Q.ANTUM solar half cells
Junction box	53-101 mm × 32-60 mm × 15-18 mm Protection class IP67, with bypass diodes
Cable	4 mm <sup>2</sup> Solar cable; (+) ≥ 1350 mm, (-) ≥ 1350 mm
Connector	Stäubli MC4, Hanwha Q CELLS HQC4, Amphenol UTX, Renhe 05-6, Tongling TL-Cable01S, JMTHY JM601; IP68 or Friends PV2e; IP67

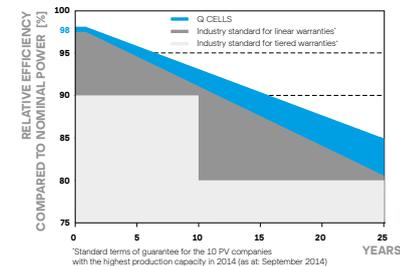


## ELECTRICAL CHARACTERISTICS

POWER CLASS		380	385	390	395	400	
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC <sup>1</sup> (POWER TOLERANCE +5 W / -0 W)							
Minimum	Power at MPP <sup>1</sup>	$P_{MPP}$ [W]	380	385	390	395	400
	Short Circuit Current <sup>1</sup>	$I_{SC}$ [A]	10.05	10.10	10.14	10.19	10.24
	Open Circuit Voltage <sup>1</sup>	$V_{OC}$ [V]	47.95	48.21	48.48	48.74	49.00
	Current at MPP	$I_{MPP}$ [A]	9.57	9.61	9.66	9.70	9.75
	Voltage at MPP	$V_{MPP}$ [V]	39.71	40.05	40.38	40.71	41.04
	Efficiency <sup>1</sup>	$\eta$ [%]	≥ 18.9	≥ 19.1	≥ 19.4	≥ 19.6	≥ 19.9
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT <sup>2</sup>							
Minimum	Power at MPP	$P_{MPP}$ [W]	284.4	288.2	291.9	295.6	299.4
	Short Circuit Current	$I_{SC}$ [A]	8.10	8.14	8.17	8.21	8.25
	Open Circuit Voltage	$V_{OC}$ [V]	45.21	45.46	45.71	45.96	46.21
	Current at MPP	$I_{MPP}$ [A]	7.53	7.57	7.60	7.64	7.67
	Voltage at MPP	$V_{MPP}$ [V]	37.77	38.08	38.40	38.71	39.02

<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 1.5 according to IEC 60904-3 • 2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5

### Q CELLS PERFORMANCE WARRANTY

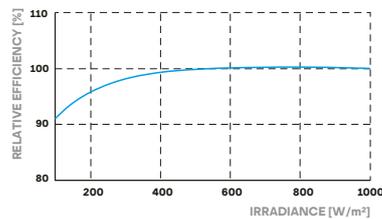


At least 98% of nominal power during first year. Thereafter max. 0.54% degradation per year. At least 93.1% of nominal power up to 10 years. At least 85% of nominal power up to 25 years.

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

<sup>1</sup>Standard terms of guarantee for the 10 PV companies with the highest production capacity in 2014 (as at September 2014)

### 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

Temperature Coefficient of $I_{SC}$	$\alpha$ [%/K]	+0.04	Temperature Coefficient of $V_{OC}$	$\beta$ [%/K]	-0.27
Temperature Coefficient of $P_{MPP}$	$\gamma$ [%/K]	-0.36	Nominal Module Operating Temperature	NMOT [°C]	43 ± 3

## PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	$V_{SYS}$ [V]	1000 (IEC)/1000 (UL)	PV module classification	Class II
Maximum Reverse Current	$I_R$ [A]	20	Fire Rating based on ANSI / UL 1703	C / TYPE 2
Max. Design Load, Push / Pull	[Pa]	3600/1600	Permitted Module Temperature on Continuous Duty	-40°C - +85°C
Max. Test Load, Push / Pull	[Pa]	5400/2400		

## QUALIFICATIONS AND CERTIFICATES

IEC 61215:2016; IEC 61730:2016;  
This data sheet complies with DIN EN 50380.



## PACKAGING INFORMATION

Number of Modules per Pallet	30
Number of Pallets per Trailer (24t)	24
Number of Pallets per 40' HC-Container (26t)	22
Pallet Dimensions (L × W × H)	2074 × 1130 × 1170 mm
Pallet Weight	746 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.

### Hanwha Q CELLS GmbH

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