

# Q.PEAK DUO XL-G11.3

## 570-590

ENDURING HIGH  
PERFORMANCE



### BREAKING THE 21% EFFICIENCY BARRIER

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 21.7%.



### LOW ELECTRICITY GENERATION COSTS

Higher yield per surface area, lower BOS costs and up to 175 watts more module power than standard 144 half-cell modules.



### 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 12-busbar design with Q.ANTUM Technology.

<sup>1</sup> APT test conditions according to IEC / TS 62804-1:2015, method A (-1500 V, 96 h)

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

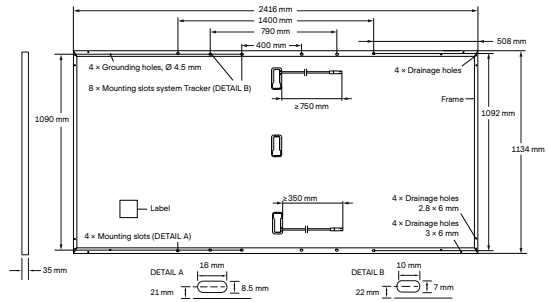
### THE IDEAL SOLUTION FOR:



Ground-mounted  
solar power plants

## MECHANICAL SPECIFICATION

Format	2416 mm × 1134 mm × 35 mm (including frame)
Weight	30.7 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodised aluminium
Cell	6 × 26 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; (+) ≥ 750 mm, (-) ≥ 350 mm
Connector	Stäubli MC4-Evo2, Hanwha Q CELLS HQC4; IP68



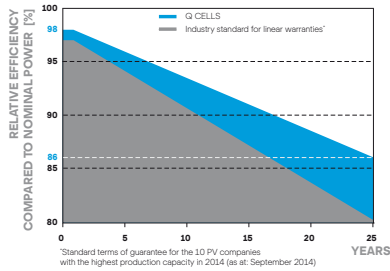
Drawing not to scale

## ELECTRICAL CHARACTERISTICS

POWER CLASS		570	575	580	585	590	
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]	570	575	580	585	590
	Short Circuit Current <sup>1</sup>	I <sub>SC</sub> [A]	13.49	13.51	13.54	13.57	13.59
	Open Circuit Voltage <sup>1</sup>	V <sub>OC</sub> [V]	53.59	53.62	53.64	53.67	53.70
	Current at MPP	I <sub>MPP</sub> [A]	12.82	12.87	12.92	12.97	13.01
	Voltage at MPP	V <sub>MPP</sub> [V]	44.46	44.68	44.90	45.12	45.33
	Efficiency <sup>1</sup>	η [%]	≥ 20.8	≥ 21.0	≥ 21.2	≥ 21.4	≥ 21.5
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT <sup>2</sup>							
Minimum	Power at MPP	P <sub>MPP</sub> [W]	427.6	431.4	435.1	438.9	442.6
	Short Circuit Current	I <sub>SC</sub> [A]	10.87	10.89	10.91	10.93	10.95
	Open Circuit Voltage	V <sub>OC</sub> [V]	50.54	50.56	50.59	50.62	50.64
	Current at MPP	I <sub>MPP</sub> [A]	10.09	10.13	10.17	10.22	10.26
	Voltage at MPP	V <sub>MPP</sub> [V]	42.39	42.58	42.77	42.96	43.14

<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 • 2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5

### Q CELLS PERFORMANCE WARRANTY

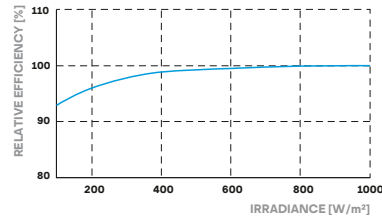


\*Standard terms of guarantee for the 10 PV companies with the highest production capacity in 2014 (as at September 2014)

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/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]	-0.34	Nominal Module Operating Temperature	NMOT	[°C]	43 ± 3

## PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	V <sub>SYS</sub>	[V]	1500	PV module classification	Class II
Maximum Reverse Current	I <sub>R</sub>	[A]	25	Fire Rating	C
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

Vertical packaging	2458mm	1134mm	1270mm	1000kg	20 pallets	16 pallets	31 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 GmbH

Sonnenallee 17-21, 06766 Bitterfeld-Wolfen, Germany | TEL +49 (0)3494 66 99-23444 | FAX +49 (0)3494 66 99-23000 | EMAIL sales@q-cells.com | WEB www.q-cells.com

Engineered in Germany

