

# Q.PEAK DUO XL-G11S SERIES



PRELIMINARY

575 - 590 Wp | 156 Cells  
21.1% Maximum Module Efficiency

MODEL Q.PEAK DUO XL-G11S.3/BFG



## Bifacial energy yield gain of up to 20 %

Bifacial Q.ANTUM solar cells make efficient use of light shining on the module rear-side for radically improved LCOE.



## Low electricity generation costs

Q.ANTUM DUO Z combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology for higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 21.1%.



## A reliable investment

Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty<sup>1</sup>.



## Enduring high performance

Long-term yield security with Anti LID and Anti PID Technology<sup>2</sup>, Hot-Spot Protect.



## Frame for versatile mounting options

High-tech aluminum alloy frame protects from damage, enables use of a wide range of mounting structures and is certified regarding IEC for high snow (5400 Pa) and wind loads (2400 Pa).



## Innovative all-weather technology

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

<sup>1</sup> See data sheet on rear for further information.

<sup>2</sup> APT test conditions according to IEC/TS 62804-1:2015 method B (-1500V, 168 h) including post treatment according to IEC 61215-1-1 Ed. 2.0 (CD)

### The ideal solution for:



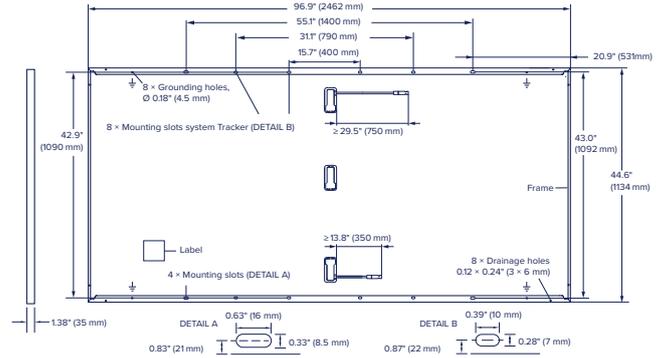
Ground-mounted solar power plants



# Q.PEAK DUO XL-G11S SERIES

## Mechanical Specification

Format	96.9 in × 44.6 in × 1.38 in (including frame) (2462 mm × 1134 mm × 35 mm)
Weight	77.8 lbs (35.3 kg)
Front Cover	0.08 in (2.0 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	0.08 in (2.0 mm) semi-tempered glass
Frame	Anodised aluminium
Cell	6 × 26 monocrystalline Q.ANTUM solar half cells
Junction box	2.09-3.98 × 1.26-2.36 × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), Protection class IP67, with bypass diodes
Cable	4 mm <sup>2</sup> Solar cable; (+) ≥ 29.5 in (750 mm), (-) ≥ 13.8 in (350 mm)
Connector	Stäubli MC4-Evo2, Hanwha Q CELLS HQC4; IP68



## Electrical Characteristics

POWER CLASS			575	580	585	590
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC <sup>1</sup> (POWER TOLERANCE +5 W/-0 W)						
			BSTC*		BSTC*	
Minimum	Power at MPP <sup>1</sup>	P <sub>MPP</sub> [W]	575	629.0	580	634.4
	Short Circuit Current <sup>1</sup>	I <sub>SC</sub> [A]	13.67	14.96	13.69	14.99
	Open Circuit Voltage <sup>1</sup>	V <sub>OC</sub> [V]	53.52	53.71	53.55	53.74
	Current at MPP	I <sub>MPP</sub> [A]	12.98	14.20	13.03	14.25
	Voltage at MPP	V <sub>MPP</sub> [V]	44.31	44.30	44.53	44.52
	Efficiency <sup>1</sup>	η [%]	≥ 20.6	≥ 20.8	≥ 21.0	≥ 21.1

Bifaciality of P<sub>MPP</sub> and I<sub>SC</sub> 70% ± 5% • Bifaciality given for rear side irradiation on top of STC (front side) • According to IEC 60904-1-2

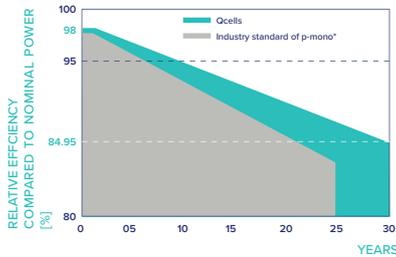
<sup>1</sup> Measurement tolerances P<sub>MPP</sub> ± 3%; I<sub>SC</sub>, V<sub>OC</sub> ± 5% at STC: 1000 W/m<sup>2</sup>; \*at BSTC: 1000 W/m<sup>2</sup> + φ × 135 W/m<sup>2</sup>, φ = 70% ± 5%, 25 ± 2 °C, AM 1.5 according to IEC 60904-3

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT<sup>2</sup>

Minimum	Power at MPP	P <sub>MPP</sub> [W]	433.0	436.7	440.5	444.2
	Short Circuit Current	I <sub>SC</sub> [A]	11.01	11.03	11.05	11.07
	Open Circuit Voltage	V <sub>OC</sub> [V]	50.61	50.64	50.67	50.69
	Current at MPP	I <sub>MPP</sub> [A]	10.21	10.25	10.30	10.34
	Voltage at MPP	V <sub>MPP</sub> [V]	42.41	42.60	42.79	42.97

<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 • <sup>2</sup> 800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5

## Qcells PERFORMANCE WARRANTY

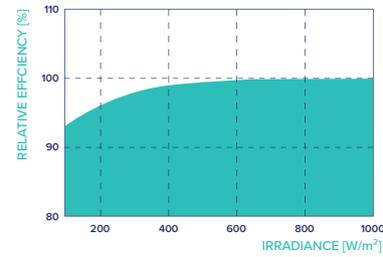


At least 98% of nominal power during first year. Thereafter max. 0.45% degradation per year. At least 93.95% of nominal power up to 10 years. At least 84.95% of nominal power up to 30 years.

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

\*Standard terms of guarantee for the 5 PV companies with the highest production capacity in 2021 (February 2021)

## 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 [°F]	109 ± 5.4 (43 ± 3 °C)

## Properties for System Design

Maximum System Voltage	V <sub>sys</sub> [V]	1500	PV module classification	Class II
Maximum Series Fuse Rating	[A DC]	25	Fire Rating based on ANSI/UL 61730	TYPE 29 <sup>4</sup>
Max. Design Load, Push/Pull <sup>3</sup>	[lbs/ft <sup>2</sup> ] / [Pa]	75 (3600 Pa)/33 (1600 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> ] / [Pa]	113 (5400 Pa)/50 (2400 Pa)		

<sup>3</sup> See Installation Manual

<sup>4</sup> New Type is similar to Type 3 but with metallic frame

## Qualifications and Certificates

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



Qcells pursues minimizing paper output in consideration of the global environment.

Note: Installation instructions must be followed. Contact our technical service for further information on approved installation of this product.

Hanwha Q CELLS America Inc. 400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL hqc-inquiry@qcells.com | WEB www.qcells.com

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