

# Q.PEAK DUO XL-G11S SERIES



**590 - 605 Wp | 156 Cells**  
**21.7% Maximum Module Efficiency**

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



## Bifacial energy yield gain of up to 21%

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 technology with optimized module layout to boost module power and improve LCOE.



## 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 (3750 Pa)<sup>3</sup>.



## 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)

<sup>3</sup> See Installation Manual for instructions

### The ideal solution for:



Ground-mounted  
solar power plants



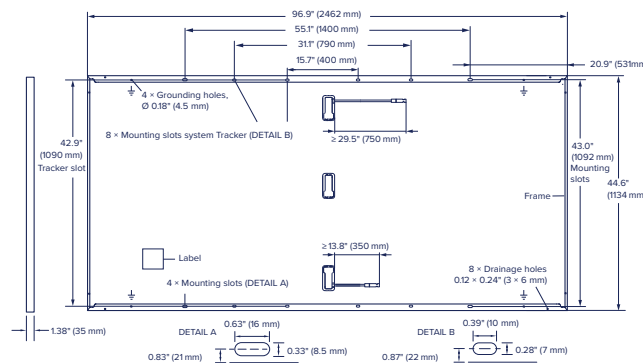
Solar power plants  
with tracker



# 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	76.9 lbs (34.9 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	Anodized aluminum
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; Stäubli MC4-Evo2; - IP68



## Electrical Characteristics

POWER CLASS	590	595	600	605
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MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC<sup>1</sup> (POWER TOLERANCE +5W/-0W)

Minimum				B5TC*		B5TC*		B5TC*		B5TC*	
	Power at MPP <sup>1</sup>	P <sub>MPP</sub>	[W]	590	645.4	595	650.8	600	656.3	605	661.8
	Short Circuit Current <sup>1</sup>	I <sub>SC</sub>	[A]	13.74	15.04	13.77	15.07	13.80	15.10	13.90	15.21
	Open Circuit Voltage <sup>1</sup>	V <sub>OC</sub>	[V]	53.60	53.79	53.63	53.82	53.66	53.85	53.69	53.88
	Current at MPP	I <sub>MPP</sub>	[A]	13.12	14.36	13.17	14.41	13.25	14.50	13.33	14.58
	Voltage at MPP	V <sub>MPP</sub>	[V]	44.96	44.95	45.18	45.17	45.30	45.27	45.40	45.39
	Efficiency <sup>1</sup>	η	[%]	≥21.1		≥21.3		≥21.5		≥21.7	

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

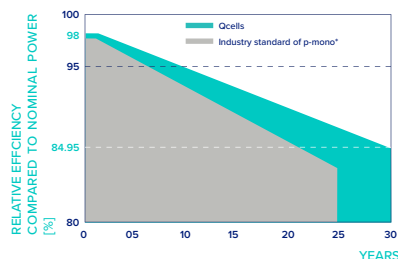
<sup>1</sup>Measurement tolerances P<sub>MPP</sub> ± 3%; I<sub>SC</sub>, V<sub>OC</sub> ± 5% at STC: 1000 W/m<sup>2</sup>; \*at BSTC: 1000 W/m<sup>2</sup> + φ × 135 W/m<sup>2</sup>, φ = 70%, 25 ± 2 °C, AM 1.5 according to IEC 60904-3

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

Minimum	Power at MPP	P <sub>MPP</sub> [W]	444.2	448.0	451.8	455.5
	Short Circuit Current	I <sub>SC</sub> [A]	11.07	11.09	11.11	11.20
	Open Circuit Voltage	V <sub>OC</sub> [V]	50.69	50.72	50.75	50.78
	Current at MPP	I <sub>MPP</sub> [A]	10.34	10.38	10.45	10.51
	Voltage at MPP	V <sub>MPP</sub> [V]	42.97	43.15	43.24	43.33

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

## Qcells PERFORMANCE WARRANTY

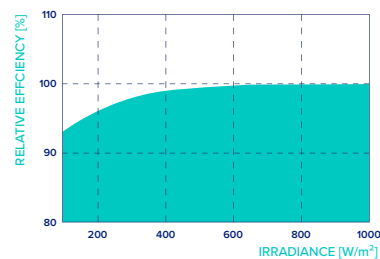


At least 98% of nominal power during first year. Thereafter max. 0.45% degradation per year. At least 93.95% of nominal power up to 10 years. At least 84.95% of nominal power up to 30 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Qcells sales organization 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]	108 ± 5.4 (42 ± 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]	30	Fire Rating based on ANSI/UL 61730	TYPE 29 <sup>4</sup>
Max. Push Load <sup>3</sup> , Test/Design	[lbs/ft <sup>2</sup> ]	113 (5400 Pa) / 75 (3600 Pa)	Permitted Module Temperature on Continuous Duty	-40 °F up to +185 °F (-40 °C up to +85 °C)
Max. Pull Load <sup>3</sup> , Test/Design	[lbs/ft <sup>2</sup> ]	78 (3750 Pa) / 52 (2500 Pa)		

<sup>3</sup> See Installation Manual for instructions

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

## Qualifications and Certificates

UL61730-1 & UL61730-2, CE-compliant,  
IEC 61215:2016,  
IEC 61730:2016,  
U.S. Patent No. 9,893,215  
(solar cells)



\* Contact your Qcells Sales Representative for details regarding the module's eligibility to be Buy American Act (BAA) compliant.

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.

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