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 warranty¹.



Enduring high performance

Long-term yield security with Anti LID and Anti PID Technology², 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)³.



Innovative all-weather technology

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

- ¹ See data sheet on rear for further information.
- ² APT test conditions according to IEC/TS 62804-1:2015 method B (-1500 V, 168 h) including post treatment according to IEC 61215-1-1 Ed. 2.0 (CD)
- ³ See Installation Manual for instructions





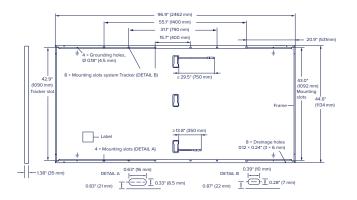






■ Mechanical Specification

Format	96.9 in × 44.6 in × 1.38 in (including frame) (2462 mm × 1134 mm × 35 mm)
Weight	76.9 lbs (34.9kg)
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	$2.09\text{-}3.98\times1.26\text{-}2.36\times0.59\text{-}0.71$ in (53-101 mm \times 32-60 mm \times 15-18 mm), Protection class IP67, with bypass diodes
Cable	$4 \text{ mm}^2 \text{ Solar cable; (+)} \ge 29.5 \text{ in (750 mm), (-)} \ge 13.8 \text{ in (350 mm)}$
Connector	Stäubli MC4; Stäubli MC4-Evo2; - IP68



■ Electrical Characteristics

PC	WER CLASS			590		595		600		605	
IIM	MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC1 (POWER TOLERANCE +5W/-0W)										
					BSTC*		BSTC*		BSTC*		BSTC*
	Power at MPP ¹	P_{MPP}	[W]	590	645.4	595	650.8	600	656.3	605	661.8
_	Short Circuit Current ¹	Isc	[A]	13.74	15.04	13.77	15.07	13.80	15.10	13.90	15.21
E E	Open Circuit Voltage ¹	Voc	[V]	53.60	53.79	53.63	53.82	53.66	53.85	53.69	53.88
Minir	Current at MPP	I _{MPP}	[A]	13.12	14.36	13.17	14.41	13.25	14.50	13.33	14.58
	Voltage at MPP	V_{MPP}	[V]	44.96	44.95	45.18	45.17	45.30	45.27	45.40	45.39
	Efficiency ¹	η	[%]	≥21.1		≥21.3		≥21.5		≥21.7	

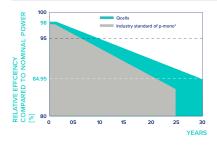
Bifaciality of P_{MPP} and I_{SC} 70% \pm 5% \star Bifaciality given for rear side irradiation on top of STC (front side) \star According to IEC 60904-1-2

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT2W

Minimum	Power at MPP	P _{MPP}	[W]	444.2	448.0	451.8	455.5	
	Short Circuit Current	Isc	[A]	11.07	11.09	11.11	11.20	
	Open Circuit Voltage	Voc	[V]	50.69	50.72	50.75	50.78	
	Current at MPP	I _{MPP}	[A]	10.34	10.38	10.45	10.51	
	Voltage at MPP	V _{MPP}	[V]	42.97	43.15	43.24	43.33	

 $^{1}\text{Measurement tolerances P}_{\text{MPP}}\pm3\%; I_{\text{SC}}, V_{\text{OC}}\pm5\% \text{ at STC: } 1000 \text{W/m}^{2}, 25\pm2\text{°C}, \text{AM 1.5 according to IEC } 60904-3 \cdot ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC } 1000 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC } 1000 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 } 1000 \text{W/m$

Qcells PERFORMANCE WARRANTY

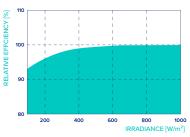


At least 98% of nominal power during first year. Thereafter max. 0.45% degradation per year. At least 93.95% of nominal power up to 10 years. At least 84.95% of nominal power up to 30 years.

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

*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 $^{\circ}$ C, 1000 W/m²).

TE	MPERATURE COEFFICIENTS						
Ter	nperature Coefficient of I _{sc}	α	[%/K]	+0.04	Temperature Coefficient of V _{oc}	β	[%/K]
Ter	mperature Coefficient of P _{MPP}	γ	[%/K]	-0.34	Nominal Module Operating Temperature	NMOT	[°F]

■ Properties for System Design

Maximum System Voltage	$V_{\rm SYS}$	[V]	1500
Maximum Series Fuse Rating		[A DC]	30
Max. Push Load ³ , Test/Design		[lbs/ft²]	113 (5400 Pa) / 75 (3600 Pa)
Max Pull Load ³ Test/Design		[lbs/ft²]	78 (3750 Pa) /52 (2500 Pa)

³ See Installation Manual for instructions

PV module classification	Class II
Fire Rating based on ANSI/UL 61730	TYPE 29⁴
Permitted Module Temperature	−40°F up to +185°F
on Continuous Duty	(-40°C up to +85°C)

⁴ New Type is similar to Type 3 but with metallic frame

■ Qualifications and Certificates

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











-0.27 108±5.4

(42±3°C)

