

Q.PEAK DUO XL-G11S SERIES



580-595 Wp | 156 Cells
21.3% 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 (2400 Pa).



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 (-1500V, 168h) including post treatment according to IEC 61215-11 Ed. 2.0 (CD)

The ideal solution for:



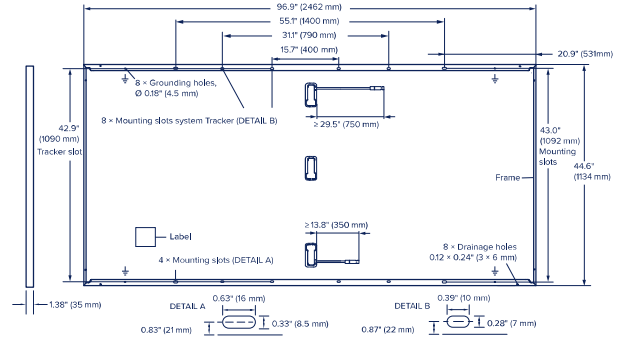
Ground-mounted
solar power plants



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	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	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 ² Solar cable; (+) ≥ 29.5 in (750 mm), (-) ≥ 13.8 in (350 mm)
Connector	Stäubli MC4-Evo2



Electrical Characteristics

POWER CLASS	580	585	590	595					
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5 W/-0 W)									
		BSTC*	BSTC*	BSTC*	BSTC*				
Power at MPP ¹	P _{MPP} [W]	580	634.4	585	639.9	590	645.4	595	650.8
Short Circuit Current ¹	I _{SC} [A]	13.69	14.99	13.72	15.01	13.74	15.04	13.77	15.07
Open Circuit Voltage ¹	V _{OC} [V]	53.55	53.74	53.57	53.76	53.60	53.79	53.63	53.82
Current at MPP	I _{MPP} [A]	13.03	14.25	13.07	14.30	13.12	14.36	13.17	14.41
Voltage at MPP	V _{MPP} [V]	44.53	44.52	44.75	44.74	44.96	44.95	45.18	45.17
Efficiency ¹	η [%]	≥ 20.8		≥ 21.0		≥ 21.1		≥ 21.3	

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

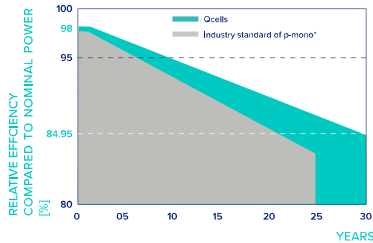
¹Measurement tolerances P_{MPP} ± 3%; I_{SC}, V_{OC} ± 5% at STC: 1000 W/m²; *at BSTC: 1000 W/m² + φ × 135 W/m², φ = 70% ± 5%, 25 ± 2 °C, AM 1.5 according to IEC 60904-3

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

Power at MPP	P _{MPP} [W]	436.7	440.5	444.2	448.0
Short Circuit Current	I _{SC} [A]	11.03	11.05	11.07	11.09
Open Circuit Voltage	V _{OC} [V]	50.64	50.67	50.69	50.72
Current at MPP	I _{MPP} [A]	10.25	10.30	10.34	10.38
Voltage at MPP	V _{MPP} [V]	42.60	42.79	42.97	43.15

¹Measurement tolerances P_{MPP} ± 3%; I_{SC}, V_{OC} ± 5% at STC: 1000 W/m², 25 ± 2 °C, AM 1.5 according to IEC 60904-3 • ²800 W/m², NMOT, spectrum AM 1.5

Qcells PERFORMANCE WARRANTY

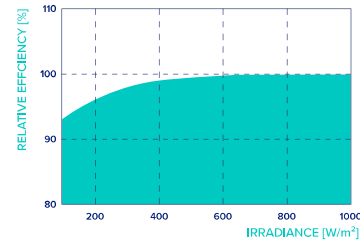


At least 98% of nominal power during first year. Thereafter max. 0.45% degradation per year. At least 93.95% of nominal power up to 10 years. At least 84.95% of nominal power up to 30 years.

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/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I _{SC}	α [%/K]	+0.04	Temperature Coefficient of V _{OC}	β [%/K]	-0.27
Temperature Coefficient of P _{MPP}	γ [%/K]	-0.34	Nominal Module Operating Temperature	NMOT [°F]	108 ± 5.4 (42 ± 3 °C)

Properties for System Design

Maximum System Voltage	V _{SYS} [V]	1500	PV module classification	Class II
Maximum Series Fuse Rating	[A DC]	25	Fire Rating based on ANSI/UL 61730	TYPE 29 ⁴
Max. Design Load, Push/Pull ³	[lbs/ft ²]	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 ³	[lbs/ft ²]	113 (5400 Pa)/50 (2400 Pa)		

³ See Installation Manual

⁴ 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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