

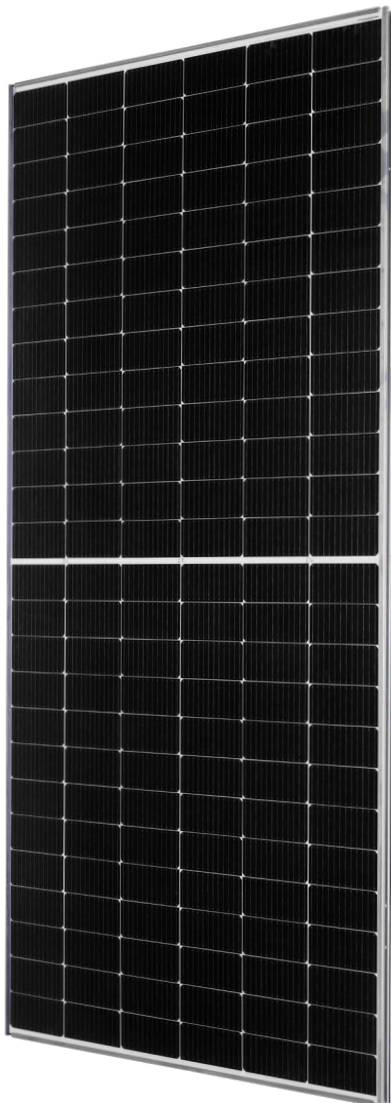
Q.PEAK DUO RSF XL-G11S SERIES



PRELIMINARY

585-600 Wp | 156 Cells
21.5 % Maximum Module Efficiency

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



Fast installation

Innovative S shape frame design including perfectly matched clamps, bringing innovation and convenience together for effortless setup.



Increased design loads for short rails

Unlock unparalleled strength with Qcells steel frames for cost-effective tracker mounting



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.



A reliable investment

Double glass module with Anti LID and Anti PID Technology¹ enables long-term yield security for an extended lifetime backed by a 30-year performance warranty².



Lowering carbon emission

High tech steel frame module generates significantly less CO2 pollution than standard aluminum frame.



Enhanced bifaciality and self cleaning

Optimized frame shape reducing rear side shading and drainage slot for reducing soiling loss.

¹ 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)

² See data sheet on rear for further information

The ideal solution for:



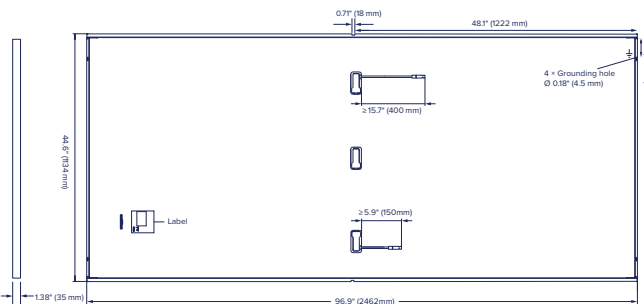
Solar power plants
with tracker



Q.PEAK DUO RSF XL-G11S SERIES

Mechanical Specification

Format	96.9 in × 44.6 in × 1.38 in (including frame) (2462 mm × 1134 mm × 35 mm)
Weight	80.2 lbs (36.4 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	Steel (Zn-Al-Mg coating)
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 IP68, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥15.7 in (400 mm), (-) ≥5.9 in (150 mm)
Connector	Stäubli MC4; Stäubli MC4-Evo2; - IP68



Electrical Characteristics

POWER CLASS	585	590	595	600
-------------	-----	-----	-----	-----

MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5W/-0W)

			585		590		595		600	
				BSTC*		BSTC*		BSTC*		BSTC*
Minimum	Power at MPP ¹	P _{MPP} [W]	585	639.9	590	645.4	595	650.8	600	656.3
	Short Circuit Current ¹	I _{SC} [A]	13.72	15.01	13.74	15.04	13.77	15.07	13.80	15.10
	Open Circuit Voltage ¹	V _{OC} [V]	53.57	53.76	53.60	53.79	53.63	53.82	53.66	53.85
	Current at MPP	I _{MPP} [A]	13.07	14.30	13.12	14.36	13.17	14.41	13.22	14.46
	Voltage at MPP	V _{MPP} [V]	44.75	44.74	44.96	44.95	45.18	45.17	45.39	45.38
	Efficiency ¹	η [%]	≥21.0		≥21.1		≥21.3		≥21.5	

Bifaciality of P_{MPP} and I_{SC} 72% ± 5% • Bifaciality given for rear side irradiation on top of STC (front side) • According to IEC 60904-1-2

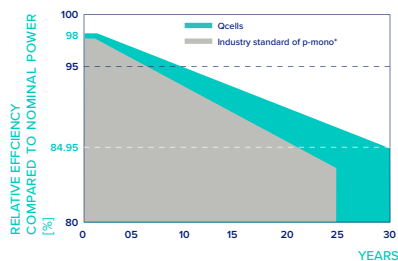
¹Measurement tolerances P_{MPP} ± 3%; I_{SC}, V_{OC} ± 5% at STC: 1000 W/m²; *at BSTC: 1000 W/m² + φ × 135 W/m², φ = 70%, 25 ± 2°C, AM 1.5 according to IEC 60904-3

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

			585	590	595	600
Minimum	Power at MPP	P _{MPP} [W]	440.5	444.2	448.0	451.8
	Short Circuit Current	I _{SC} [A]	11.05	11.07	11.09	11.11
	Open Circuit Voltage	V _{OC} [V]	50.67	50.69	50.72	50.75
	Current at MPP	I _{MPP} [A]	10.30	10.34	10.38	10.42
	Voltage at MPP	V _{MPP} [V]	42.79	42.97	43.15	43.34

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

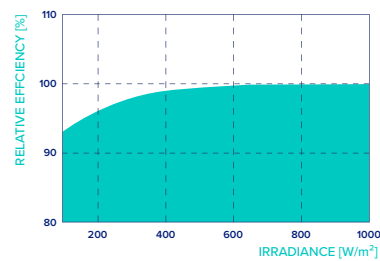


At least 98% of nominal power during first year. Thereafter max. 0.45% degradation per year. At least 93.95% of nominal power up to 10 years. At least 84.95% of nominal power up to 30 years.

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. Push Load ³ , Test/Design	[lbs/ft ²] / [Pa]	54 (2600 Pa) / 36 (1700 Pa)	Permitted Module Temperature on Continuous Duty	-40°F up to +185°F (-40°C up to +85°C)
Max. Pull Load ³ , Test/Design	[lbs/ft ²] / [Pa]	63 (3000 Pa) / 42 (2000 Pa)		

³ See Installation Manual for instructions

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

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

qcells