Q.PEAK DUO XL-G11S SERIES

580 - 605 Wp | 156 Cells
21.7 % Maximum Module Efficiency
Domestic Content Option Available

MODEL Q.PEAK DUO XL-G11S.3 / BFG
Q.PEAK DUO XL-G11S.L3 / BFG

Includes Domestic Content

Q.PEAK DUO XL-G11S.Y3 solar modules ("Y" can be "L") contain U.S. manufactured components which can contribute to qualifying for the 10 % domestic content bonus to applicable tax credits.[1]

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[2].

Enduring high performance

Long-term yield security with Anti LID and Anti PID Technology[3], Hot-Spot Protect.

Built to perform – designed to endure

Robust aluminum frame supports flexible mounting and withstands high snow (5400 Pa) and wind loads (3750 Pa)[4]. Combined with innovative technology, the module delivers optimal energy yields even in low-light conditions and extreme temperatures.

[1] This statement should not be relied on as tax advice and is subject to change based on changes made to the Inflation Reduction Act and its implementing rules and regulations. Please consult a qualified tax professional for specific guidance.
[2] See data sheet on rear for further information.
[3] 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)
[4] See Installation Manual for instructions.

The ideal solution for:

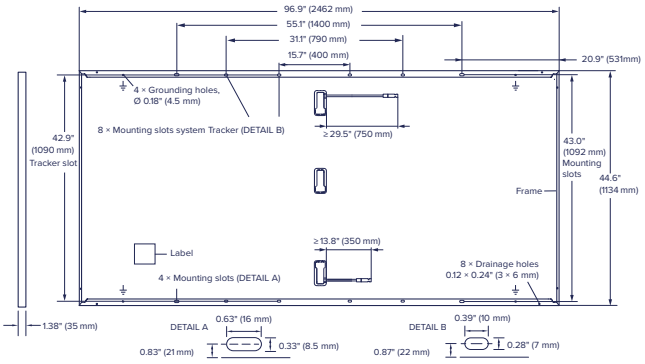
Ground-mounted solar power plants

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 (34.9kg)
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	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 IP68, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥ 29.5 in (750 mm), (−) ≥ 13.8 in (350 mm)
Connector	Stäubli MC4-Evo2A; IP68

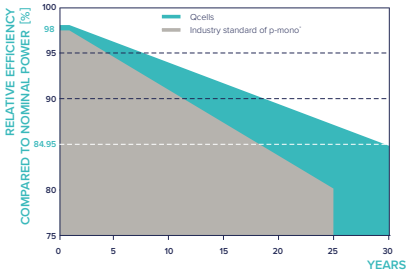


Electrical Characteristics

Power Class				580	585	590	595	600	605
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / −0 W)									
Minimum	Power at MPP[1]	P_{MPP}	[W]	580	585	590	595	600	605
	Short Circuit Current[1]	I_{SC}	[A]	13.69	13.72	13.74	13.77	13.80	13.90
	Open Circuit Voltage[1]	V_{OC}	[V]	53.55	53.57	53.60	53.63	53.66	53.69
	Current at MPP	I_{MPP}	[A]	13.03	13.07	13.12	13.17	13.25	13.33
	Voltage at MPP	V_{MPP}	[V]	44.53	44.75	44.96	45.18	45.30	45.40
	Efficiency[1]	η	[%]	≥ 20.8	≥ 21.0	≥ 21.1	≥ 21.3	≥ 21.5	≥ 21.7
MINIMUM PERFORMANCE AT BIFACIAL NAMEPLATE IRRADIANCE, BNPI[1]									
Minimum	Power at MPP[1]	P_{MPP}	[W]	634.4	639.9	645.4	650.8	656.3	661.8
	Short Circuit Current[1]	I_{SC}	[A]	14.99	15.01	15.04	15.07	15.10	15.21
	Open Circuit Voltage[1]	V_{OC}	[V]	53.74	53.76	53.79	53.82	53.85	53.88
	Current at MPP	I_{MPP}	[A]	14.25	14.30	14.36	14.41	14.50	14.58
	Voltage at MPP	V_{MPP}	[V]	44.52	44.74	44.95	45.17	45.27	45.39

[1] Measurement tolerances: P_{MPP} ±3 %; I_{SC}, V_{OC} ±5 % at STC / BNPI: front 1000 W/m²; BNPI: rear 135 W/m², φI_{SC}, P_{MPP} = 0.70 ± 0.05, φV_{OC} = 0.99 ± 0.03; 25 ± 2 °C, AM 1.5 according to IEC 60904-3. Data given are rated (nominal) values.

Qcells Performance Warranty

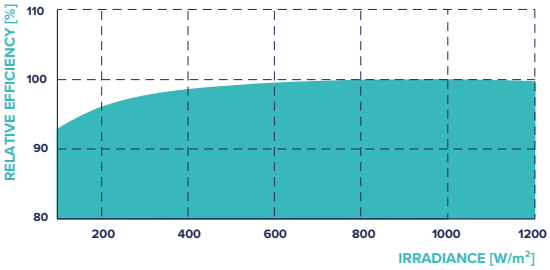


At least 98 % of nominal power during first year. Thereafter max. 0.45 % degradation per year. At least 93.95 % of nominal power up to 10 years. At least 84.95 % of nominal power up to 30 years.

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/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				

Properties for System Design

Maximum System Voltage	V_{SYS}	[V]	1500	PV module classification			Class II
Maximum Series Fuse Rating	I_R	[A DC]	30	Fire Rating based on ANSI / UL 61730			C / TYPE 29
Max. Push Load[3], Test / Design		[lbs / ft²]	113 (5400 Pa) / 75 (3600 Pa)	Permitted Module Temperature on Continuous Duty, ($T_{98\,max}$)			−40 °F up to +158 °F (−40 °C up to +70 °C)
Max. Pull Load[3], Test / Design		[lbs / ft²]	78 (3750 Pa) / 52 (2500 Pa)				

[3] See Installation Manual for instructions

Qualifications and Certificates

UL61730-1 & UL61730-2,
CE-compliant,
IEC 61215:2021,
IEC 61730:2023,
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.

Hanwha Q CELLS USA Corp. 300 Spectrum Center Drive, Suite 500, Irvine, CA 92618, USA | TEL +1 949 748 5996 | EMAIL na.support@qcells.com | WEB www.qcells.com/us