Q.TRON XL-G2 SERIES

620 - 645 Wp | 156 Cells
23.1% Maximum Module Efficiency

MODEL Q.TRON XL-G2.3 / BFG

High performance Qcells N-type solar cells

Q.ANTUM NEO Technology with optimized module layout boosts module efficiency up to 23.1%.

Bifacial energy yield gain of up to 21%

Bifacial Q.ANTUM NEO solar cells make efficient use of light shining on the module rear-side for radically improved LCOE.

A reliable investment

Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty[1].

Enduring high performance

Long-term yield security with Anti LeTID and Anti PID Technology[2], 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.

Far beyond the standard

Qcells' comprehensive quality program ensures high long-term yields and the reliability of your solar system.

[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

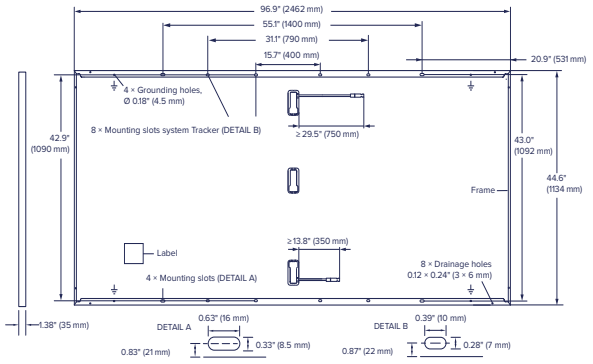
The ideal solution for:

Ground mounted solar panels

Q.TRON XL-G2 SERIES

Mechanical Specification

Format	96.9 in × 44.6 in × 1.38 in (including frame) (2462 mm × 1134 mm × 35 mm)
Weight	78.0 lbs (35.4 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	anodized aluminum
Cell	6 × 26 monocrystalline Q.ANTUM NEO 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 PV-K(S/B)T4-EVO 2 ; IP68

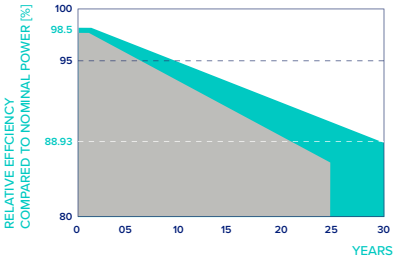


Electrical Characteristics

Power Class				620	625	630	635	640	645
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / −0 W)									
Minimum	Power at MPP[1]	P_{MPP}	[W]	620	625	630	635	640	645
Minimum	Short Circuit Current[1]	I_{SC}	[A]	13.76	13.82	13.88	13.93	13.99	14.05
Minimum	Open Circuit Voltage[1]	V_{OC}	[V]	56.67	56.95	57.23	57.51	57.79	58.07
Minimum	Current at MPP	I_{MPP}	[A]	13.05	13.10	13.15	13.21	13.26	13.31
Minimum	Voltage at MPP	V_{MPP}	[V]	47.50	47.70	47.89	48.09	48.28	48.47
Minimum	Efficiency[1]	η	[%]	≥ 22.2	≥ 22.4	≥ 22.6	≥ 22.7	≥ 22.9	≥ 23.1
MINIMUM PERFORMANCE AT BIFACIAL NAMEPLATE IRRADIANCE, BNPI[1]									
Minimum	Power at MPP	P_{MPP}	[W]	686.5	692.0	697.6	703.1	708.6	714.2
Minimum	Short Circuit Current	I_{SC}	[A]	15.25	15.31	15.38	15.44	15.50	15.57
Minimum	Open Circuit Voltage	V_{OC}	[V]	56.90	57.18	57.46	57.74	58.03	58.31
Minimum	Current at MPP	I_{MPP}	[A]	14.46	14.51	14.57	14.62	14.68	14.74
Minimum	Voltage at MPP	V_{MPP}	[V]	47.49	47.69	47.88	48.08	48.27	48.46

[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} = 0.80 ± 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

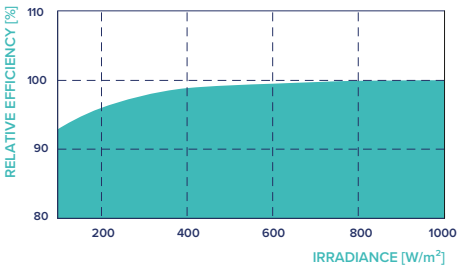


At least 98.5% of nominal power during first year. Thereafter max. 0.33% degradation per year. At least 95.53% of nominal power up to 10 years. At least 88.93% of nominal power up to 30 years.

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]	−0.24
Temperature Coefficient of P_{MPP}	γ	[%/K]	−0.29				

Properties for System Design

Maximum System Voltage	V_{SYS}	[V]	1500	PV module classification	Class II
Maximum Series Fuse Rating		[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

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

Find product recycling details at QR code above

* 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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