

# 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<sup>1</sup>.



## Enduring high performance

Long-term yield security with Anti LeTID and Anti PID Technology<sup>2</sup>, 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)<sup>3</sup>.



## 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.

<sup>1</sup> See data sheet on rear for further information.

<sup>2</sup> APT test conditions according to IEC/TS 62804-1:2015 method B (-1500V, 168h) including post treatment according to IEC 61215-1:1 Ed. 2.0 (CD)

<sup>3</sup> See Installation Manual for instructions

The ideal solution for:



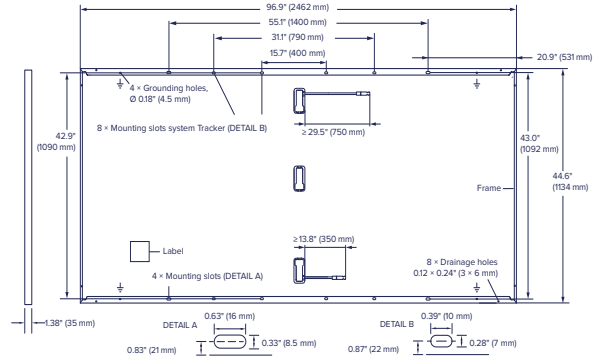
Ground mounted solar panels



# 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 mm <sup>2</sup> Solar cable; (+) ≥ 29.5 in (750 mm), (-) ≥ 13.8 in (350 mm)
Connector	Stäubli PV-K(S/B)T4-EVO 2 ; IP68

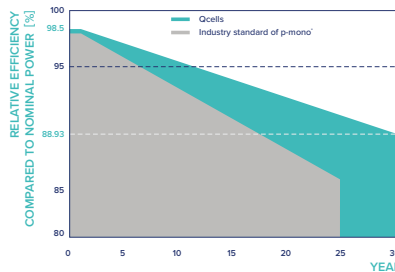


## Electrical Characteristics

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

<sup>1</sup> Measurement tolerances:  $P_{MPP} \pm 3\%$ ;  $I_{SC}$ ,  $V_{OC} \pm 5\%$  at STC/BNPI: front 1000 W/m<sup>2</sup>; BNPI: rear 135 W/m<sup>2</sup>,  $\phi_{I_{SC}}$ ,  $P_{MPP} = 0.80 \pm 0.05$ ,  $\phi_{V_{OC}} = 0.99 \pm 0.03$ ; 25 ± 2 °C, AM 1.5 according to IEC 60904-3. Data given are rated (nominal) values.

### Qcells Performance Warranty

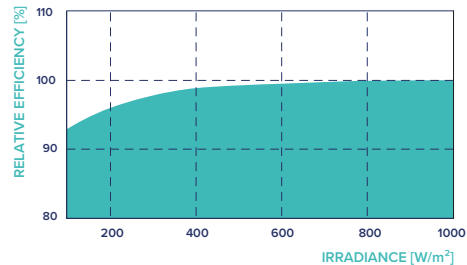


At least 98.5% of nominal power during first year. Thereafter max. 0.33% degradation per year. At least 95.53% of nominal power up to 10 years. At least 88.93% of nominal power up to 30 years.

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

<sup>\*</sup>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/m<sup>2</sup>).

### Temperature Coefficients

Temperature Coefficient of $I_{SC}$	$\alpha$ [%/K]	+0.04	Temperature Coefficient of $V_{OC}$	$\beta$ [%/K]	-0.24
Temperature Coefficient of $P_{MPP}$	$\gamma$ [%/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 <sup>3</sup> , Test/Design	[lbs/ft <sup>2</sup> ]	113 (5400 Pa)/75 (3600 Pa)	Permitted Module Temperature on Continuous Duty, ( $T_{98 \text{ max}}$ )	-40 °F up to +158 °F (-40 °C up to +70 °C)
Max. Pull Load <sup>3</sup> , Test/Design	[lbs/ft <sup>2</sup> ]	78 (3750 Pa)/52 (2500 Pa)		

<sup>3</sup> 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

<sup>\*</sup> 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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