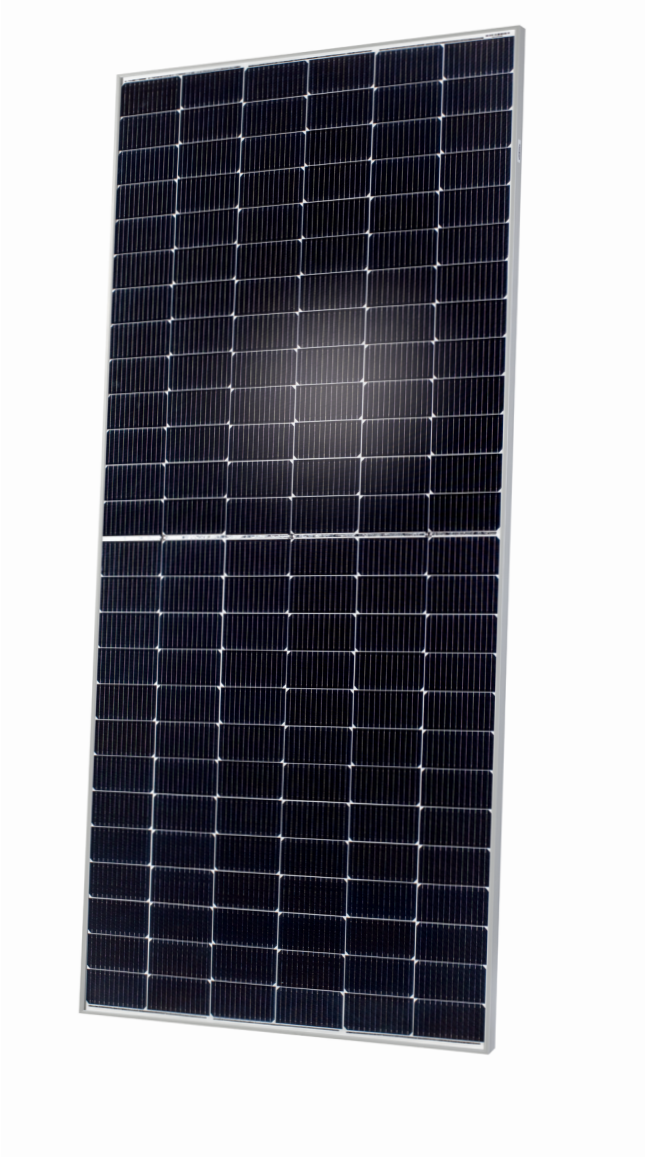
Q.PEAK DUO XL-G11S SERIES

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 warranty[1].

Enduring high performance

Long-term yield security with Anti LID 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 (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 (–1500 V, 168 h) including post treatment according to IEC 61215-1-1 Ed. 2.0 (CD)

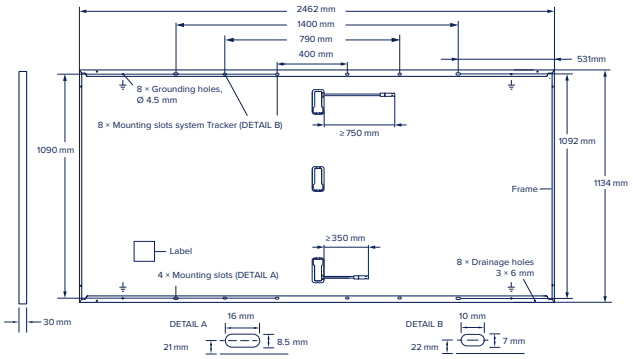
The ideal solution for:

Ground-mounted solar power plants

Q.PEAK DUO XL-G11S SERIES

Mechanical Specification

Format	2462 mm × 1134 mm × 30 mm (including frame)
Weight	34.3 kg
Front Cover	2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	2 mm semi-tempered glass
Frame	Anodised aluminium
Cell	6 × 26 monocrystalline Q.ANTUM solar half cells
Junction box	53-101 mm × 32-60 mm × 15-18 mm Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥ 750 mm, (−) ≥ 350 mm
Connector	Stäubli MC4-Evo2, Hanwha Q CELLS HQC4; IP68



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*
Minimum	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	

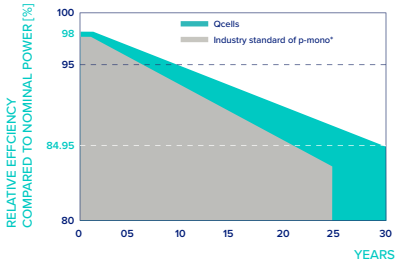
Bifaciality of P_{MPP} and I_{SC} 70 % ± 5 % • Bifaciality given for rear side irradiation on top of STC (front side) • According to IEC 60904-1-2

[1]Measurement 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, NMOT[2]							
Minimum	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

[2]800 W/m², NMOT, spectrum AM 1.5

Qcells PERFORMANCE WARRANTY

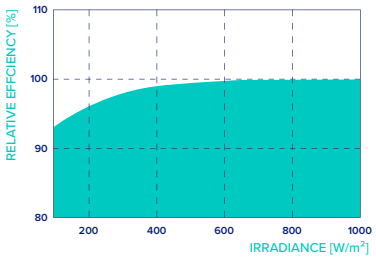


At least 98 % of nominal power during first year. Thereafter max. 0.45 % degradation per year. At least 93.95 % of nominal power up to 10 years. At least 84.95 % of nominal power up to 30 years.

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	[°C]	42 ± 3

Properties for System Design

Maximum System Voltage	V_{SYS}	[V]	1500	PV module classification	Class II
Maximum Series Fuse Rating	I_R	[A]	25	Fire Rating based on ANSI / UL 61730	C/TYPE 29[4]
Max. Design Load, Push / Pull[3]		[Pa]	3600 / 1600	Permitted Module Temperature on Continuous Duty	−40 °C - +85 °C
Max. Test Load, Push / Pull[3]		[Pa]	5400 / 2400		

[3] See Installation Manual

[4] New Type is similar to Type 3 but with metallic frame

Qualifications and Certificates

Quality Controlled PV - TÜV Rheinland; IEC 61215:2016; IEC 61730:2016.
This data sheet complies with DIN EN 50380.

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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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