

# Q.PEAK DUO XL-G10 SERIES



470-490 Wp | 156 Cells  
21.2% Maximum Module Efficiency

MODEL Q.PEAK DUO XL-G10.3  
Q.PEAK DUO XL-G10.7



## Breaking the 21% efficiency barrier

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 21.2%.



## Enduring high performance

Long-term yield security with Anti LeTID Technology, Anti PID Technology<sup>1</sup>, Hot-Spot Protect.



## Low electricity generation costs

Higher yield per surface area, lower BOS costs and up to 80 watts more module power than standard 144 half-cell modules.



## Extreme weather rating

High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (3000 Pa).



## A reliable investment

Inclusive 12-year product warranty and 25-year linear performance warranty<sup>2</sup>.



## State of the art module technology

Q.ANTUM DUO combines cutting edge cell separation and innovative 12-busbar design with Q.ANTUM Technology.

<sup>1</sup> APT test conditions according to IEC/TS 62804-1:2015, method A (-1500 V, 96 h)  
<sup>2</sup> See data sheet on rear for further information.

The ideal solution for:



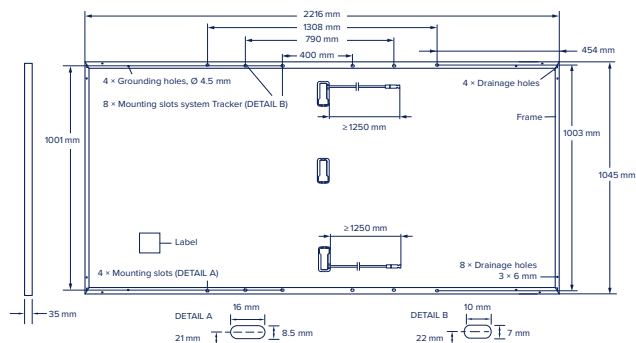
Ground mounted solar panels



# Q.PEAK DUO XL-G10 SERIES

## Mechanical Specification

Format	2216 mm × 1045 mm × 35 mm (including frame)
Weight	26.0 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
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 mm <sup>2</sup> Solar cable; (+) ≥1250 mm, (-) ≥1250 mm*
Connector	Hanwha Q CELLS HQC4; IP68



## Electrical Characteristics

POWER CLASS	470	475	480	485	490
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MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC<sup>1</sup> (POWER TOLERANCE +5 W/-0 W)

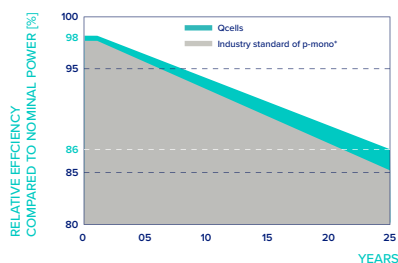
Minimum	Power at MPP <sup>1</sup>	$P_{MPP}$ [W]	470	475	480	485	490
	Short Circuit Current <sup>1</sup>	$I_{SC}$ [A]	11.21	11.24	11.26	11.29	11.31
	Open Circuit Voltage <sup>1</sup>	$V_{OC}$ [V]	53.54	53.58	53.61	53.64	53.68
	Current at MPP	$I_{MPP}$ [A]	10.62	10.66	10.71	10.76	10.81
	Voltage at MPP	$V_{MPP}$ [V]	44.27	44.54	44.81	45.07	45.33
	Efficiency <sup>1</sup>	$\eta$ [%]	≥20.3	≥20.5	≥20.7	≥20.9	≥21.2

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT<sup>2</sup>

Minimum	Power at MPP	$P_{MPP}$ [W]	352.6	356.4	360.1	363.9	367.6
	Short Circuit Current	$I_{SC}$ [A]	9.03	9.05	9.07	9.09	9.12
	Open Circuit Voltage	$V_{OC}$ [V]	50.49	50.53	50.56	50.59	50.62
	Current at MPP	$I_{MPP}$ [A]	8.34	8.39	8.43	8.47	8.52
	Voltage at MPP	$V_{MPP}$ [V]	42.26	42.49	42.72	42.94	43.17

<sup>1</sup>Measurement tolerances  $P_{MPP} \pm 3\%$ ;  $I_{SC}$ ;  $V_{OC} \pm 5\%$  at STC: 1000 W/m<sup>2</sup>, 25 ± 2 °C, AM 1.5 according to IEC 60904-3 • <sup>2</sup>800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5

## Qcells PERFORMANCE WARRANTY

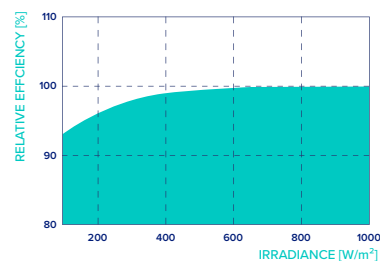


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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

## TEMPERATURE COEFFICIENTS

Temperature Coefficient of $I_{SC}$	$\alpha$ [%/K]	+0.04	Temperature Coefficient of $V_{OC}$	$\beta$ [%/K]	-0.27
Temperature Coefficient of $P_{MPP}$	$\gamma$ [%/K]	-0.34	Nominal Module Operating Temperature	NMOT [°C]	43 ± 3

## Properties for System Design

Maximum System Voltage	$V_{SYS}$ [V]	1500	PV module classification	Class II
Maximum Reverse Current	$I_R$ [A]	20	Fire Rating based on ANSI/UL 61730	C / TYPE 1
Max. Design Load, Push/Pull	[Pa]	3600/2000	Permitted Module Temperature on Continuous Duty	-40 °C - +85 °C
Max. Test Load, Push/Pull	[Pa]	5400/3000		

## Qualifications and Certificates

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



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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