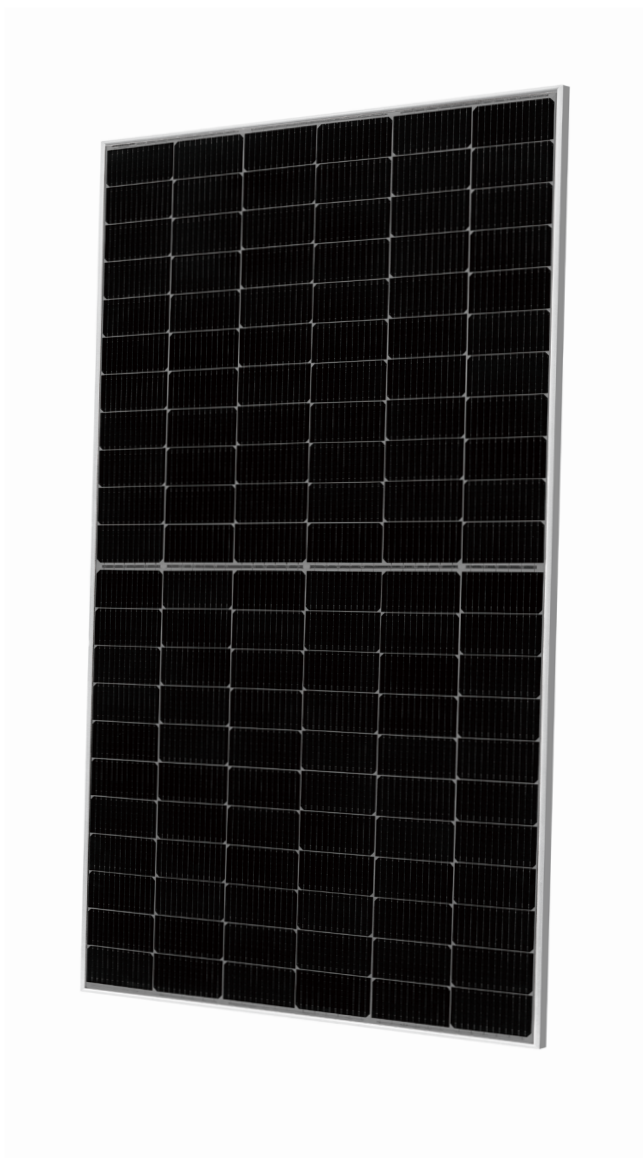


Q.PEAK DUO ML-G11S+ SERIES



480 - 505 Wp | 132 Cells
21.3% Maximum Module Efficiency

MODEL Q.PEAK DUO ML-G11S.2+



A reliable investment

Inclusive 25-year product warranty and 25-year linear performance warranty¹.



Enduring high performance

Long-term yield security with Anti LeTID Technology and Hot-Spot Protect.



The most thorough testing programme in the industry

Qcells is the first solar module manufacturer to pass the most comprehensive quality programme in the industry: The new "Quality Controlled PV" of the independent certification institute TÜV Rheinland.



Breaking the 21% efficiency barrier

Q.ANTUM DUO Technology with optimized module layout boosts module power.



Extreme weather rating

High-tech aluminium alloy frame, certified 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 behaviour.

¹ See data sheet on rear for further information.

The ideal solution for:



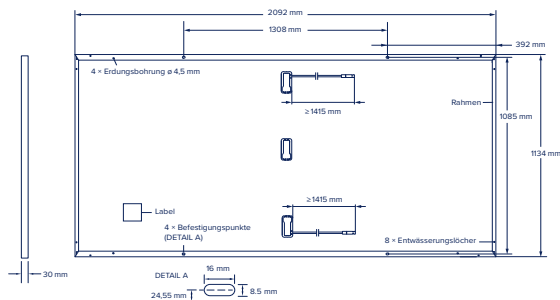
Rooftop arrays on commercial/industrial buildings



Q.PEAK DUO ML-G11S+ SERIES

Mechanical Specification

Format	2092 mm × 1134 mm × 30 mm (including frame)
Weight	25.7 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodized aluminium
Cell	6 × 22 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 ² Solar cable; (+) ≥1415 mm, (-) ≥1415 mm
Connector	Stäubli MC4-Evo2, Hanwha Q CELLS HQC4; IP68

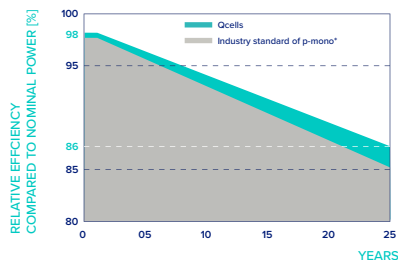


Electrical Characteristics

POWER CLASS		480	485	490	495	500	505	
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5 W/-0 W)								
Minimum	Power at MPP ¹	P_{MPP} [W]	480	485	490	495	500	505
	Short Circuit Current ¹	I_{SC} [A]	13.82	13.85	13.88	13.91	13.94	13.97
	Open Circuit Voltage ¹	V_{OC} [V]	45.24	45.27	45.3	45.32	45.35	45.38
	Current at MPP	I_{MPP} [A]	13.05	13.11	13.16	13.22	13.28	13.34
	Voltage at MPP	V_{MPP} [V]	36.79	37.01	37.23	37.44	37.66	37.87
	Efficiency ¹	η [%]	≥20.2	≥20.4	≥20.7	≥20.9	≥21.1	≥21.3
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ²								
Minimum	Power at MPP	P_{MPP} [W]	360.1	363.9	367.6	371.4	375.1	378.9
	Short Circuit Current	I_{SC} [A]	11.13	11.16	11.18	11.21	11.23	11.26
	Open Circuit Voltage	V_{OC} [V]	42.66	42.69	42.72	42.74	42.77	42.79
	Current at MPP	I_{MPP} [A]	10.25	10.30	10.35	10.4	10.45	10.5
	Voltage at MPP	V_{MPP} [V]	35.14	35.33	35.52	35.71	35.89	36.07

¹Measurement tolerances $P_{MPP} \pm 3\%$; I_{SC} ; $V_{OC} \pm 5\%$ at STC: 1000 W/m², 25 ± 2 °C, AM 1.5 according to IEC 60904-3 • ²800 W/m², NMOT, spectrum AM 1.5

Qcells PERFORMANCE WARRANTY

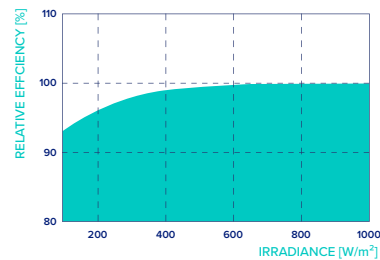


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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

¹Standard 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]	43 ± 3

Properties for System Design

Maximum System Voltage	V_{SYS} [V]	1500	PV module classification	Class II
Maximum Reverse Current	I_R [A]	25	Fire Rating based on ANSI/UL 61730	C / TYPE 1
Max. Design Load, Push/Pull	[Pa]	3600/1600	Permitted Module Temperature on Continuous Duty	-40 °C - +85 °C
Max. Test Load, Push/Pull	[Pa]	5400/2400		

Qualifications and Certificates

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



Made in China

Packaging Information



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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