

Q.PEAK DUO M-G11A SERIES



390 - 410 Wp | 108 Cells
21.4% Maximum Module Efficiency

MODEL Q.PEAK DUO M-G11A



Breaking the 21% efficiency barrier

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 21.4%.



Enduring high performance

Long-term yield security with Anti LeTID Technology, Anti PID Technology¹, Hot-Spot Protect.



Extreme weather rating

High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (3600 Pa).



Innovative all-weather technology

Optimal yields, whatever the weather with excellent low-light and temperature behaviour.



A reliable investment

Inclusive 12-year product warranty and 25-year linear performance warranty².



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.

¹ APT test conditions according to IEC/TS 62804-1:2015, method A (-1500 V, 96 h)

² See data sheet on rear for further information.

The ideal solution for:



Rooftop arrays on residential buildings



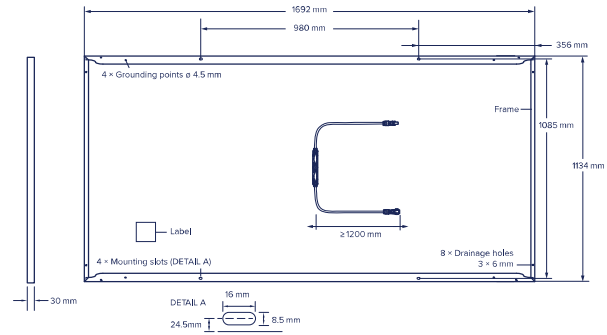
Rooftop arrays on commercial/industrial buildings



Q.PEAK DUO M-G11A SERIES

Mechanical Specification

Format	1692 mm × 1134 mm × 30 mm (including frame)
Weight	20.9 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodised aluminium
Cell	6 × 18 monocrystalline Q.ANTUM solar half cells
Junction box	225 mm × 30 mm × 15 mm Protection class IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥ 1200 mm, (-) ≥ 1200 mm
Connector	Stäubli MC4, Hanwha Q CELLS HQC4; IP68



Electrical Characteristics

POWER CLASS	390	395	400	405	410
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MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W/-0 W)

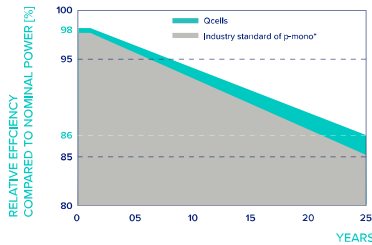
Minimum	Power at MPP ¹	P _{MPP} [W]	390	395	400	405	410
	Short Circuit Current ¹	I _{SC} [A]	13.46	13.50	13.54	13.57	13.61
	Open Circuit Voltage ¹	V _{OC} [V]	37.10	37.13	37.16	37.18	37.21
	Current at MPP	I _{MPP} [A]	12.76	12.83	12.90	12.97	13.04
	Voltage at MPP	V _{MPP} [V]	30.56	30.78	31.00	31.22	31.43
	Efficiency ¹	η [%]	≥ 20.3	≥ 20.6	≥ 20.8	≥ 21.1	≥ 21.4

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

Minimum	Power at MPP	P _{MPP} [W]	292.6	296.3	300.1	303.8	307.6
	Short Circuit Current	I _{SC} [A]	10.85	10.88	10.91	10.94	10.97
	Open Circuit Voltage	V _{OC} [V]	34.99	35.01	35.04	35.07	35.09
	Current at MPP	I _{MPP} [A]	10.03	10.10	10.16	10.22	10.28
	Voltage at MPP	V _{MPP} [V]	29.16	29.35	29.54	29.72	29.91

¹Measurement tolerances P_{MPP} ± 3%; I_{SC}; V_{OC} ± 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

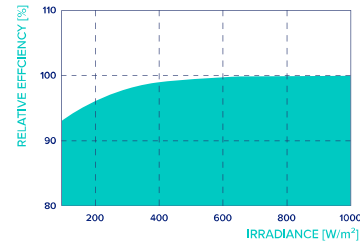


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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

*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]	43 ± 3

Properties for System Design

Maximum System Voltage	V _{sys} [V]	1000	PV module classification	Class II
Maximum Reverse Current	I _r [A]	25	Fire Rating based on ANSI/UL 61730	C / TYPE 2
Max. Design Load, Push/Pull	[Pa]	3600/2400	Permitted Module Temperature on Continuous Duty	-40 °C - +85 °C
Max. Test Load, Push/Pull	[Pa]	5400/3600		

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. Hanwha Q CELLS GmbH Sonnenallee 17-21, 06766 Bitterfeld-Wolfen, Germany | TEL +49 (0)3494 66 99-23444 | FAX +49 (0)3494 66 99-23000 | EMAIL sales@q-cells.com | WEB www.qcells.com

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