Q.PEAK DUO M-G11 SERIES

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

MODEL Q.PEAK DUO M-G11



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 Technology[1] and 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 warranty[2].

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:

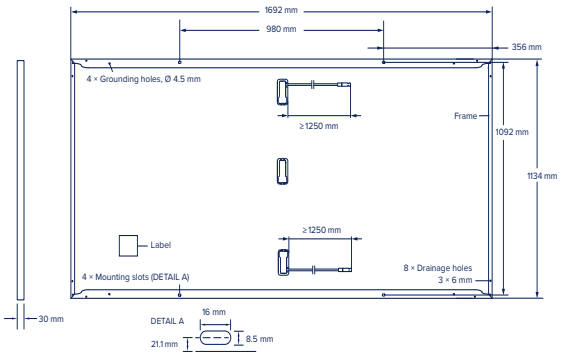
Rooftop arrays on residential buildings

Rooftop arrays on commercial / industrial buildings

Q.PEAK DUO M-G11 SERIES

Mechanical Specification

Format	1692 mm × 1134 mm × 30 mm (including frame)
Weight	21.2 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	53-101 mm × 32-60 mm × 15-18 mm Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥1250 mm, (−) ≥1250 mm
Connector	Stäubli MC4, Hanwha Q CELLS HQC4; IP68

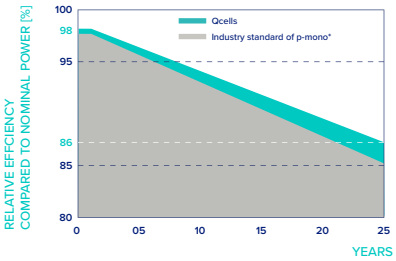


Electrical Characteristics

POWER CLASS				390	395	400	405	410
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (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, NMOT[2]								
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

[1]Measurement 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 • [2]800 W/m², NMOT, spectrum AM 1.5

Qcells PERFORMANCE WARRANTY

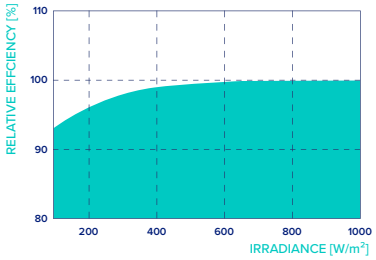


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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.

TÜV Rheinland CERTIFIED
www.tuv.com ID 1111220277

UK CA CE

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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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