Q.PEAK DUO M-G11S SERIES



400-420 Wp | 108 Cells 21.5 % Maximum Module Efficiency

MODEL Q.PEAK DUO M-G11S





Breaking the 21% efficiency barrier

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



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 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:





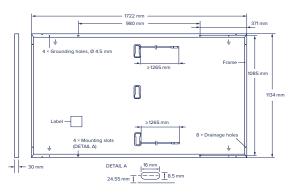
Rooftop arrays on commercial/industrial buildings



Q.PEAK DUO M-G11S SERIES

Mechanical Specification

Format	1722 mm × 1134 mm × 30 mm (including frame)
Weight	21.1 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; (+) ≥1265 mm, (-) ≥1265 mm
Connector	Stäubli MC4, Hanwha Q CELLS HQC4; IP68



Electrical Characteristics

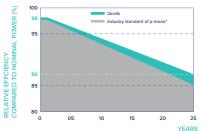
POWER CLASS			400	405	410	415	420			
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC! (POWER TOLERANCE +5 W/-0 W)										
Power at MPP ¹	P _{MPP}	[W]	400	405	410	415	420			
Short Circuit Current ¹	I _{sc}	[A]	13.88	13.91	13.95	13.99	14.03			
Open Circuit Voltage ¹	V _{oc}	[V]	37.06	37.09	37.11	37.14	37.17			
Current at MPP	I _{MPP}	[A]	13.16	13.23	13.30	13.37	13.44			
Voltage at MPP	V _{MPP}	[V]	30.40	30.62	30.83	31.05	31.26			
Efficiency ¹	η	[%]	≥20.5	≥20.7	≥21.0	≥21.3	≥21.5			

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

Minimum	Power at MPP	P _{MPP}	[W]	300.1	303.8	307.6	311.3	315.1
	Short Circuit Current	I _{sc}	[A]	11.18	11.21	11.24	11.27	11.30
	Open Circuit Voltage	V _{oc}	[V]	34.95	34.97	35.00	35.03	35.05
	Current at MPP	I _{MPP}	[A]	10.34	10.41	10.47	10.53	10.59
	Voltage at MPP	$V_{\rm MPP}$	[V]	29.01	29.20	29.38	29.56	29.74

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

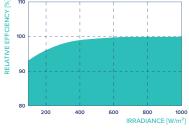
Qcells PERFORMANCE WARRANTY



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.

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

TEMPERATURE COEFFICIENTS

*Standard terms of guarantee for the 5 PV companies with the

highest production capacity in 2021 (February 2021)

Temperature Coefficient of Isc	α	[%/K]	+0.04	Temperature Coefficient of Voc	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	-40°C - +85°C
Max. Test Load, Push/Pull		[Pa]	5400/3600	on Continuous Duty	

Qualifications and Certificates

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







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 I TEL +49 (0)3494 66 99-23444 | FAX +49 (0)3494 66 99-23000 | EMAIL sales@q-cells.com | WEB www.qcells.com

