Q.PEAK DUO BLK M-G11S SERIES



390-410 Wp | 108 Cells 21.0% Maximum Module Efficiency

MODEL Q.PEAK DUO BLK 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, 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 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.









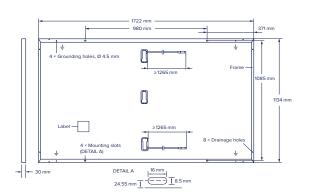
¹ APT test conditions according to IEC/TS 62804-1:2015, method A (-1500 V, 96 h)

² See data sheet on rear for further information

Q.PEAK DUO BLK M-G11S SERIES

■ Mechanical Specification

Format	$1722 \text{mm} \times 1134 \text{mm} \times 30 \text{mm}$ (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

PC	OWER CLASS			390	395	400	405	410	
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC1 (POWER TOLERANCE +5W/-0W)									
	Power at MPP ¹	P_{MPP}	[W]	390	395	400	405	410	
_	Short Circuit Current ¹	I _{sc}	[A]	13.61	13.65	13.68	13.72	13.76	
unu.	Open Circuit Voltage ¹	V _{oc}	[V]	37.02	37.04	37.07	37.10	37.13	
Mini	Current at MPP	I _{MPP}	[A]	12.88	12.95	13.02	13.09	13.16	
2	Voltage at MPP	V_{MPP}	[V]	30.27	30.49	30.71	30.93	31.14	
	Efficiency ¹	η	[%]	≥20.0	≥20.2	≥20.5	≥20.7	≥21.0	
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ²									
	Power at MPP	P_{MPP}	[W]	292.6	296.3	300.1	303.8	307.6	
Ę	Short Circuit Current	I _{sc}	[A]	10.97	11.00	11.03	11.06	11.09	
ĬË.	Open Circuit Voltage	V _{oc}	[V]	34.91	34.93	34.96	34.99	35.01	
Ξ	Current at MPP	I _{MPP}	[A]	10.12	10.19	10.25	10.31	10.38	

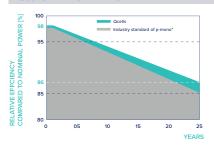
28 90

 V_{MPP} $^{1}\text{Measurement tolerances P}_{\text{MPP}} \pm 3\,\%; I_{\text{SC}}; V_{\text{OC}} \pm 5\,\% \text{ at STC: } 1000\,\text{W/m}^{2}, 25 \pm 2\,^{\circ}\text{C}, \text{AM 1.5 according to IEC 60904-3} \bullet ^{2}\text{800 W/m}^{2}, \text{NMOT, spectrum AM 1.5}$

[V]

Qcells PERFORMANCE WARRANTY

Voltage at MPP



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 Ocells sales organisation of your respective country.

*Standard terms of guarantee for the 5 PV companies with the highest production capacity in 2021 (February 2021)

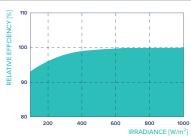
PERFORMANCE AT LOW IRRADIANCE

29.09

29 28

29.46

29.65



Typical module performance under low irradiance conditions in comparison to STC conditions ($25\,^{\circ}\text{C}$, $1000\,\text{W/m}^2$).

TEMPERATURE COEFFICIENTS							
Temperature Coefficient of I _{sc}	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.







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