Q.MAXX BLK-G4+ SERIES



390-400 Wp | 108 Cells 20.8 % Maximum Module Efficiency

MODEL Q.MAXX BLK-G4+





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.



More suitable size for residential installation

With its length less than 1700 mm, Q.MAXX BLK-G4+ provides with easier system designs and installations.



Breaking the 20% efficiency barrier

Q.ANTUM DUO Z technology with zero gap cell layout boosts module efficiency up to $20.8\,\%$.



Extreme weather rating

High-tech aluminium alloy frame, certified for high snow (8100 Pa) and wind loads (4000 Pa).



Innovative all-weather technology

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

The ideal solution for:





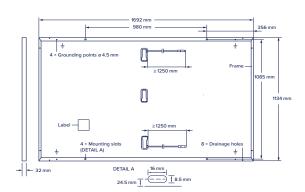




¹ See data sheet on rear for further information.

■ Mechanical Specification

Format	1692 mm × 1134 mm × 32 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	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

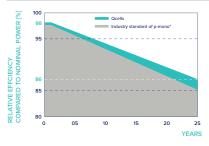
PC	WER CLASS			390	400
MIN	IIMUM PERFORMANCE AT STANDARD TI	EST CONDITIONS, ST	C (POWER TOLERANCE +5 W/-5 W)		
	Power at MPP ¹	P _{MPP}	[W]	390	400
	Short Circuit Current ¹	I _{sc}	[A]	13.34	13.41
III (Open Circuit Voltage ¹	V _{oc}	[V]	37.13	37.18
Minir	Current at MPP	I _{MPP}	[A]	12.68	12.82
	Voltage at MPP	V_{MPP}	[V]	30.77	31.21
	Efficiency ¹	η	[%]	≥20.3	≥20.8

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

	Power at MPP	P_{MPP}	[W]	292.6	300.1
트	Short Circuit Current	I _{sc}	[A]	10.75	10.81
ij	Open Circuit Voltage	V _{oc}	[V]	35.01	35.07
Ē	Current at MPP	I _{MPP}	[A]	9.97	10.10
	Voltage at MPP	V _{MPP}	[V]	29.34	29.72

'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 • ²800 W/m², NMOT, spectrum AM 1.5

Qcells PERFORMANCE WARRANTY

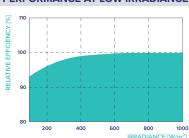


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the 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



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 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]	5400/2660	Permitted Module Temperature	-40°C - +85°C
Max. Test Load, Push/Pull		[Pa]	8100/4000	on Continuous Duty	

■ Qualifications and Certificates

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

Quality Controlled PV -



■ Packaging Information













30 pallets







specifications subject to technical changes © Qcells Q.MAXX_BLK-G4+_390-400_32T_2022-07_Rev01_AU