Q.MAXX-G5+ SERIES





405-415 Wp | 108 Cells 21.3% Maximum Module Efficiency

MODEL Q.MAXX-G5+





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 1722 mm, Q.MAXX-G5+ provides with easier system designs and installations.



Breaking the 21% efficiency barrier

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



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.

The ideal solution for:







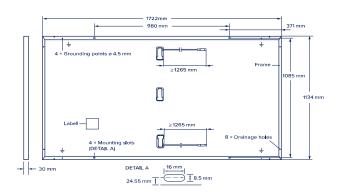


¹See data sheet on rear for further information.

Q.MAXX-G5+ 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

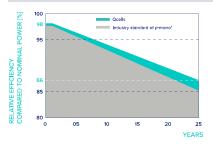
PC	WER CLASS			405	415		
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC1 (POWER TOLERANCE +5W/-5W)							
	Power at MPP ¹	P _{MPP}	[W]	405	415		
_	Short Circuit Current ¹	I _{sc}	[A]	13.91	13.99		
mu.	Open Circuit Voltage ¹	V _{oc}	[V]	37.09	37.14		
Minir	Current at MPP	I _{MPP}	[A]	13.23	13.37		
	Voltage at MPP	V_{MPP}	[V]	30.62	31.05		
	Efficiency ¹	η	[%]	≥20.7	≥21.3		

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

Minimum	Power at MPP	P _{MPP}	[W]	303.8	311.3
	Short Circuit Current	I _{sc}	[A]	11.21	11.27
	Open Circuit Voltage	V_{oc}	[V]	34.97	35.03
	Current at MPP	I _{MPP}	[A]	10.41	10.53
	Voltage at MPP	V _{MPP}	[V]	29.20	29.56

 $^{1}\text{Measurement tolerances P}_{\text{MPP}} \pm 3\,\%; I_{\text{SC}}; V_{\text{OC}} \pm 5\,\% \text{ at STC: } 1000\,\text{W/m}^{2}, 25\pm 2\,^{\circ}\text{C}, \text{AM 1.5 according to IEC 60904-3} \bullet ^{2}800\,\text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800\,\text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800\,\text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800\,\text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800\,\text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800\,\text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800\,\text{W/m}^{2}, \text{NMOT, spectrum AM 1.5} \bullet ^{2}8000\,\text{W/m}^{2}, \text{NMOT, spectrum AM 1.5$

Qcells PERFORMANCE WARRANTY

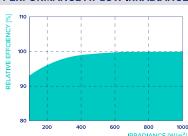


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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 °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	V	[%/K]	-0.34	Nominal Module Operating Temperature	NMOT	l,CJ	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.



■ Packaging Information



















