# Q.MAXX-G4+ SERIES



400-410 Wp | 108 Cells 21.4% Maximum Module Efficiency

**MODEL** Q.MAXX-G4+





### A reliable investment

Inclusive 25-year product warranty and 25-year linear performance warranty<sup>1</sup>.



### **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-G4+ provides with easier system designs and installations.



### Breaking the 21% efficiency barrier

Q.ANTUM DUO Z technology with zero gap cell layout boosts module efficiency up to 21.4%.



### **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:



Rooftop arrays on residential buildings









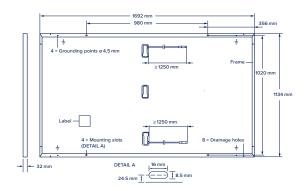


<sup>&</sup>lt;sup>1</sup> See data sheet on rear for further information.

### Q.MAXX-G4+ SERIES

### ■ 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



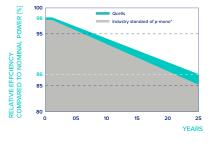
#### ■ Electrical Characteristics

POWER CLASS			400	410
MINIMUM PERFORMANCE AT STANDAR	RD TEST CONDITIONS, ST	C1 (POWER TOLERANCE +5 W/-5 W)		
Power at MPP <sup>1</sup>	P <sub>MPP</sub>	[W]	400	410
Short Circuit Current <sup>1</sup>	I <sub>sc</sub>	[A]	13.54	13.61
Open Circuit Voltage <sup>1</sup>	V <sub>oc</sub>	[V]	37.16	37.21
Current at MPP	I <sub>MPP</sub>	[A]	12.90	13.04
Voltage at MPP	V <sub>MPP</sub>	[V]	31.00	31.43
Efficiency <sup>1</sup>	η	[%]	≥20.8	≥21.4
INIMUM PERFORMANCE AT NORMAL	OPERATING CONDITION	S, NMOT <sup>2</sup>		
Power at MPP	P <sub>MPP</sub>	[W]	300.1	307.6
Charles in Constant		[A]	10.01	40.07

	Power at MPP	$P_{MPP}$	[W]	300.1	307.6
Ę	Short Circuit Current	I <sub>sc</sub>	[A]	10.91	10.97
je j	Open Circuit Voltage	V <sub>oc</sub>	[V]	35.04	35.09
Ξ	Current at MPP	I <sub>MPP</sub>	[A]	10.16	10.28
	Voltage at MPP	V <sub>MPP</sub>	[V]	29.54	29.91

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

### **Qcells PERFORMANCE WARRANTY**

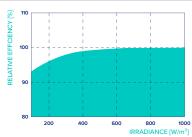


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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 <sub>sc</sub>	α	[%/K]	+0.04	Temperature Coefficient of V <sub>oc</sub>	β	[%/K]	-0.27	
Temperature Coefficient of P <sub>MPP</sub>	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 <sub>R</sub>	[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
May 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

















**ocells** 





1270mm

727kg

30 pallets

26 pallets 33 modules



<sup>\*</sup>More suitable size for residential installation.