



## POLYCRYSTALLINE SOLAR MODULE

# Q.PRO-G3 240-255

Reliability. Safety.

The new **Q.PRO-G3** is the reliable evergreen. The third module generation from Q.CELLS has been optimised across the board: improved output yield, higher operating reliability and durability, quicker installation and more intelligent design.

### INNOVATIVE ALL-WEATHER TECHNOLOGY

- Maximum yields whatever the weather with **excellent low-light and temperature behaviour**.
- Increased cell efficiency ratio of up to 19.5% due to utilisation of **world record-holding cell concept Q.ANTUM**.

### ENDURING HIGH PERFORMANCE

- **Long-term Yield Security** due to Anti PID Technology<sup>1</sup>, Hot-Spot Protect, and Traceable Quality Tra.Q™.
- **Long-term stability** due to **VDE Quality Tested** – the strictest test programme in the industry.

### LIGHTWEIGHT QUALITY FRAME

- Stability at **wind loads of up to 5400 Pa** with a **module weight of just 19 kg** due to slim frame design with high-tech alloy.

### PROFIT-INCREASING GLASS TECHNOLOGY

- **Reduction of light reflection** by 50%, plus **long-term corrosion resistance** due to high-quality “Sol-Gel roller coating” processing.

### SAFE ELECTRONICS

- **Protection against short circuits** and **thermally induced power losses** due to breathable junction box and welded cables.
- **Increased flexibility** due to MC4-combinable connectors – one tool for all.

### MAXIMUM COST REDUCTIONS

- Up to **35% lower logistics costs** due to higher module capacity per box.

### EXTENDED GUARANTEES

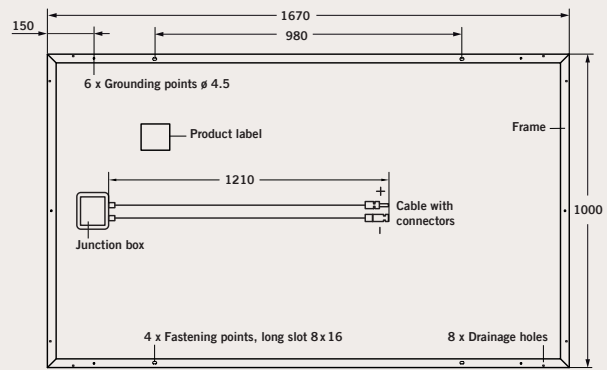
- Investment security due to **12-year product guarantee** and **25-year linear performance guarantee**<sup>2</sup>.



<sup>1</sup> APT test conditions: Cells at -1000 V against grounded, with conductive metal foil covered module surface, 25 °C, 168 h (TÜV test conditions)  
<sup>2</sup> See data sheet on rear for further information.

## MECHANICAL SPECIFICATION

<b>Format</b>	1670 mm x 1000 mm x 35 mm (including frame)
<b>Weight</b>	19 kg
<b>Front Cover</b>	3.2 mm thermally pre-stressed glass with antireflection coating (ARC)
<b>Back Cover</b>	Composite film
<b>Frame</b>	Anodised aluminum
<b>Cell</b>	6 x 10 polycrystalline solar cells (Q.ANTUM)
<b>Junction box</b>	110 mm x 115 mm x 23 mm Protection class IP67, with bypass diodes
<b>Cable</b>	4 mm <sup>2</sup> Solar cable; (+) 1210 mm, (-) 1210 mm
<b>Connector</b>	SOLARLOK PV4, IP68



## ELECTRICAL CHARACTERISTICS

PERFORMANCE AT STANDARD TEST CONDITIONS (STC: 1000 W/M<sup>2</sup>, 25 °C, AM 1.5 G SPECTRUM)<sup>1</sup>

NOMINAL POWER (+5 W/-0 W)		[W]	240	245	250	255
<b>Average Power</b>	P <sub>MPP</sub>	[W]	242.5	247.5	252.5	257.5
<b>Short Circuit Current</b>	I <sub>SC</sub>	[A]	8.76	8.85	8.94	9.03
<b>Open Circuit Voltage</b>	V <sub>OC</sub>	[V]	37.35	37.56	37.78	37.99
<b>Current at P<sub>MPP</sub></b>	I <sub>MPP</sub>	[A]	8.20	8.32	8.45	8.57
<b>Voltage at P<sub>MPP</sub></b>	V <sub>MPP</sub>	[V]	29.57	29.73	29.89	30.04
<b>Efficiency (Nominal Power)</b>	η	[%]	≥ 14.4	≥ 14.7	≥ 15.0	≥ 15.3

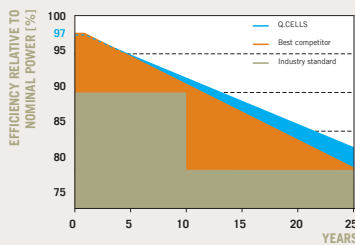
PERFORMANCE AT NORMAL OPERATING CELL TEMPERATURE (NOCT: 800 W/m<sup>2</sup>, 47 ± 3 °C, AM 1.5 G SPECTRUM)<sup>2</sup>

NOMINAL POWER (+5 W/-0 W)		[W]	240	245	250	255
<b>Average Power</b>	P <sub>MPP</sub>	[W]	176.8	180.5	184.1	187.8
<b>Short Circuit Current</b>	I <sub>SC</sub>	[A]	7.07	7.14	7.22	7.29
<b>Open Circuit Voltage</b>	V <sub>OC</sub>	[V]	34.29	34.49	34.69	34.89
<b>Current at P<sub>MPP</sub></b>	I <sub>MPP</sub>	[A]	6.56	6.65	6.75	6.85
<b>Voltage at P<sub>MPP</sub></b>	V <sub>MPP</sub>	[V]	26.97	27.12	27.27	27.42

<sup>1</sup> Measurement tolerances STC: ± 3% (P<sub>MPP</sub>); ± 10% (I<sub>SC</sub>, V<sub>OC</sub>, I<sub>MPP</sub>, V<sub>MPP</sub>)

<sup>2</sup> Measurement tolerances NOCT: ± 5% (P<sub>MPP</sub>); ± 10% (I<sub>SC</sub>, V<sub>OC</sub>, I<sub>MPP</sub>, V<sub>MPP</sub>)

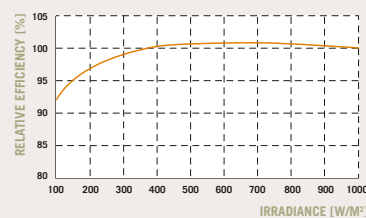
## Q.CELLS PERFORMANCE WARRANTY



At least 97% of nominal power during first year. Thereafter max. 0.6% degradation per year.  
At least 92% of nominal power after 10 years.  
At least 83% of nominal power after 25 years.

All data within measurement tolerances.  
Full warranties in accordance with the warranty terms of the Q.CELLS sales organization of your respective country.

## PERFORMANCE AT LOW IRRADIANCE



The typical change in module efficiency at an irradiance of 200 W/m<sup>2</sup> in relation to 1000 W/m<sup>2</sup> (both at 25 °C and AM 1.5 G spectrum) is -3% (relative).

## TEMPERATURE COEFFICIENTS (AT 1000 W/m<sup>2</sup>, 25 °C, AM 1.5 G SPECTRUM)

<b>Temperature Coefficient of I<sub>SC</sub></b>	α	[%/K]	+0.04	<b>Temperature Coefficient of V<sub>OC</sub></b>	β	[%/K]	-0.33
<b>Temperature Coefficient of P<sub>MPP</sub></b>	γ	[%/K]	-0.43				

## PROPERTIES FOR SYSTEM DESIGN

<b>Maximum System Voltage V<sub>sys</sub></b>	[V]	1000	<b>Safety Class</b>	II
<b>Maximum Reverse Current I<sub>r</sub></b>	[A]	20	<b>Fire Rating</b>	C
<b>Wind/Snow Load (in accordance with IEC 61215)</b>	[Pa]	5400	<b>Permitted module temperature on continuous duty</b>	-40 °C up to +85 °C

## QUALIFICATIONS AND CERTIFICATES

VDE Quality Tested, IEC 61215 (Ed.2); IEC 61730 (Ed.1), Application class A  
This data sheet complies with DIN EN 50380.



## PARTNER

**NOTE:** Installation instructions must be followed. See the installation and operating manual or contact the technical service for further information on approved installation and use of this product.