

**POLYCRYSTALLINE SOLAR MODULE DATA SHEET**

# Q.PRO BFR-G3 245-260

Versatility. Safety.

The new **Q.PRO BFR-G3** is the reliable evergreen for all applications, with a black frame design for improved aesthetics. 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 with **excellent low-light and temperature behaviour**.
- Certified fully resistant to level 5 salt fog

**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 program.

**SAFE ELECTRONICS**

- **Protection against short circuits and thermally induced power losses** due to breathable junction box and welded cables.
- **Increased flexibility** due to MC4-intermateable connectors.

**PROFIT-INCREASING GLASS TECHNOLOGY**

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

**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.

**MAXIMUM COST REDUCTIONS**

- Up to **31 % lower logistics costs** due to higher module capacity per box.

**EXTENDED WARRANTIES**

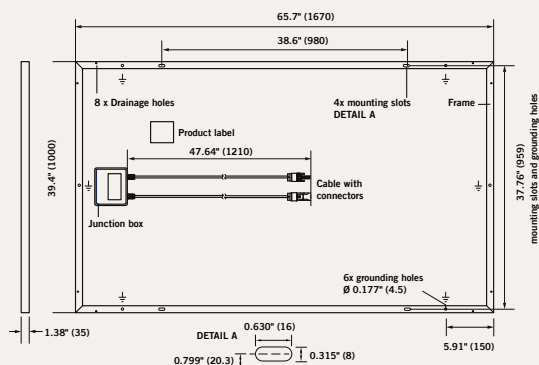
- Investment security due to **12-year product warranty** and **25-year linear performance warranty**<sup>2</sup>.



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

## MECHANICAL SPECIFICATION

<b>Format</b>	65.7 in x 39.4 in x 1.38 in (including frame) (1670 mm x 1000 mm x 35 mm)
<b>Weight</b>	41.89 lb (19.0 kg)
<b>Front Cover</b>	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
<b>Back Cover</b>	Composite film
<b>Frame</b>	Black anodized aluminum
<b>Cell</b>	6 x 10 polycrystalline solar cells
<b>Junction box</b>	Protection class IP67, with bypass diodes
<b>Cable</b>	4 mm <sup>2</sup> Solar cable; (+) 47.64 in (1210 mm), (-) 47.64 in (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]	245	250	255	260
<b>Average Power</b>	<b>P<sub>MPP</sub></b>	[W]	247.5	252.5	257.5	262.5
<b>Short Circuit Current</b>	<b>I<sub>SC</sub></b>	[A]	8.52	8.71	8.90	9.09
<b>Open Circuit Voltage</b>	<b>V<sub>OC</sub></b>	[V]	37.15	37.49	37.83	38.18
<b>Current at P<sub>MPP</sub></b>	<b>I<sub>MPP</sub></b>	[A]	8.05	8.21	8.37	8.53
<b>Voltage at P<sub>MPP</sub></b>	<b>V<sub>MPP</sub></b>	[V]	30.75	30.76	30.77	30.78
<b>Efficiency (Nominal Power)</b>	<b>η</b>	[%]	14.7	≥ 15.0	≥ 15.3	≥ 15.6

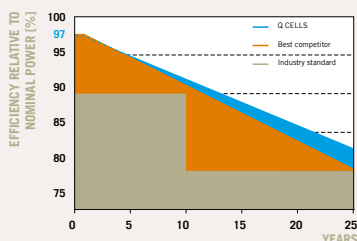
### PERFORMANCE AT NORMAL OPERATING CELL TEMPERATURE (NOCT: 800 W/m<sup>2</sup>, 45 ± 3 °C, AM 1.5 G SPECTRUM)<sup>2</sup>

NOMINAL POWER (+5 W/-0 W)		[W]	245	250	255	260
<b>Average Power</b>	<b>P<sub>MPP</sub></b>	[W]	182.4	186.0	189.7	193.4
<b>Short Circuit Current</b>	<b>I<sub>SC</sub></b>	[A]	6.87	7.03	7.18	7.33
<b>Open Circuit Voltage</b>	<b>V<sub>OC</sub></b>	[V]	34.36	34.68	34.99	35.31
<b>Current at P<sub>MPP</sub></b>	<b>I<sub>MPP</sub></b>	[A]	6.32	6.44	6.56	6.68
<b>Voltage at P<sub>MPP</sub></b>	<b>V<sub>MPP</sub></b>	[V]	28.86	28.89	28.92	28.94

<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>)

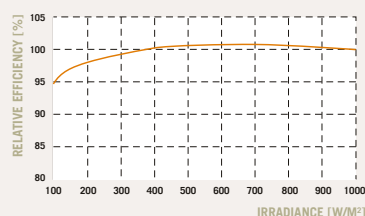
## Q CELLS PERFORMANCE WARRANTY



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 organisation 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 -2% (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>	<b>α</b>	[%/K]	+0.04	<b>Temperature Coefficient of V<sub>oc</sub></b>	<b>β</b>	[%/K]	-0.33
<b>Temperature Coefficient of P<sub>MPP</sub></b>	<b>γ</b>	[%/K]	-0.42				

## 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 °F up to 185 °F (-40 °C up to 85 °C)

## QUALIFICATIONS AND CERTIFICATES

UL 1703; VDE Quality Tested; CE-compliant;  
IEC 61215 (Ed.2); IEC 61730 (Ed.1) application class A



## PARTNER

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

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