

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 Technology¹, 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 warranty².









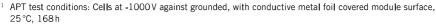


THE IDEAL SOLUTION FOR:





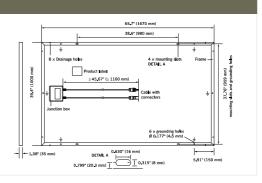




See data sheet on rear for further information.

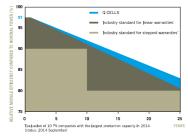


MECHANICAL SPECIFICATION					
Format	65.7 in \times 39.4 in \times 1.38 in (including frame) (1670 mm \times 1000 mm \times 35 mm)				
Weight	41.89 lb (19.0 kg)				
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology				
Back Cover	Composite film				
Frame	Black anodized aluminum				
Cell	6×10 polycrystalline solar cells				
Junction box	Protection class IP67, with bypass diodes				
Cable	4 mm² Solar cable; (+) \geq 45.67 in (1160 mm), (-) \geq 45.67 in (1160 mm)				
Connector	SOLARLOK PV4, IP68				



ELECTRICAL CHARACTERISTICS						
PERFORMANCE AT STANDARD TEST CONDITIONS (STC: 1000 W/m², 25°C, AM 1.5G SPECTRUM)¹						
NOMINAL POWER (+5 W/-0 W)		[W]	255	260	265	
Average Power	P _{MPP}	[W]	257.5	262,5	267.5	
Short Circuit Current	I _{sc}	[A]	8,90	9,09	9,28	
Open Circuit Voltage	V _{oc}	[V]	37.83	38.18	38.52	
Current at P _{MPP}	I _{MPP}	[A]	8.37	8.53	8.69	
Voltage at P _{MPP}	V _{MPP}	[V]	30.77	30.78	30.79	
Efficiency (Nominal Power)	η	[%]	≥15.3	≥15.6	≥15.9	
PERFORMANCE AT NORMAL OPERATING CELL TEMPERATURE (NOCT: 800 W/m², 45 ± 3 °C. AM 1.5 G SPECTRUM)²						
NOMINAL POWER (+5 W/-0 W)		[W]	255	260	265	
Average Power	P _{MPP}	[W]	189.7	193.4	197.1	
Short Circuit Current	I _{sc}	[A]	7.18	7,33	7.48	
Open Circuit Voltage	V _{oc}	[V]	35,22	35,54	35,86	
Current at P _{MPP}	I _{MPP}	[A]	6.56	6.68	6.80	
Voltage at P _{MPP}	V_{MPP}	[V]	28.92	28.94	28.97	
¹ Measurement tolerances STC: ±3% (P _{mpp}); ±	± 10 % (I _{sc} , V _{oc} , I _{mpp} , V	mpp)	² Measurement tolerances NOCT: ±	$5\% (P_{mpp}); \pm 10\% (I_{sc}, V_{oc}, I_{mpp}, V_{mpp})$		

Q CELLS PERFORMANCE WARRANTY

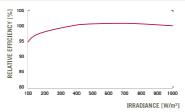


At least 97 % of nominal power during first year. Thereafter max. 0.6% degradation per year.
At least 92% of nominal power after

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/m² in relation to 1000 W/m² (both at 25 $^{\circ}\text{C}$ and AM 1.5 G spectrum) is -2 % (relative).

TEMPERATURE COEFFICIENTS (AT 1000 W/M², 25 °C, AM 1.5 G SPECTRUM)

PROPERTIES FOR SYSTEM DESIGN							
Temperature Coefficient of P _{MPP}	γ	[%/K]	-0.42	NOCT		[°F]	113 ± 5.4 (45 ± 3°C)
Temperature Coefficient of I _{sc}	α	[%/K]	+0.04	Temperature Coefficient of \mathbf{V}_{oc}	β	[%/K]	-0.30

PROPERTIES FOR SYSTEM DESIGN					
Maximum System Voltage V _{sys}	[V]	1000 (IEC) / 600 (UL)	Safety Class	II	
Maximum Series Fuse Rating	[A DC]	20	Fire Rating	С	
Max Load (UL) ²	[lbs/ft²]	75 (3600 Pa)	Permitted module temperature on continuous duty	-40°F up to +185°F (-40°C up to +85°C)	
Load Rating (UL) ²	[lbs/ft ²]	75 (3600 Pa)	² see installation manual		

QUALIFICATIONS AND CERTIFICATES	PACKAGING INFORMATION	
UL 1703; VDE Quality Tested; CE-compliant;	Number of Modules per Pallet	29
IEC 61215 (Ed.2); IEC 61730 (Ed.1) application class A	Number of Pallets per 53' Container	32
	Number of Pallets per 40' Container	26
C Certified US UL 17033 (2544:11)	Pallet Dimensions ($L \times W \times H$)	$68.5 \text{in} \times 44.5 \text{in} \times 46.0 \text{in}$ (1740 × 1130 × 1170 mm)
	Pallet Weight	1323 lb (600 kg)

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

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