Q.PRO BFR-G3 245-260

POLYCRYSTALLINE SOLAR MODULE

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.



Rooftop arrays on commercial/industrial buildings







 1 APT test conditions: Cells at -1000V against grounded, with conductive metal foil covered module surface, 25 °C, 168 h

² See data sheet on rear for further information.



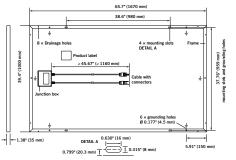




Engineered in Germany

MECHANICAL SPECIFICATION

Format	65.7 in \times 39.4 in x 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; (+) $\geq\!45.67\text{in}$ (1160 mm), (-) $\geq\!45.67\text{in}$ (1160 mm)
Connector	SOLARLOK PV4, IP68

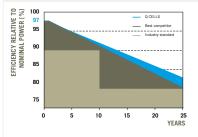


ELECTRICAL CHARACTERISTICS

PERFORMANCE AT STANDARD TEST COND	DITIONS (STC: 1000	W/m², 25°C, /	AM 1.5G SPECTRUM) ¹			
NOMINAL POWER (+5W/-0W)		[W]	245	250	255	260
Average Power	P _{MPP}	[W]	247.5	252.5	257.5	262.5
Short Circuit Current	I _{sc}	[A]	8.52	8.71	8.90	9.09
Open Circuit Voltage	V _{oc}	[V]	37.15	37.49	37.83	38.18
Current at P _{MPP}	I _{MPP}	[A]	8.05	8.21	8.37	8.53
Voltage at P _{MPP}	V _{MPP}	[V]	30.75	30.76	30.77	30.78
Efficiency (Nominal Power)	η	[%]	14.7	≥15.0	≥15.3	≥15.6
PERFORMANCE AT NORMAL OPERATING C	ELL TEMPERATURE	(NOCT: 800 W	//m², 45 ± 3 °C. AM 1.5 G	SPECTRUM) ²		
NOMINAL POWER (+5W/-0W)		[W]	245	250	255	260
Average Power	P _{MPP}	[W]	182.4	186.0	189.7	193.4
Short Circuit Current	I _{sc}	[A]	6.87	7.03	7.18	7.33
Open Circuit Voltage	V _{oc}	[V]	34.58	34.90	35.22	35.54
Current at P _{MPP}	I _{MPP}	[A]	6.32	6.44	6.56	6.68
Voltage at P _{MPP}	V _{MPP}	[V]	28.86	28.89	28.92	28.94
1 Mossurement tolorances STC + 3 % (P	1.+10% (1 V 1	V)				

 1 Measurement tolerances STC: ± 3 % (P_{_{mpp}}); ± 10 % (I $_{_{sc}}$, V $_{_{oc}}$, I $_{_{mpp}}$, V $_{_{mpp}}$)

Q CELLS PERFORMANCE WARRANTY

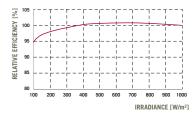


At least 97% of nominal power during first year. Thereafter max. 0.6% degradation per year.

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 °C and AM 1.5G spectrum) is -2 % (relative).

TEMPERATURE COEFFICIENTS (AT 100	00 W/M², 25 °C,	AM 1.5 G SF	ECTRUM)				
Temperature Coefficient of I _{sc}	α	%/K]	+0.04	Temperature Coefficient of V_{oc}	β	[%/K]	-0.30
Temperature Coefficient of $\mathbf{P}_{_{\mathbf{MPP}}}$	Ŷ	[%/K]	-0.42				
PROPERTIES FOR SYSTEM D	ESIGN						
Maximum System Voltage V _{sys}		[V]	1000	Safety Class	II		
Maximum Reverse Current I_{R}		[A]	20	Fire Rating	С		
Wind/Snow Load [Pa] (in accordance with IEC 61215)			5400	Permitted module temperature on continuous duty	-40 °F up to 185 °F (-40 °C up to 85 °C)		
QUALIFICATIONS AND CERTIN	FICATES			PARTNER			
UL 1703; VDE Quality Tested; CE-comp IEC 61215 (Ed.2); IEC 61730 (Ed.1) a		A					
	C Certified US						

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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