

# Q.PEAK BLK-G3 265-275

## MONOCRYSTALLINE SOLAR MODULE

With its top performances and completely black design, the new **Q.PEAK BLK-G3** is the aesthetic model athlete. 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 – Made in Europe.

### INNOVATIVE ALL-WEATHER TECHNOLOGY

- Maximum yields with excellent low-light and temperature behaviour.
- Increased cell efficiency due to full-square monocrystalline cells.

### 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-inter-mateable 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

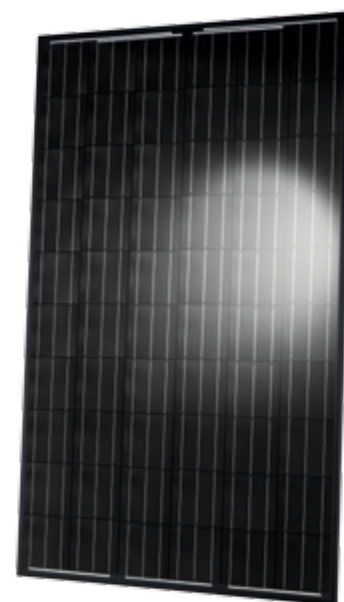
- Stability at wind loads of up to 5400 Pa with a module weight of just 19kg due to slim frame design with high-tech alloy.

### 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>.



## THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings

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

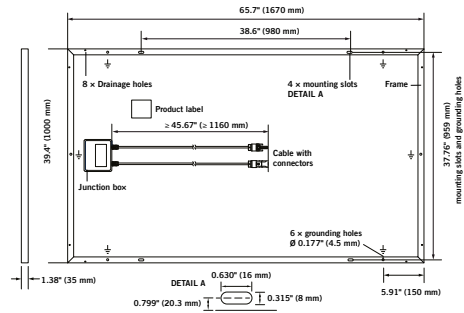
<sup>2</sup> See data sheet on rear for further information.

Engineered in **Germany**

**Q CELLS**

## MECHANICAL SPECIFICATION

<b>Format</b>	65.7 in × 39.4 in × 1.38 in (including frame) (1670 mm × 1000 mm × 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 × 10 monocrystalline solar cells
<b>Junction box</b>	4.33 in × 4.53 in × 0.9 in (110 mm × 115 mm × 23 mm), Protection class IP67, with bypass diodes
<b>Cable</b>	4 mm <sup>2</sup> Solar cable; (+) ≥ 45.67 in (1160 mm), (-) ≥ 45.67 in (1160 mm)
<b>Connector</b>	TYCO 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 (+5W/-0W)	[W]	265	270	275
<b>Average Power</b>	$P_{MPP}$ [W]	267.5	272.5	277.5
<b>Short Circuit Current</b>	$I_{sc}$ [A]	9.08	9.14	9.21
<b>Open Circuit Voltage</b>	$U_{oc}$ [V]	38.22	38.51	38.80
<b>Current at <math>P_{MPP}</math></b>	$I_{MPP}$ [A]	8.60	8.67	8.74
<b>Voltage at <math>P_{MPP}</math></b>	$U_{MPP}$ [V]	31.10	31.42	31.73
<b>Efficiency (Nominal Power)</b>	$\eta$ [%]	≥15.9	≥16.2	≥16.5

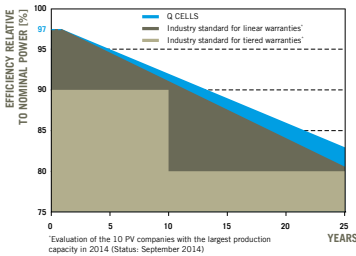
PERFORMANCE AT NORMAL OPERATING CELL TEMPERATURE (NOCT: 800 W/m<sup>2</sup>, 45 ± 3°C, AM 1.5 G SPECTRUM)<sup>2</sup>

NOMINAL POWER	[W]	265	270	275
<b>Average Power</b>	$P_{MPP}$ [W]	197.1	200.8	204.5
<b>Short Circuit Current</b>	$I_{sc}$ [A]	7.32	7.37	7.43
<b>Open Circuit Voltage</b>	$U_{oc}$ [V]	35.58	35.86	36.13
<b>Current at <math>P_{MPP}</math></b>	$I_{MPP}$ [A]	6.76	6.82	6.88
<b>Voltage at <math>P_{MPP}</math></b>	$U_{MPP}$ [V]	29.16	29.45	29.74

<sup>1</sup> Measurement tolerances STC: ±3% ( $P_{MPP}$ ); ±10% ( $I_{sc}$ ,  $V_{oc}$ ,  $I_{MPP}$ ,  $V_{MPP}$ )

<sup>2</sup> Measurement tolerances NOCT: ±5% ( $P_{MPP}$ ); ±10% ( $I_{sc}$ ,  $V_{oc}$ ,  $I_{MPP}$ ,  $V_{MPP}$ )

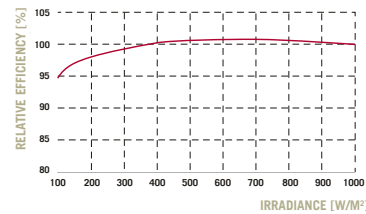
## Q CELLS PERFORMANCE WARRANTY



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/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 <math>I_{sc}</math></b>	$\alpha$ [%/K]	+0.04	<b>Temperature Coefficient of <math>V_{oc}</math></b>	$\beta$ [%/K]	-0.30
<b>Temperature Coefficient of <math>P_{MPP}</math></b>	$\gamma$ [%/K]	-0.42	<b>NOCT</b>	[°F]	113 ± 5.4 (45 ± 3°C)

## PROPERTIES FOR SYSTEM DESIGN

<b>Maximum System Voltage <math>V_{sys}</math></b>	[V]	1000 (IEC) / 1000 (UL)	<b>Safety Class</b>	II
<b>Maximum Series Fuse Rating</b>	[A DC]	20	<b>Fire Rating</b>	C / TYPE 1
<b>Max Load (UL)<sup>2</sup></b>	[lbs/ft <sup>2</sup> ]	75 (3600 Pa)	<b>Permitted module temperature on continuous duty</b>	-40°F up to +185°F (-40°C up to +85°C)
<b>Load Rating (UL)<sup>2</sup></b>	[lbs/ft <sup>2</sup> ]	75 (3600 Pa)	<sup>2</sup> see installation manual	

## QUALIFICATIONS AND CERTIFICATES

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



## PACKAGING INFORMATION

<b>Number of Modules per Pallet</b>	29
<b>Number of Pallets per 53' Container</b>	32
<b>Number of Pallets per 40' Container</b>	26
<b>Pallet Dimensions (L × W × H)</b>	68.5 in × 44.5 in × 46.0 in (1740 × 1130 × 1170 mm)
<b>Pallet Weight</b>	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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