

**Q.CELLS**  
YIELD SECURITY

- ✓ ANTI PID TECHNOLOGY (APT)
- ✓ HOT-SPOT PROTECT (HSP)
- ✓ TRACEABLE QUALITY (TRA.Q™)



## MONOCRYSTALLINE SOLAR MODULE

# Q.PEAK BLK 245-260

Top performance and appearance

The monocrystalline **Q.PEAK BLK** solar module with its power classes up to 260 W is the ultimate choice for demanding architectural PV solutions: Black cells, black frame and black back sheet. Made in Germany, **Q.PEAK BLK** boasts all that German engineering by Q.CELLS has to offer including our unique triple Yield Security.

### YOUR EXCLUSIVE TRIPLE YIELD SECURITY

- **Anti PID Technology (APT)** reliably prevents power loss resulting from unwanted leakage currents (potential-induced degradation)<sup>1</sup>.
- **Hot-Spot Protect (HSP)** prevents yield losses and reliably protects against module fire.
- **Traceable Quality (Tra.Q™)** is the ‚Finger Print‘ of a solar cell. Tra.Q™ ensures continuous quality control throughout the entire production process from cells to modules while making Q.CELLS solar modules forgery proof.

### ONE MORE ADVANTAGE FOR YOU

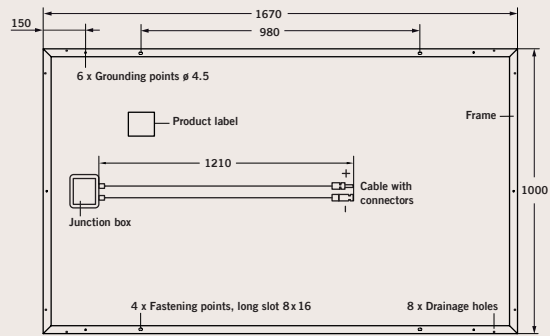
- **NEW! More energy output:** optimised light utilisation with non-corrosive anti-reflection technology.
- **Controlled quality:** Q.CELLS tests its solar modules in the world's largest module testing center at head office in Thalheim, Germany, longer and more stringently than prescribed in the standards.
- **Guaranteed performance:** Q.CELLS offers the best warranties on the market. A 10-year product warranty plus a 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 (TUV test conditions)  
<sup>2</sup> See data sheet on rear for further information.

## MECHANICAL SPECIFICATION

<b>Format</b>	1670 mm x 1000 mm x 50 mm (including frame)
<b>Weight</b>	19.8 kg
<b>Front Cover</b>	3.2 mm thermally pre-stressed glass with anti-reflection technology
<b>Back Cover</b>	Black composite film
<b>Frame</b>	Black anodized aluminum
<b>Cell</b>	6 x 10 monocrystalline solar cells
<b>Junction box</b>	116 mm x 153 mm x 20 mm Protection class IP 68, with bypass diodes
<b>Cable</b>	4 mm <sup>2</sup> Solar cable; (+) 1210 mm, (-) 1210 mm
<b>Connector</b>	Yamaichi Y-SOL4, IP 68



## ELECTRICAL CHARACTERISTICS

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

NOMINAL POWER (+5 / -0 W)		[W]	245	250	255	260
<b>Average Power</b>	$P_{MPP}$	[W]	247.5	252.5	257.5	262.5
<b>Short Circuit Current</b>	$I_{SC}$	[A]	8.67	8.75	8.82	8.90
<b>Open Circuit Voltage</b>	$V_{OC}$	[V]	37.74	37.94	38.14	38.33
<b>Current at <math>P_{MPP}</math></b>	$I_{MPP}$	[A]	8.16	8.26	8.35	8.45
<b>Voltage at <math>P_{MPP}</math></b>	$V_{MPP}$	[V]	30.32	30.58	30.83	31.08
<b>Efficiency (Nominal Power)</b>	$\eta$	[%]	≥ 14.7	≥ 15.0	≥ 15.3	≥ 15.6

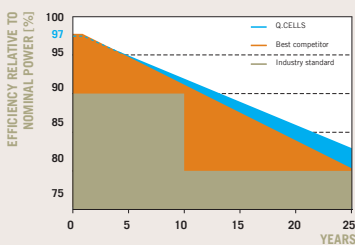
### PERFORMANCE AT NORMAL OPERATING CELL TEMPERATURE (NOCT: 800 W/m<sup>2</sup>, 47 ± 3 °C, AM 1.5 SPECTRUM)<sup>2</sup>

NOMINAL POWER (+5 / -0 W)		[W]	245	250	255	260
<b>Average Power</b>	$P_{MPP}$	[W]	180.6	184.3	187.9	191.6
<b>Short Circuit Current</b>	$I_{SC}$	[A]	6.99	7.06	7.12	7.19
<b>Open Circuit Voltage</b>	$V_{OC}$	[V]	34.66	34.85	35.03	35.21
<b>Current at <math>P_{MPP}</math></b>	$I_{MPP}$	[A]	6.53	6.60	6.68	6.75
<b>Voltage at <math>P_{MPP}</math></b>	$V_{MPP}$	[V]	27.68	27.92	28.16	28.61

<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 % ( $I_{SC}$ ,  $V_{OC}$ ,  $I_{MPP}$ ,  $V_{MPP}$ )

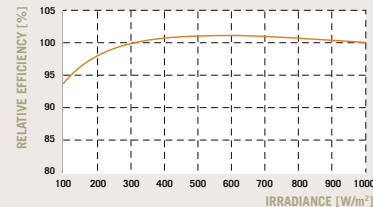
### Q.CELLS PERFORMANCE WARRANTY



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 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 -2% (relative).

### TEMPERATURE COEFFICIENTS (AT 1000 W/m<sup>2</sup>, 25 °C, AM 1.5 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]	-0.33
<b>Temperature Coefficient of <math>P_{MPP}</math></b>	$\gamma$	[%/K]	-0.43				

### PROPERTIES FOR SYSTEM DESIGN

<b>Maximum System Voltage <math>V_{SYS}</math></b>	[V]	1000	<b>Safety Class</b>	II
<b>Maximum Reverse Current <math>I_R</math></b>	[A]	20	<b>Fire Rating</b>	C
<b>Wind/Snow Load (tested 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

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.