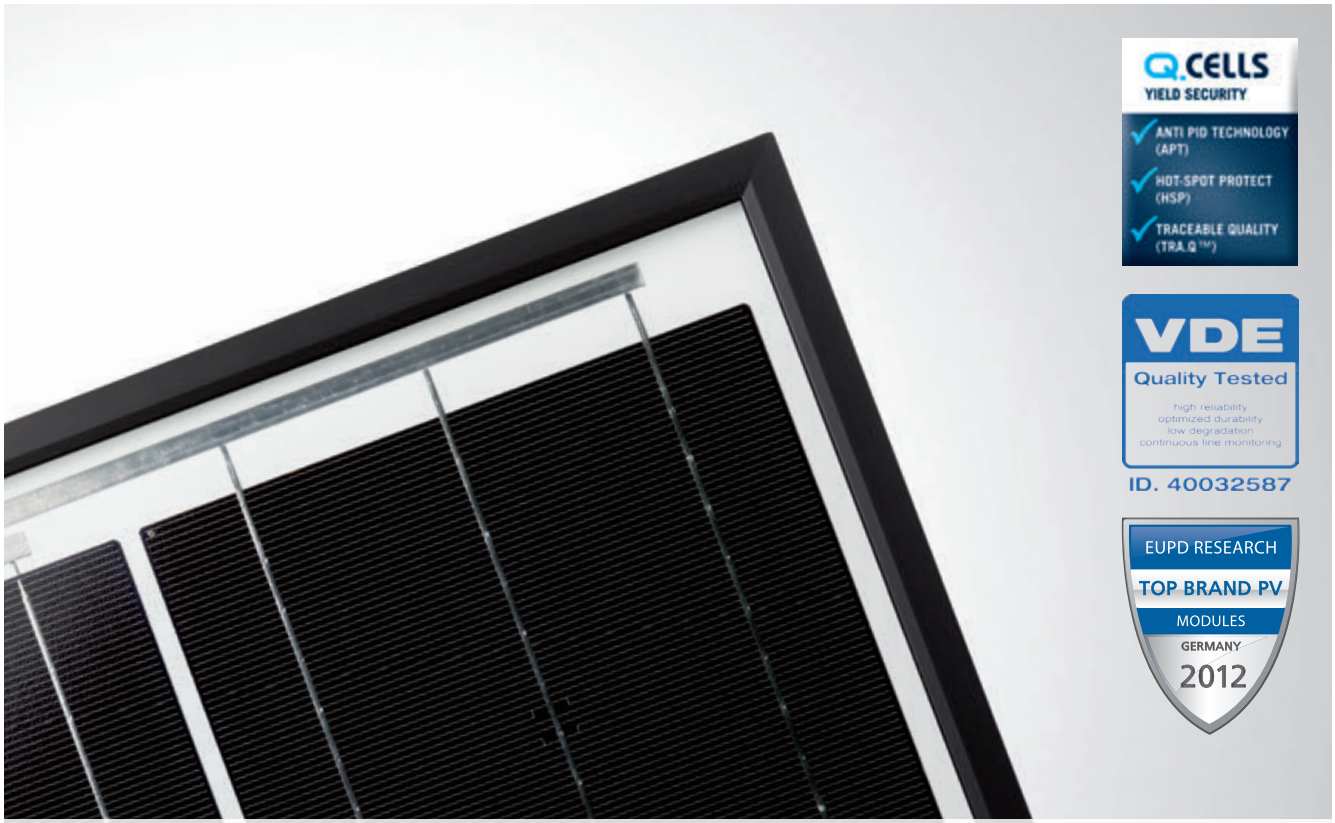


MONOCRYSTALLINE SOLAR MODULE

Q.PEAK S-G3 200-210

Compactness. High performance.

With its 48-cell design, the new Q.PEAK S-G3 is the compact powerhouse among the monocrystalline solar modules – perfectly fitting on small and angled roofs. 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 whatever the weather 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[1], Hot-Spot Protect, and Traceable Quality Tra.Q™.
- **Long-term stability** due to **VDE Quality Tested** – the strictest test programme in the industry.

LIGHTWEIGHT QUALITY FRAME

- Stability at **wind loads of up to 5400 Pa** with a **module weight of just 15.5 kg** due to slim frame design with high-tech alloy.

PROFIT-INCREASING GLASS TECHNOLOGY

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

SAFE ELECTRONICS

- **Protection against short circuits** and **thermally induced power losses** due to breathable junction box and welded cables.
- **Increased flexibility** due to MC4-combinable connectors – one tool for all.

MAXIMUM COST REDUCTIONS

- Up to **35 % lower logistics costs** due to higher module capacity per box.

EXTENDED GUARANTEES

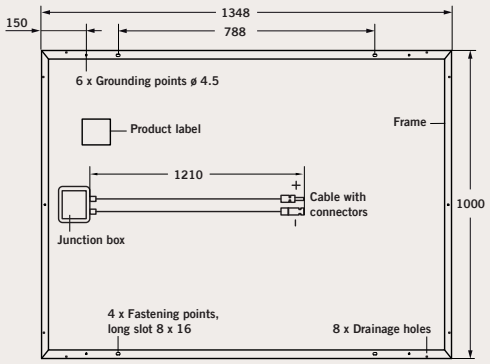
- Investment security due to **12-year product guarantee** and **25-year linear performance guarantee**[2].

[1] APT test conditions: Cells at -1000 V against grounded, with conductive metal foil covered module surface, 25 °C, 168 h (TÜV test conditions)
[2] See data sheet on rear for further information.

Q.CELLS

MECHANICAL SPECIFICATION

Format	1348 mm x 1000 mm x 35 mm (including frame)
Weight	15.5 kg
Front Cover	3.2 mm thermally pre-stressed glass with antireflection coating (ARC)
Back Cover	Composite film
Frame	Black anodised aluminum
Cell	6 x 8 monocrystalline solar cells
Junction box	110 mm x 115 mm x 23 mm Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) 1210 mm, (-) 1210 mm
Connector	SOLARLOK PV4, IP68



ELECTRICAL CHARACTERISTICS

PERFORMANCE AT STANDARD TEST CONDITIONS (STC: 1000 W/M², 25 °C, AM 1.5 G SPECTRUM)[1]

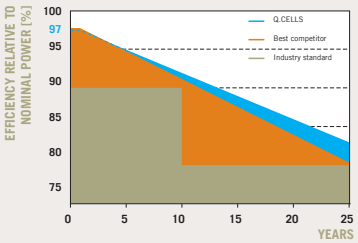
NOMINAL POWER (+5 W/-0 W)		[W]	200	205	210
Average Power	P_{MPP}	[W]	202.5	207.5	212.5
Short Circuit Current	I_{SC}	[A]	9.07	9.14	9.21
Open Circuit Voltage	V_{OC}	[V]	29.76	30.15	30.53
Current at P_{MPP}	I_{MPP}	[A]	8.42	8.53	8.63
Voltage at P_{MPP}	V_{MPP}	[V]	24.04	24.33	24.62
Efficiency (Nominal Power)	η	[%]	≥14.8	≥15.2	≥15.6

NOMINAL POWER (+5 W/-0 W)		[W]	200	205	210
Average Power	P_{MPP}	[W]	147.80	151.45	155.10
Short Circuit Current	I_{SC}	[A]	7.32	7.38	7.43
Open Circuit Voltage	V_{OC}	[V]	27.33	27.69	28.04
Current at P_{MPP}	I_{MPP}	[A]	6.73	6.81	6.89
Voltage at P_{MPP}	V_{MPP}	[V]	21.95	22.23	22.50

[1] Measurement tolerances STC: ±3% (P_{MPP}); ±10% (I_{SC}, V_{OC}, I_{MPP}, V_{MPP})

[2] Measurement tolerances NOCT: ±5% (P_{MPP}); ±10% (I_{SC}, V_{OC}, I_{MPP}, V_{MPP})

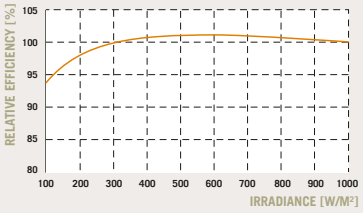
Q.CELLS PERFORMANCE WARRANTY



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/m² in relation to 1000 W/m² (both at 25 °C and AM 1.5 G spectrum) is -2% (relative).

TEMPERATURE COEFFICIENTS (AT 1000 W/m², 25 °C, AM 1.5 G SPECTRUM)

Temperature Coefficient of I_{SC}	α	[%/K]	+0.04	**Temperature Coefficient of V_{OC}**	β	[%/K]	−0.33
Temperature Coefficient of P_{MPP}	γ	[%/K]	−0.43				

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V_{SYS}	[V]	1000	**Safety Class**	II
Maximum Reverse Current I_R	[A]	20	**Fire Rating**	C
Wind/Snow Load (in accordance with IEC 61215)	[Pa]	5400	**Permitted module temperature on continous duty**	-40 °C up to +85 °C

QUALIFICATIONS AND CERTIFICATES

VDE Quality Tested, 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.

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