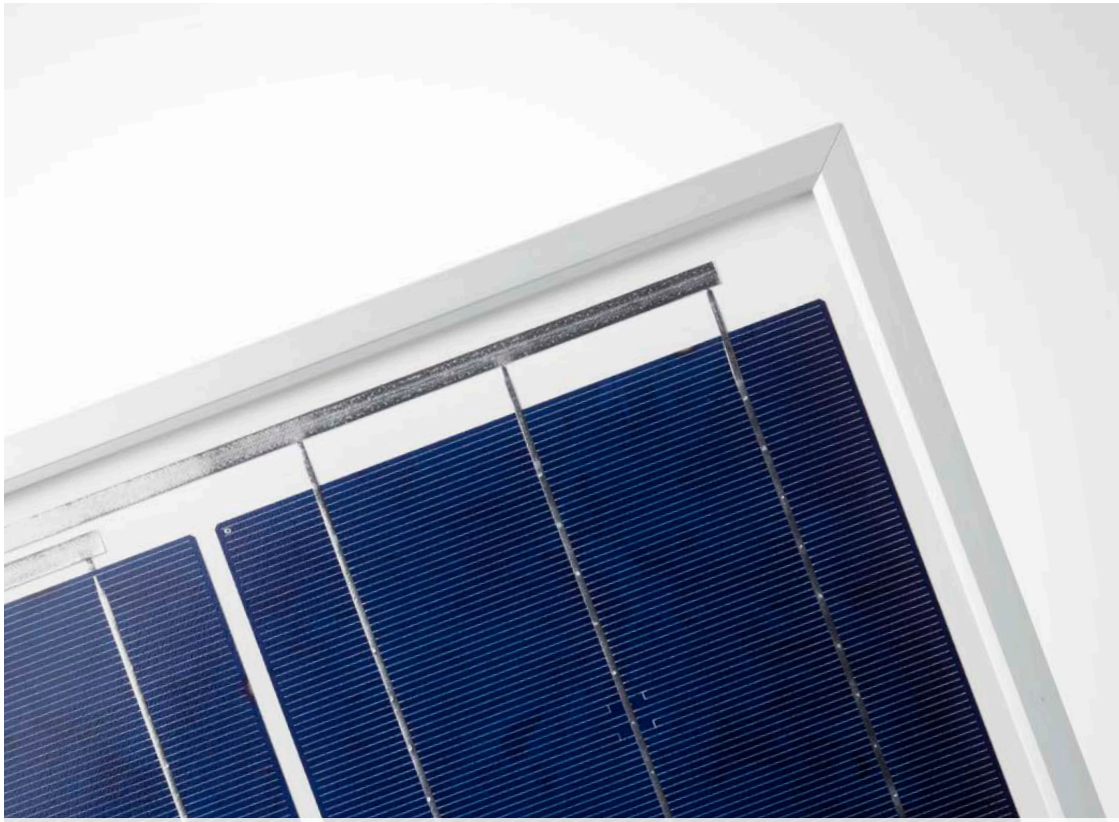


QCELLS YIELD SECURITY
- ANTI PID TECHNOLOGY (APT)
- HOT-SPOT PROTECT (HSP)
- TRACEABLE QUALITY (TRA.Q™)

VDE Quality Tested
high reliability
optimized durability
low degradation
continuous line monitoring
ID. 40032587

EUPD RESEARCH
TOP BRAND PV
MODULES
GERMANY
2012

POLYCRYSTALLINE SOLAR MODULE

Q.PRO-G2 250-265

Reliability and safety

The Q.PRO-G2 solar module with power classes up to 265 Wp is one of the strongest 60-cell modules of its type on the market globally – MADE IN EUROPE. But there is even more to our polycrystalline modules. Only Q CELLS offers German engineering quality with our unique triple Yield Security – verified by independent testing[1].

YOUR EXCLUSIVE TRIPLE YIELD SECURITY

- **Anti PID Technology (APT)** reliably prevents power loss resulting from unwanted leakage currents (potential-induced degradation)[2].
- **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.
- **MADE IN EUROPE**

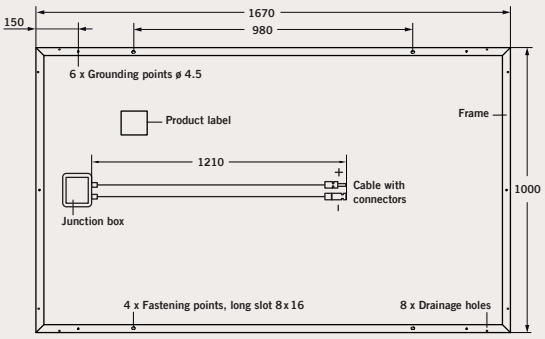
ONE MORE ADVANTAGE FOR YOU

- **NEW! More energy output:** optimised light utilisation with non-corrosive anti-reflection technology.
- **Controlled quality:** Q.PRO-G2 modules continuously pass the most stringent testing program in the PV sector and carry the quality certificate 'VDE Quality Tested' awarded by the Association of German Engineers.
- **Guaranteed performance:** Q CELLS offers the best warranties on the market.
  A 12-year product warranty plus a 25-year linear performance warranty[3].

[1] For more information please visit the Desert Knowledge Australia Solar Centre (www.dksolarcentre.com.au)
[2] APT test conditions: Cells at -1000 V against grounded, with conductive metal foil covered module surface, 25 °C, 168 h (TÜV test conditions)
[3] See data sheet on rear for further information.

MECHANICAL SPECIFICATION

Format	1670 mm x 1000 mm x 50 mm (including frame)
Weight	19.8 kg
Front Cover	3.2 mm thermally pre-stressed glass with antireflection technology
Back Cover	Composite film
Frame	Anodised aluminum
Cell	6 x 10 polycrystalline solar cells
Junction box	116 mm x 153 mm x 20 mm Protection class IP68, with bypass diodes
Cable	4 mm² Solar cable; (+) 1210 mm, (-) 1210 mm
Connector	Yamaichi Y-SOL4, 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]**	**250**	**255**	**260**	**265**
Average Power	P_{MPP}	**[W]**	252.5	257.5	262.5	267.5
Short Circuit Current	I_{SC}	**[A]**	8.94	9.03	9.12	9.21
Open Circuit Voltage	V_{OC}	**[V]**	37.78	37.99	38.21	38.43
Current at P_{MPP}	I_{MPP}	**[A]**	8.45	8.57	8.70	8.82
Voltage at P_{MPP}	V_{MPP}	**[V]**	29.89	30.04	30.18	30.32
Efficiency (Nominal Power)	η	**[%]**	≥15.0	≥15.3	≥15.6	≥15.9

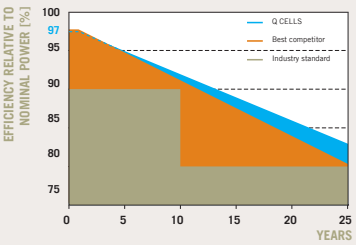
PERFORMANCE AT NORMAL OPERATING CELL TEMPERATURE (NOCT: 800 W/m², 47 ±3 °C. AM 1.5 G SPECTRUM)[2]

NOMINAL POWER (+5 W/-0 W)		**[W]**	**250**	**255**	**260**	**265**
Average Power	P_{MPP}	**[W]**	184.1	187.8	191.4	195.1
Short Circuit Current	I_{SC}	**[A]**	7.22	7.29	7.36	7.43
Open Circuit Voltage	V_{OC}	**[V]**	34.69	34.89	35.09	35.29
Current at P_{MPP}	I_{MPP}	**[A]**	6.75	6.85	6.95	7.04
Voltage at P_{MPP}	V_{MPP}	**[V]**	27.27	27.42	27.56	27.70

[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})

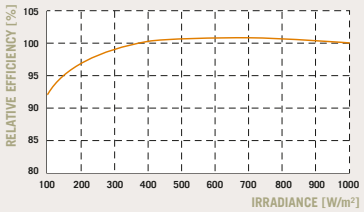
Q CELLS PERFORMANCE WARRANTY



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 -3% (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, Ed.2), 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 department for further information on approved installation and use of this product.

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