Q.POWER-G5 260-280

POLYCRYSTALLINE SOLAR MODULE

The new Q.POWER-G5 is the result of the continued evolution of our polycrystalline solar modules. Thanks to improved power yield, excellent reliability and high-level operational safety, the new Q.POWER-G5 generates electricity at a low cost (LCOE) and is suitable for a wide range of applications.

SUPERIOR YIELD
High power output thanks to advanced 6-busbar technology and outstanding performance under real-life conditions.

LOW LEVELISED COST OF ELECTRICITY
Higher yield per surface area, lower BOS costs, higher power classes and an efficiency rate of up to 17.4 %.

INNOVATIVE ALL-WEATHER TECHNOLOGY
Optimal yields, whatever the weather with excellent low-light and temperature behaviour.

EXTREME WEATHER RATING
High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).

A RELIABLE INVESTMENT
Inclusive 12-year product warranty and 25-year linear performance warranty[1].

EUPD RESEARCH TOP BRAND PV MODULES EUROPE 2017

Photon YIELD MEASUREMENT Q CELLS Best polycrystalline solar module 2014 Q.PRO-G2 235 174 modules tested

pv magazine award 2017 top innovation

[1] See data sheet on rear for further information.

THE IDEAL SOLUTION FOR:

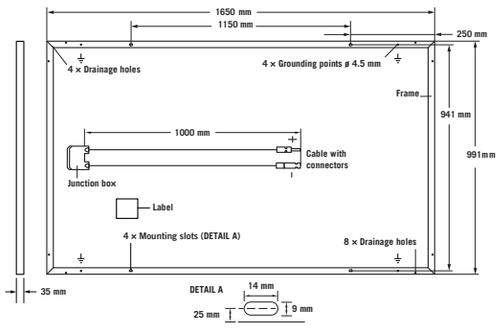
- Rooftop arrays on residential buildings
- Ground-mounted solar power plants
- Rooftop arrays on commercial/industrial buildings

Engineered in **Germany**

Q CELLS

MECHANICAL SPECIFICATION

Format	1650 mm × 991 mm × 35 mm (including frame)
Weight	18 kg ±5 %
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Multi-layer composite sheet
Frame	Anodised aluminium
Cell	6 × 10 polycrystalline solar cells
Junction box	Protection class IP67 or IP68, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥ 1000 mm, (-) ≥ 1000 mm
Connector	Intermateable connector with H4, MC4

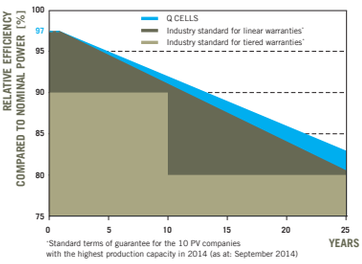


ELECTRICAL CHARACTERISTICS

POWER CLASS				260	265	270	275	280
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / -0 W)								
Minimum	Power at MPP[2]	P_{MPP}	[W]	260	265	270	275	280
	Short Circuit Current*	I_{SC}	[A]	9.05	9.20	9.23	9.27	9.29
	Open Circuit Voltage*	V_{OC}	[V]	37.7	38.0	38.1	38.3	38.5
	Current at MPP*	I_{MPP}	[A]	8.45	8.58	8.69	8.79	8.87
	Voltage at MPP*	V_{MPP}	[V]	30.8	30.9	31.1	31.3	31.6
	Efficiency[2]	η	[%]	≥15.9	≥16.2	≥16.5	≥16.8	≥17.1
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC[3]								
Minimum	Power at MPP[2]	P_{MPP}	[W]	191	195	199	202	206
	Short Circuit Current*	I_{SC}	[A]	7.32	7.44	7.47	7.50	7.51
	Open Circuit Voltage*	V_{OC}	[V]	35.4	35.6	35.7	35.9	36.1
	Current at MPP*	I_{MPP}	[A]	6.75	6.86	6.95	7.02	7.09
	Voltage at MPP*	V_{MPP}	[V]	28.3	28.4	28.6	28.8	29.1

[1] 1000 W/m², 25 °C, spectrum AM 1.5 G [2] Measurement tolerances STC ±3 %; NOC ±5 % [3] 800 W/m², NOCT, spectrum AM 1.5 G * typical values, actual values may differ

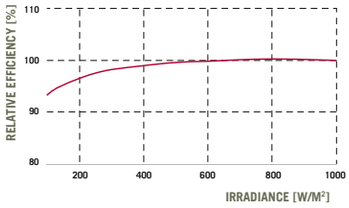
Q CELLS PERFORMANCE WARRANTY



At least 97 % of nominal power during first year. Thereafter max. 0.6 % degradation per year.
At least 91.6 % of nominal power up to 10 years.
At least 83.0 % of nominal power up to 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



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I_{SC}	α	[%/K]	+0.05	**Temperature Coefficient of V_{OC}**	β	[%/K]	-0.31
Temperature Coefficient of P_{MPP}	γ	[%/K]	-0.40	**Normal Operating Cell Temperature**	NOCT	[°C]	45±3

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	V_{SYS}	[V]	1000 (IEC), 1500 (IEC)	**Safety Class**	II
Maximum Reverse Current	I_R	[A]	20	**Fire Rating**	C
Push/Pull Load (Test-load in accordance with IEC 61215)		[Pa]	5400/4000	**Permitted Module Temperature On Continuous Duty**	-40 °C up to +85 °C

QUALIFICATIONS AND CERTIFICATES

IEC 61215, IEC 61730, Conformity to CE, Application Class A

PARTNER

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.

Hanwha Q CELLS (Qidong) Co., Ltd.
No. 888 Linyang Road, Qidong City, Jiangsu Province, China | **EMAIL** sales@hanwha-qcells.com | **WEB** www.q-cells.com

Engineered in **Germany**