

# Q.POWER-G5

## 260-280

EXCELLENT RELIABILITY  
AND OUTSTANDING YIELDS



### 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 aluminum alloy frame, tested to the extreme in Australia for Australian Conditions at James Cook University Cyclone Testing Station.



### A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance warranty<sup>1</sup>.

<sup>1</sup> See data sheet on rear for further information.

### THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings



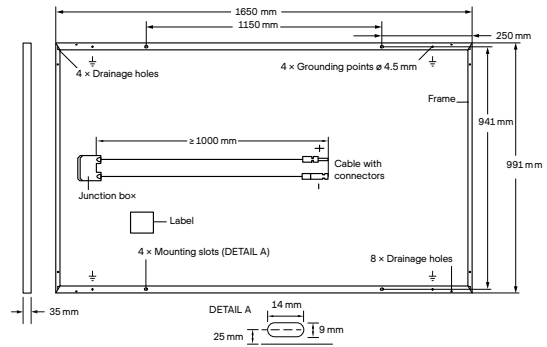
Rooftop arrays on commercial/industrial buildings



Ground-mounted solar power plants

## 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	Composite film
Frame	Anodised aluminium
Cell	6 × 10 polycrystalline solar cells
Junction box	85-115 mm × 60-80 mm × 15-20 mm Protection class ≥ IP67, with bypass diodes
Cable	4 mm <sup>2</sup> Solar cable; (+) ≥ 1000 mm, (-) ≥ 1000 mm
Connector	Stäubli MC4; IP68

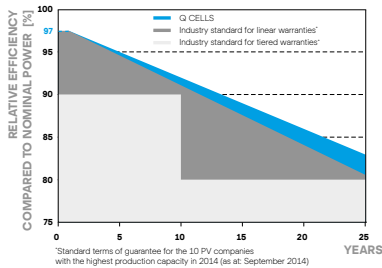


## ELECTRICAL CHARACTERISTICS

POWER CLASS		260	265	270	275	280	
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC <sup>1</sup> (POWER TOLERANCE +5 W / -0 W)							
Minimum	Power at MPP <sup>1</sup>	$P_{MPP}$ [W]	260	265	270	275	280
	Short Circuit Current <sup>1</sup>	$I_{SC}$ [A]	9.05	9.20	9.23	9.27	9.29
	Open Circuit Voltage <sup>1</sup>	$V_{OC}$ [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 <sup>1</sup>	$\eta$ [%]	≥ 15.9	≥ 16.2	≥ 16.5	≥ 16.8	≥ 17.1
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT <sup>2</sup>							
Minimum	Power at MPP	$P_{MPP}$ [W]	193	197	200	204	208
	Short Circuit Current	$I_{SC}$ [A]	7.31	7.43	7.46	7.49	7.51
	Open Circuit Voltage	$V_{OC}$ [V]	35.60	35.90	36.00	36.20	36.40
	Current at MPP	$I_{MPP}$ [A]	6.75	6.86	6.95	7.02	7.09
	Voltage at MPP	$V_{MPP}$ [V]	28.60	28.70	28.90	29.00	29.30

<sup>1</sup>Measurement tolerances  $P_{MPP} \pm 3\%$ ;  $I_{SC}$ ;  $V_{OC} \pm 5\%$  at STC: 1000 W/m<sup>2</sup>, 25 ± 2 °C, AM 1.5G according to IEC 60904-3 • <sup>2</sup>800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5G

### Q CELLS PERFORMANCE WARRANTY

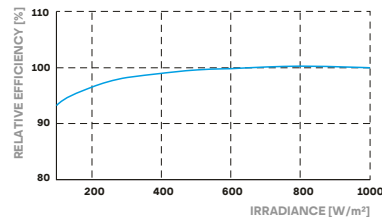


<sup>1</sup>Standard terms of guarantee for the 10 PV companies with the highest production capacity in 2014 (as at September 2014)

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 organisation of your respective country.

### PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m<sup>2</sup>).

### TEMPERATURE COEFFICIENTS

Temperature Coefficient of $I_{SC}$	$\alpha$ [%/K]	+0.05	Temperature Coefficient of $V_{OC}$	$\beta$ [%/K]	-0.31
Temperature Coefficient of $P_{MPP}$	$\gamma$ [%/K]	-0.40	Normal Module Operating Temperature	NMOT [°C]	43 ± 3

## PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	$V_{SYS}$ [V]	1000	Safety Class	II
Maximum Reverse Current	$I_R$ [A]	20	Fire Rating	C
Max. Design Load, Push/Pull	[Pa]	3600/2667	Permitted Module Temperature on Continuous Duty	-40 °C - +85 °C
Max. Test Load, Push/Pull	[Pa]	5400/4000		

## QUALIFICATIONS AND CERTIFICATES

IEC 61215:2016; IEC 61730:2016, Application Class II;  
This data sheet complies with DIN EN 50380.



## PACKAGING INFORMATION

Number of Modules per Pallet	30
Number of Pallets per 40' HC-Container (26t)	28
Pallet Dimensions (L × W × H)	1700 × 1130 × 1160 mm
Pallet Weight	584 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.

Made in China

Hanwha Q CELLS Australia Pty Ltd

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