

# Q.PRO-G4 255-265

## POLYCRYSTALLINE SOLAR MODULE

The new **Q.PRO-G4** is the result of the continued evolution of our **Q.PRO** family. Thanks to improved power yield, excellent reliability, and high-level operational safety, the new **Q.PRO-G4** generates electricity at a low cost (LCOE) and is suitable for a wide range of applications.



### LOW ELECTRICITY GENERATION COSTS

Higher yield per surface area and lower BOS costs thanks to higher power classes and an efficiency rate of up to 16.2 %.



### INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behavior.



### ENDURING HIGH PERFORMANCE

Long-term yield security with Anti-PID Technology<sup>1</sup>, Hot-Spot-Protect and Traceable Quality Tra.Q™.



### LIGHT-WEIGHT QUALITY FRAME

High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).



### MAXIMUM COST REDUCTIONS

Up to 10 % lower logistics costs due to higher module capacity per box.



### SAFE ELECTRONICS

Protection against short circuits and thermally induced power losses due to breathable junction box and welded cables.



### A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance guarantee<sup>2</sup>.



### THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings



Rooftop arrays on commercial/industrial buildings



Ground-mounted solar power plants

Engineered in **Germany**

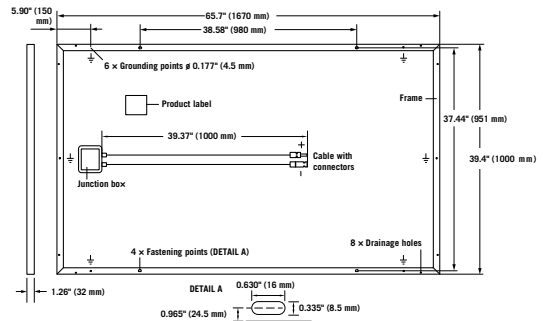
**Q CELLS**

<sup>1</sup> APT test conditions: Cells at -1000V against grounded, with conductive metal foil covered module surface, 25 °C, 168h

<sup>2</sup> See data sheet on rear for further information.

## MECHANICAL SPECIFICATION

<b>Format</b>	65.7 in × 39.4 in × 1.26 in (including frame) (1670 mm × 1000 mm × 32 mm)
<b>Weight</b>	41.45 lb (18.8 kg)
<b>Front Cover</b>	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
<b>Back Cover</b>	Composite film
<b>Frame</b>	Anodized aluminum
<b>Cell</b>	6 × 10 polycrystalline solar cells
<b>Junction box</b>	4.33 in × 4.53 in × 0.9 in (110 mm × 115 mm × 23 mm), Protection class IP67, with bypass diodes
<b>Cable</b>	4 mm <sup>2</sup> Solar cable; (+) ≥ 39.37 in (1000 mm), (-) ≥ 39.37 in (1000 mm)
<b>Connector</b>	Tyco Solarlok PV4, IP68

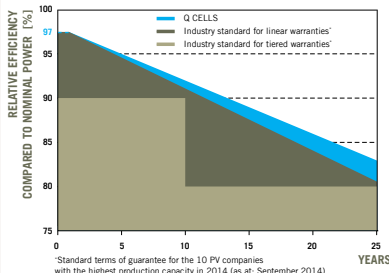


## ELECTRICAL CHARACTERISTICS

POWER CLASS		255	260	265	
<b>MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC<sup>1</sup> (POWER TOLERANCE +5 W /- 0 W)</b>					
Minimum	<b>Power at MPP<sup>2</sup></b>	<b>P<sub>MPP</sub></b> [W]	255	260	265
	<b>Short Circuit Current*</b>	<b>I<sub>SC</sub></b> [A]	9.07	9.15	9.23
	<b>Open Circuit Voltage*</b>	<b>V<sub>OC</sub></b> [V]	37.54	37.77	38.01
	<b>Current at MPP*</b>	<b>I<sub>MPP</sub></b> [A]	8.45	8.53	8.62
	<b>Voltage at MPP*</b>	<b>V<sub>MPP</sub></b> [V]	30.18	30.46	30.75
	<b>Efficiency<sup>2</sup></b>	<b>η</b> [%]	≥ 15.3	≥ 15.6	≥ 15.9
<b>MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC<sup>3</sup></b>					
Minimum	<b>Power at MPP<sup>2</sup></b>	<b>P<sub>MPP</sub></b> [W]	188.3	192.0	195.7
	<b>Short Circuit Current*</b>	<b>I<sub>SC</sub></b> [A]	7.31	7.38	7.44
	<b>Open Circuit Voltage*</b>	<b>V<sub>OC</sub></b> [V]	34.95	35.16	35.38
	<b>Current at MPP*</b>	<b>I<sub>MPP</sub></b> [A]	6.61	6.68	6.75
	<b>Voltage at MPP*</b>	<b>V<sub>MPP</sub></b> [V]	28.48	28.75	29.01

<sup>1</sup> 1000 W/m<sup>2</sup>, 25 °C, spectrum AM 1.5G    <sup>2</sup> Measurement tolerances STC ± 3 %; NOC ± 5 %    <sup>3</sup> 800 W/m<sup>2</sup>, NOCT, spectrum AM 1.5G    \* typical values, actual values may differ

## Q CELLS PERFORMANCE WARRANTY

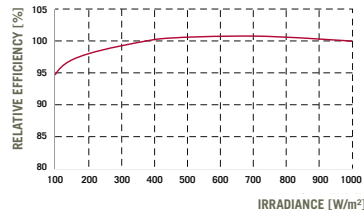


At least 97 % of nominal power during first year. Thereafter max. 0.6 % degradation per year.  
At least 92 % of nominal power after 10 years.  
At least 83 % of nominal power after 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.

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

## 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 1.5G spectrum) is -2 % (relative).

## TEMPERATURE COEFFICIENTS

<b>Temperature Coefficient of I<sub>SC</sub></b>	<b>α</b>	[%/K]	+0.04	<b>Temperature Coefficient of V<sub>OC</sub></b>	<b>β</b>	[%/K]	-0.30
<b>Temperature Coefficient of P<sub>MPP</sub></b>	<b>γ</b>	[%/K]	-0.41	<b>Normal Operating Cell Temperature</b>	<b>NOCT</b>	[°F]	113 ± 5.4 (45 ± 3 °C)

## PROPERTIES FOR SYSTEM DESIGN

<b>Maximum System Voltage V<sub>sys</sub></b>	[V]	1000 (IEC) / 1000 (UL)	<b>Safety Class</b>	II
<b>Maximum Series Fuse Rating</b>	[A DC]	20	<b>Fire Rating</b>	C / TYPE 1
<b>Max Load (UL)<sup>2</sup></b>	[lbs/ft <sup>2</sup> ]	75 (3600 Pa)	<b>Permitted module temperature on continuous duty</b>	-40 °F up to +185 °F (-40 °C up to +85 °C)
<b>Load Rating (UL)<sup>2</sup></b>	[lbs/ft <sup>2</sup> ]	55.6 (2666 Pa)	<sup>2</sup> see installation manual	

## QUALIFICATIONS AND CERTIFICATES

UL 1703; VDE Quality Tested; CE-compliant;  
IEC 61215 (Ed.2); IEC 61730 (Ed.1) application class A



## PACKAGING INFORMATION

<b>Number of Modules per Pallet</b>	32
<b>Number of Pallets per 53' Container</b>	32
<b>Number of Pallets per 40' Container</b>	26
<b>Pallet Dimensions (L × W × H)</b>	68.7 in × 45.0 in × 46.0 in (1745 × 1145 × 1170 mm)
<b>Pallet Weight</b>	1435 lbs (651 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.

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