Inspections Division
Date: 08/25/16

Q.PRO-G4.1/SC 255-265

POLYCRYSTALLINE SOLAR MODULE

The new Q.PRO-G4.1/SC is the reliable evergreen for all applications, with a black Zep Compatible™ frame design for improved aesthetics, optimized material usage and increased safety. The 4th solar 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.

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. Certified fully resistant to level 5 salt fog.

ENDURING HIGH PERFORMANCE

Long-term yield security with Anti-PID Technology[1], Hot-Spot-Protect and Traceable Quality Tra.Q™.

A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance guarantee[2].

ZEP COMPATIBLE™

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

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

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

[2] 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

Engineered in **Germany**

Q CELLS

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MECHANICAL SPECIFICATION

Format	65.7 in × 39.4 in × 1.57 in (including frame) (1670 mm × 1000 mm × 40 mm)
Weight	44.09 lb (20.0 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodized ZEP compatible frame
Cell	6 × 10 polycrystalline solar cells
Junction box	Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) 47.24 in (1200 mm), (-) 47.24 in (1200 mm)
Connector	Multi-Contact MC4, IP68

ELECTRICAL CHARACTERISTICS

POWER CLASS				255	260	265
MINIMUM PERFORMANCE AT STANDARD TESTING CONDITIONS, STC[1] (POWER TOLERANCE +5 W / -0 W)						
Minimum	Power at MPP[2]	P_{MPP}	[W]	255	260	265
Minimum	Short Circuit Current*	I_{SC}	[A]	8.99	9.07	9.15
Minimum	Open Circuit Voltage*	V_{OC}	[V]	37.47	37.70	37.93
Minimum	Current at MPP*	I_{MPP}	[A]	8.37	8.46	8.54
Minimum	Voltage at MPP*	V_{MPP}	[V]	30.45	30.74	31.03
Minimum	Efficiency[2]	η	[%]	≥15.3	≥15.6	≥15.9
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC[3]						
Minimum	Power at MPP[2]	P_{MPP}	[W]	187.6	191.3	194.9
Minimum	Short Circuit Current*	I_{SC}	[A]	7.25	7.31	7.38
Minimum	Open Circuit Voltage*	V_{OC}	[V]	34.87	35.09	35.31
Minimum	Current at MPP*	I_{MPP}	[A]	6.55	6.62	6.68
Minimum	Voltage at MPP*	V_{MPP}	[V]	28.63	28.90	29.16

[1] 1000 W/m², 25 °C, spectrum AM 1.5G [2] Measurement tolerances STC ±3 %; NOC ±5 % [3] 800 W/m², 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.

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]	+0.04	Temperature Coefficient of V_{OC}	β	[%/K]	−0.30
Temperature Coefficient of P_{MPP}	γ	[%/K]	−0.41	Normal Operating Cell Temperature	NOCT	[°F]	113 ± 5.4 (45 ± 3 °C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V_{SYS}	[V]	1000 (IEC) / 1000 (UL)	Safety Class	II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating	C / TYPE 1
Max Load (UL)[2]	[lbs/ft²]	50 (2400 Pa)	Permitted module temperature on continuous duty	−40 °F up to +185 °F (−40 °C up to +85 °C)
Load Rating (UL)[2]	[lbs/ft²]	50 (2400 Pa)	[2] see installation manual	

QUALIFICATIONS AND CERTIFICATES

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

C Certified UL 1703 (254141) US

PACKAGING INFORMATION

Number of Modules per Pallet	26
Number of Pallets per 53' Container	32
Number of Pallets per 40' Container	26
Pallet Dimensions (L × W × H)	68.7 in × 45.0 in × 46.0 in (1745 × 1145 × 1170 mm)
Pallet Weight	1254 lb (569 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. Warranty void if non-ZEP-certified hardware is attached to groove in module frame.

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Engineered in **Germany**

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