Q.PRO L-G2 305-315

POLYCRYSTALLINE SOLAR MODULE

The polycrystalline solar module Q.PRO L-G2 with power classes up to 315 W is the strongest module of its type on the market globally. Powered by 72 Q CELLS solar cells and with a size of 1.9 m² Q.PRO L-G2 was specially designed for large solar power plants to reduce BOS costs. Only Q CELLS offers German engineering quality with our unique triple Yield Security.

YOUR EXCLUSIVE TRIPLE YIELD SECURITY

- Anti PID Technology (APT) reliably prevents power loss resulting from unwanted leakage currents (potential-induced degradation)[1].
- 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.

ONE MORE ADVANTAGE FOR YOU

- Reduced BOS costs: Optimised design to reduce costs per Wp.
- Improved energy yield: The actual output of all Q CELLS solar modules is up to 5 Wp higher than the nominal power thanks to positive sorting.
- Guaranteed performance: investment security due to 12-year product warranty and 25-year linear performance warranty[2].

EUPD RESEARCH TOP BRAND PV MODULES EUROPE 2015

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

Photon YIELD MEASUREMENT
Q CELLS
Best polycrystalline solar module 2013
Q.PRO-G2 235
151 modules tested

THE IDEAL SOLUTION FOR:

Ground-mounted solar power plants

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

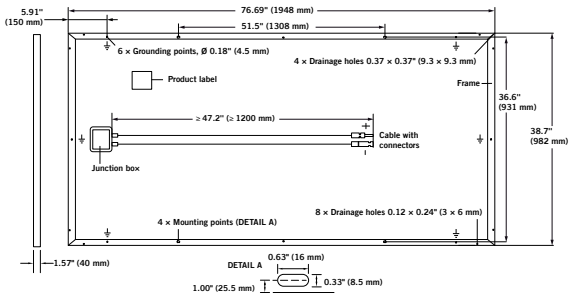
[2] See data sheet on rear for further information.

Engineered in **Germany**

Q CELLS

MECHANICAL SPECIFICATION

Format	76.69 in × 38.7 in × 1.57 in (including frame) (1948 mm × 982 mm × 40 mm)
Weight	48.72 lbs (22.1 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodised aluminium
Cell	6 × 12 polycrystalline solar cells
Junction box	4.33 in × 4.53 in × 0,91 in (110 mm × 115 mm × 23 mm) Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥ 47.2 in (1200 mm), (-) ≥ 47.2 in (1200 mm)
Connector	Tyco, Solarlok PV4, IP68

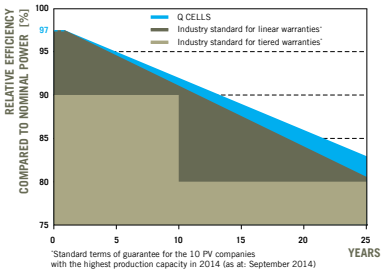


ELECTRICAL CHARACTERISTICS

POWER CLASS				305	310	315
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / -0 W)						
Minimum	Power at MPP[2]	P_{MPP}	[W]	305	310	315
	Short Circuit Current*	I_{SC}	[A]	8.99	9.06	9.12
	Open Circuit Voltage*	V_{OC}	[V]	45.14	45.37	45.61
	Current at MPP*	I_{MPP}	[A]	8.38	8.45	8.52
	Voltage at MPP*	V_{MPP}	[V]	36.39	36.68	36.97
	Efficiency[2]	η	[%]	≥ 15.9	≥ 16.2	≥ 16.5
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC[3]						
Minimum	Power at MPP[2]	P_{MPP}	[W]	225.3	228.9	232.6
	Short Circuit Current*	I_{SC}	[A]	7.25	7.30	7.36
	Open Circuit Voltage*	V_{OC}	[V]	42.02	42.24	42.46
	Current at MPP*	I_{MPP}	[A]	6.56	6.61	6.67
	Voltage at MPP*	V_{MPP}	[V]	34.35	34.62	34.88

[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

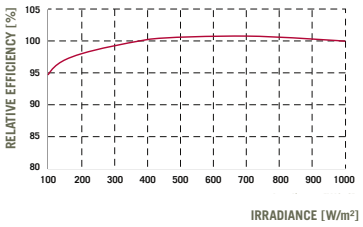
Q CELLS PERFORMANCE WARRANTY



At least 97 % of nominal power during first year. Thereafter max. 0.6 % degradation per year.
At least 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



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 -2 % (relative).

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]	75 (3600 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]	55.6 (2666 Pa)	[2] see installation manual	

QUALIFICATIONS AND CERTIFICATES

UL 1703; IEC 61215 (Ed. 2); IEC 61730 (Ed. 1), Application class A
This data sheet complies with DIN EN 50380.

C Certified US
UL 1703
(254141)

PACKAGING INFORMATION

Number of Modules per Pallet	24
Number of Pallets per 53' Container	30
Number of Pallets per 40' Container	22
Pallet Dimensions (L × W × H)	79.1 in × 43.3 in × 46.1 in (2010 × 1100 × 1170 mm)
Pallet Weight	1301 lbs (590 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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Engineered in **Germany**