powered by Q.ANTUM DUO

Q.PEAK DUO L-G7.2

385-405

ENDURING HIGH PERFORMANCE

pv magazine award 2017 top innovation

EUPD RESEARCH TOP BRAND PV MODULES EUROPE 2019

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

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

Q.ANTUM TECHNOLOGY: LOW LEVELISED COST OF ELECTRICITY
Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 20.3%.

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

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

EXTREME WEATHER RATING
High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (2400 Pa).

A RELIABLE INVESTMENT
Inclusive 12-year product warranty and 25-year linear performance warranty[2].

STATE OF THE ART MODULE TECHNOLOGY
Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.

[1] APT test conditions according to IEC/TS 62804-1:2015, method B (–1500 V, 168 h)
[2] See data sheet on rear for further information.

THE IDEAL SOLUTION FOR:

Rooftop arrays on commercial / industrial buildings

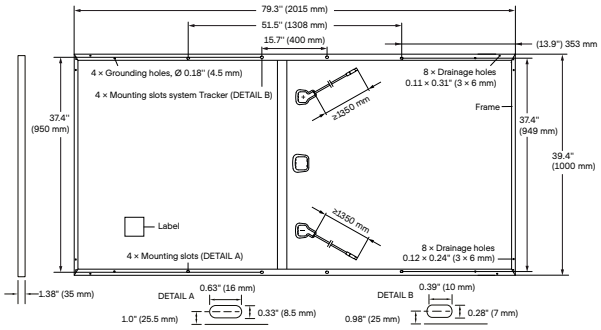
Ground-mounted solar power plants

Engineered in Germany

Q CELLS

MECHANICAL SPECIFICATION

Format	79.3 in × 39.4 in × 1.38 in (including frame) (2015 mm × 1000 mm × 35 mm)
Weight	51.8 lbs (23.5 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodized aluminum
Cell	6 × 24 monocrystalline Q.ANTUM solar half cells
Junction Box	2.09-3.98 in × 1.26-2.36 in × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥53.1 in (1350 mm), (−) ≥53.1 in (1350 mm)
Connector	Stäubli MC4-Evo2, Hanwha Q CELLS HQC4, Amphenol UTX, Renhe 05-8, JMTHY JM601A; Tongling Cable01S-F, IP68 or Friends PV2e; IP67

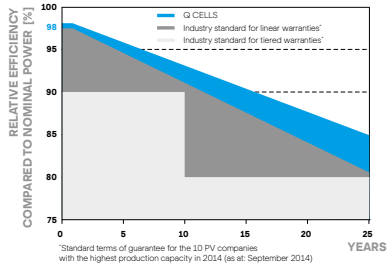


ELECTRICAL CHARACTERISTICS

POWER CLASS				385	390	395	400	405
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / −0 W)								
Minimum	Power at MPP[1]	P_{MPP}	[W]	385	390	395	400	405
	Short Circuit Current[1]	I_{SC}	[A]	10.05	10.10	10.14	10.19	10.23
	Open Circuit Voltage[1]	V_{OC}	[V]	48.17	48.44	48.70	48.96	49.22
	Current at MPP	I_{MPP}	[A]	9.57	9.61	9.66	9.70	9.75
	Voltage at MPP	V_{MPP}	[V]	40.24	40.57	40.90	41.23	41.56
	Efficiency[1]	η	[%]	≥19.1	≥19.4	≥19.6	≥19.9	≥20.1
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT[2]								
Minimum	Power at MPP	P_{MPP}	[W]	288.3	292.1	295.8	299.6	303.3
	Short Circuit Current	I_{SC}	[A]	8.10	8.14	8.17	8.21	8.24
	Open Circuit Voltage	V_{OC}	[V]	45.42	45.67	45.92	46.17	46.41
	Current at MPP	I_{MPP}	[A]	7.53	7.57	7.60	7.64	7.67
	Voltage at MPP	V_{MPP}	[V]	38.29	38.60	38.92	39.23	39.54

[1]Measurement tolerances P_{MPP} ±3%; I_{SC}; V_{OC} ±5% at STC: 1000 W/m², 25±2 °C, AM 1.5 according to IEC 60904-3 • [2]800 W/m², NMOT, spectrum AM 1.5

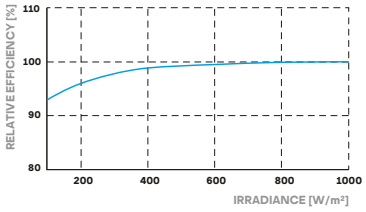
Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.54% degradation per year. At least 93.1% of nominal power up to 10 years. At least 85% 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/m²)

TEMPERATURE COEFFICIENTS							
Temperature Coefficient of I_{SC}	α	[%/K]	+0.04	Temperature Coefficient of V_{OC}	β	[%/K]	−0.27
Temperature Coefficient of P_{MPP}	γ	[%/K]	−0.35	Normal Module Operating Temperature	NMOT	[°F]	109±5.4 (43±3 °C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V_{SYS}	[V]	1500 (IEC) / 1500 (UL)	Safety Class	II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI / UL 1703	C (IEC) / TYPE 1 (UL)
Max. Design Load, Push / Pull[3]	[lbs / ft²]	75 (3600 Pa) / 33 (1600 Pa)	Permitted Module Temperature on Continuous Duty	−40 °F up to +185 °F (−40 °C up to +85 °C)
Max. Test Load, Push / Pull[3]	[lbs / ft²]	113 (5400 Pa) / 50 (2400 Pa)		

[3] See Installation Manual

QUALIFICATIONS AND CERTIFICATES

UL 1703, CE-compliant, IEC 61215:2016, IEC 61730:2016, Application Class II, U.S. Patent No. 9,893,215 (solar cells)

PACKAGING INFORMATION

Number of Modules per Pallet	29
Number of Pallets per 53' Trailer	27
Number of Pallets per 40' HC-Container	22
Pallet Dimensions (L × W × H)	81.9 × 45.3 × 46.9 in (2080 × 1150 × 1190 mm)
Pallet Weight	1636 lbs (742 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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