powered by Q.ANTUM DUO

Q.PEAK DUO L-G5.3
380-400

ENDURING HIGH PERFORMANCE

pv magazine award 2017 top innovation

EUPD RESEARCH TOP BRAND PV MODULES EUROPE 2018

Photon YIELD MEASUREMENT
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)

LOW ELECTRICITY GENERATION COSTS
Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 20.1 %.

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

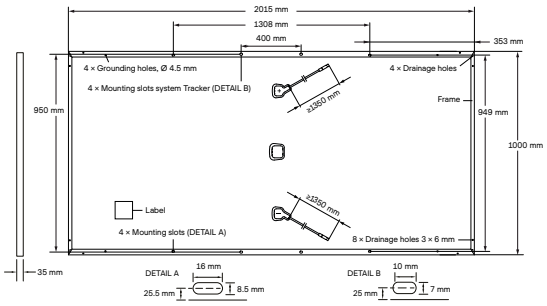
Ground-mounted solar power plants

Engineered in Germany

Q CELLS

MECHANICAL SPECIFICATION

Format	2015 mm × 1000 mm × 35 mm (including frame)
Weight	23 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodised aluminium
Cell	6 × 24 monocrystalline Q.ANTUM solar half cells
Junction box	70-85 mm × 50-70 mm × 13-21 mm Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥1350 mm, (–) ≥1350 mm
Connector	Stäubli MC4-Evo2, Amphenol UTX, Renhe 05-8, Tonglin TL-Cable01S-F; IP68 or Friends PV2e; IP67

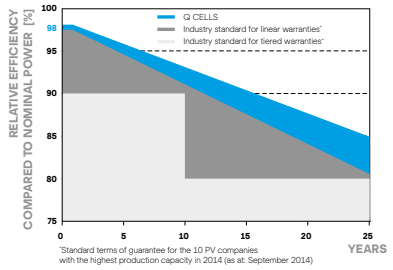


ELECTRICAL CHARACTERISTICS

POWER CLASS				380	385	390	395	400
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / –0 W)								
Minimum	Power at MPP[1]	P_{MPP}	[W]	380	385	390	395	400
	Short Circuit Current[1]	I_{SC}	[A]	10.05	10.10	10.14	10.19	10.24
	Open Circuit Voltage[1]	V_{OC}	[V]	47.95	48.21	48.48	48.74	49.00
	Current at MPP	I_{MPP}	[A]	9.57	9.61	9.66	9.70	9.75
	Voltage at MPP	V_{MPP}	[V]	39.71	40.05	40.38	40.71	41.04
	Efficiency[1]	η	[%]	≥18.9	≥19.1	≥19.4	≥19.6	≥19.9
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT[2]								
Minimum	Power at MPP	P_{MPP}	[W]	284.4	288.2	291.9	295.6	299.4
	Short Circuit Current	I_{SC}	[A]	8.10	8.14	8.17	8.21	8.25
	Open Circuit Voltage	V_{OC}	[V]	45.21	45.46	45.71	45.96	46.21
	Current at MPP	I_{MPP}	[A]	7.53	7.57	7.60	7.64	7.67
	Voltage at MPP	V_{MPP}	[V]	37.77	38.08	38.40	38.71	39.02

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

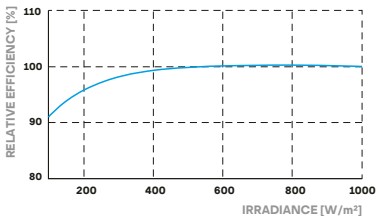
Q CELLS PERFORMANCE WARRANTY



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]	–0.36	Normal Module Operating Temperature	NMOT	[°C]	43±3

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	V_{SYS}	[V]	1500 (IEC) / 1500 (UL)	Safety Class	II
Maximum Reverse Current	I_R	[A]	20	Fire Rating	C / TYPE 1
Max. Design Load, Push / Pull		[Pa]	3600 / 1600	Permitted Module Temperature on Continuous Duty	–40 °C - +85 °C
Max. Test Load, Push / Pull		[Pa]	5400 / 2400		

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	29
Number of Pallets per Trailer (24 t)	24
Number of Pallets per 40' HC-Container (26 t)	22
Pallet Dimensions (L × W × H)	2080 × 1150 × 1190 mm
Pallet Weight	727 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