powered by Q.ANTUM DUO

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

BIFACIAL DOUBLE GLASS MODULE WITH EXCELLENT RELIABILITY AND ADDITIONAL YIELD

Q CELLS

YIELD SECURITY

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

BIFACIAL ENERGY YIELD GAIN OF UP TO 20 %

Bifacial Q.ANTUM solar cells make efficient use of light shining on the module rear-side for radically improved LCOE.

LOW ELECTRICITY GENERATION COSTS

Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology for 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 behavior.

ENDURING HIGH PERFORMANCE

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

FRAME FOR VERSATILE MOUNTING OPTIONS

High-tech aluminum alloy frame protects from damage, enables use of a wide range of mounting structures and is certified regarding IEC for high snow (5400 Pa) and wind loads (2400 Pa).

A RELIABLE INVESTMENT

Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty[2].

[1] APT test conditions according to IEC/TS 62804-1:2015 method B (–1500 V, 168 h) including post treatment according to IEC 61215-1-1 Ed. 2.0 (CD)
[2] See data sheet on rear for further information

THE IDEAL SOLUTION FOR:

Rooftop arrays on commercial and industrial buildings

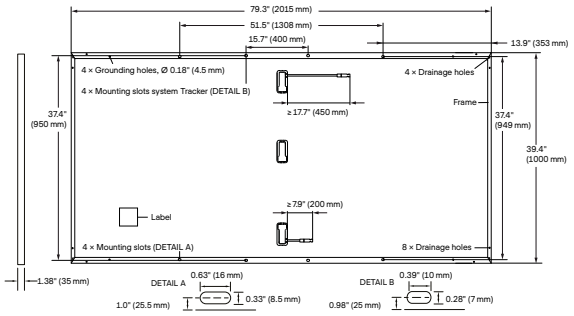
Ground-mounted solar power plants

Engineered in Germany

Q CELLS

MECHANICAL SPECIFICATION

Format	79.3 × 39.4 × 1.38 in (including frame) (2015 × 1000 × 35 mm)
Weight	57.3 lbs (26 kg)
Front Cover	0.08 in (2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	0.08 in (2 mm) semi-tempered glass
Frame	Anodized aluminium
Cell	6 × 24 monocrystalline bifacial Q.ANTUM solar half cells
Junction Box	1.26-1.52 × 3.43-3.95 × 0.62 in (32-38.5 × 87-100.3 × 15.7 mm), Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥17.7 in (450 mm), (–) ≥7.9 in (200 mm)
Connector	Stäubli MC4-Evo2, JMTHY PV-JM601A or Renhe 05-8; IP68

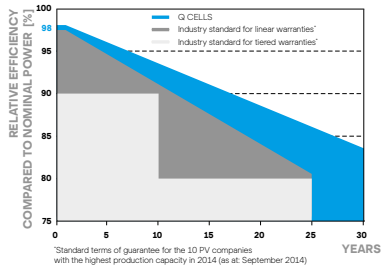


ELECTRICAL CHARACTERISTICS

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
Bifaciality of P_{MPP} and I_{SC} 70 % ± 3 % • Bifaciality of V_{OC}: 0 % ± 0.05 % • Bifaciality given for rear side irradiation on top of STC (front side)								
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT[2]								
Minimum	Power at MPP	P_{MPP}	[W]	285.5	289.3	293.0	296.8	300.5
	Short Circuit Current	I_{SC}	[A]	8.10	8.13	8.17	8.21	8.24
	Open Circuit Voltage	V_{OC}	[V]	45.34	45.59	45.84	46.09	46.34
	Current at MPP	I_{MPP}	[A]	7.53	7.57	7.60	7.64	7.67
	Voltage at MPP	V_{MPP}	[V]	37.90	38.22	38.54	38.85	39.16

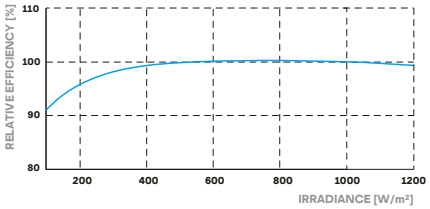
[1]Measurement tolerances P_{MPP} ±3 %; I_{SC}; V_{OC} ±5 % at STC: 1000 W/m², 25 ± 2 °C, AM 1.5 according to IEC 60904-3 • [2]800 W/m², NMOT, spectrum AM 1.5

Q CELLS PERFORMANCE WARRANTY



At least 98 % of nominal power during first year. Thereafter max. 0.5 % degradation per year. At least 93.5 % of nominal power up to 10 years. At least 86 % of nominal power up to 25 years. At least 83.5 % of nominal power up to 30 years.
All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organization 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	Nominal Module Operating Temperature	NMOT	[°F]	108 ± 5.4 (42 ± 3 °C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V_{SYS}	[V]	1500 (IEC) / 1500 (UL)	Protection Class	II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI / UL 1703	C (IEC) / TYPE 19 (UL)[4]
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

[4] New Type is similar to Type 3 but with metallic frame

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	24
Number of Pallets per 40' HC-Container	22
Pallet Dimensions (L × W × H)	81.1 × 40.9 × 47.1 in (2060 × 1040 × 1196 mm)
Pallet Weight	1748 lbs (793 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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