



EXTREME WEATHER RATING High-tech aluminium alloy frame, certified for

high snow (5400 Pa) and wind loads (2400 Pa).



STATE OF THE ART MODULE TECHNOLOGY

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

THE IDEAL SOLUTION FOR:



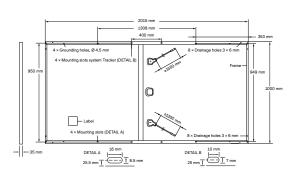


Ground-mounted solar power plants



 $^{^{\}rm 1}$ 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.

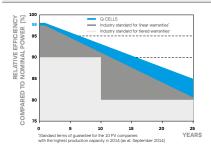


ELECTRICAL CHARACTERISTICS

PO	WER CLASS			385	390	395	400	405
MIN	IIMUM PERFORMANCE AT STANDARD T	EST CONDITIO	NS, STC1 (PC	WER TOLERANCE	+5W/-0W)			
Minimum	Power at MPP¹	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
MIN	IIMUM PERFORMANCE AT NORMAL OP	ERATING CONI	DITIONS, NIV	OT 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}\text{Measurement tolerances P}_{\text{MPP}} \pm 3\%; I_{\text{SC}}; V_{\text{OC}} \pm 5\% \text{ at STC}; 1000 \text{W/m}^{2}, 25 \pm 2\text{°C}, \text{AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2},$

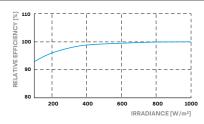
Q CELLS PERFORMANCE WARRANTY



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 $^{\circ}$ C, 1000 W/m²).

TEMPERATURE COEFFICIENTS							
Temperature Coefficient of I _{SC}	α	[%/K]	+0.04	Temperature Coefficient of Voc	β	[%/K]	-0.27
Temperature Coefficient of P _{MPP}	γ	[%/K]	-0.35	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 based on ANSI / UL 1703	C/TYPE1
Max. Design Load, Push / Pull		[Pa]	3600/1600	Permitted Module Temperature	-40°C - +85°C
Max. Test Load, Push / Pull		[Pa]	5400/2400	on Continuous Duty	

QUALIFICATIONS AND CERTIFICATES

PACKAGING INFORMATION

IEC 61215:2016; IEC 61730:2016, Application Class II; This data sheet complies with DIN EN 50380.







Number of Modules per Pallet	30
Number of Pallets per Trailer (24t)	24
Number of Pallets per 40' HC-Container (26t)	22
Pallet Dimensions (L × W × H)	2074 × 1130 × 1170 mm
Pallet Weight	761 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.

Made in China

Hanwha Q CELLS Australia Pty Ltd

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