





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 Technology¹, 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 warranty².



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, 168h)
- ² See data sheet on rear for further information.

THE IDEAL SOLUTION FOR:

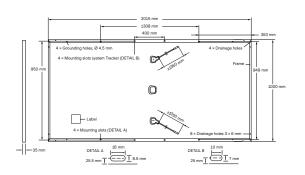


Rooftop arrays on commercial/industrial buildings



Ground-mounted solar power plants





ELECTRICAL CHARACTERISTICS

PO	VER CLASS			380	385	390	395	400
MIN	IIMUM PERFORMANCE AT STANDARD TE	+5W/-0W)						
Minimum	Power at MPP¹	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
MIN	IIMUM PERFORMANCE AT NORMAL OPE							
	Power at MPP	P _{MPP}	[W]	284.4	288.2	291.9	295.6	299.4
Minimum	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

 $^{\text{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{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{spectrum AM } 1.5\text{G} \text{ according to IEC } 60904 - 3 \cdot 2800 \text{W/m}^2, \text{spectrum AM } 1.5\text{G} \text{ according to I$

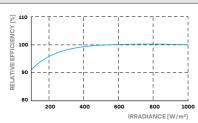
Q CELLS PERFORMANCE WARRANTY

RELATIVE E COMPARED

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

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

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	$V_{\scriptsize \text{SYS}}$	[V]	1000 (IEC)/1000 (UL)	Safety Class	II
Maximum Reverse Current	I _R	[A]	20	Fire Rating	C/TYPE 2
Max. Design Load, Push / Pull		[Pa]	3600/1600	·	-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	29
Number of Pallets per Trailer (24t)	24
Number of Pallets per 40' HC-Container (26t)	22
Pallet Dimensions (L × W × H)	2080 × 1150 × 1185 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

Hanwha Q CELLS GmbH

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