





BREAKING THE 20% EFFICIENCY BARRIER

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 21.1%.



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, 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 (4000 Pa).



A RELIABLE INVESTMENT

Inclusive 15-year product warranty and 25-year linear performance warranty¹.



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:



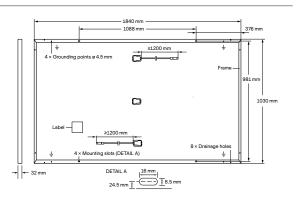
Rooftop arrays on residential buildings



Rooftop arrays on commercial/industrial buildings



¹ See data sheet on rear for further information.



ELECTRICAL CHARACTERISTICS

WER CLASS			375	380	385	390	395
IIMUM PERFORMANCE AT STANDAR	D TEST CONDITIO	NS, STC1 (PC	OWER TOLERANCE	+5W/-0W)			
Power at MPP ¹	P _{MPP}	[W]	375	380	385	390	395
Short Circuit Current ¹	I _{sc}	[A]	10.62	10.65	10.68	10.71	10.74
Open Circuit Voltage ¹	V _{oc}	[V]	44.96	44.99	45.03	45.06	45.10
Current at MPP	I _{MPP}	[A]	10.09	10.14	10.20	10.26	10.32
Voltage at MPP	V _{MPP}	[V]	37.18	37.46	37.74	38.01	38.29
Efficiency ¹	η	[%]	≥19.8	≥20.1	≥20.3	≥20.6	≥20.8
IIMUM PERFORMANCE AT NORMAL	OPERATING CONE	DITIONS, NIV	IOT ²				
Power at MPP	P _{MPP}	[W]	280.8	284.6	288.3	292.0	295.8
Short Circuit Current	I _{sc}	[A]	8.55	8.58	8.60	8.63	8.65
Open Circuit Voltage	V _{oc}	[V]	42.39	42.43	42.46	42.50	42.53
Current at MPP	I _{MPP}	[A]	7.93	7.99	8.04	8.09	8.14
Voltage at MPP	V _{MPP}	[V]	35.39	35.64	35.87	36.11	36.34
	Power at MPP¹ Short Circuit Current¹ Open Circuit Voltage¹ Current at MPP Voltage at MPP Efficiency¹ NIMUM PERFORMANCE AT NORMAL Power at MPP Short Circuit Current Open Circuit Voltage Current at MPP	NIMUM PERFORMANCE AT STANDARD TEST CONDITIO Power at MPP¹ P _{MPP} Short Circuit Current¹ I _{SC} Open Circuit Voltage¹ V _{OC} Current at MPP I _{MPP} Voltage at MPP V _{MPP} Efficiency¹ NIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS Power at MPP P _{MPP} Short Circuit Current I _{SC} Open Circuit Voltage V _{OC} Current at MPP I _{MPP}	Power at MPP Power at MPP Power at MPP Power at MPP Short Circuit Current Power at MPP Power at MPP Short Circuit Voltage Voc Voc Voc Voc Voc Voc Voc Vo	IMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE Power at MPP¹ P_{MPP} [W] 375 Short Circuit Current¹ P_{MPP} [W] 375 Short Circuit Voltage¹ P_{MPP} [W] 44.96 Current at MPP P_{MPP} [V] 44.96 Current at MPP P_{MPP} [V] 37.18 Efficiency¹ P_{MPP} [V] 37.18 Efficiency¹ P_{MPP} [V] 37.18 SIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT² Power at MPP P_{MPP} [W] 280.8 Short Circuit Current P_{MPP} [W] 280.8 Current at MPP P_{MPP} [W] 280.9 Current at MPP P_{MPP} [V] 42.39 Current at MPP P_{MPP} [A] 7.93	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5W/-0W) Power at MPP¹ P _{MPP} [W] 375 380 Short Circuit Current¹ I _{SC} [A] 10.62 10.65 Open Circuit Voltage¹ V _{OC} [V] 44.96 44.99 Current at MPP I _{MPP} [A] 10.09 10.14 Voltage at MPP V _{MPP} [V] 37.18 37.46 Efficiency¹ η [%] ≥19.8 ≥20.1 NIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT² Power at MPP P _{MPP} [W] 280.8 284.6 Short Circuit Current I _{SC} [A] 8.55 8.58 Open Circuit Voltage V _{OC} [V] 42.39 42.43 Current at MPP I _{MPP} [A] 7.93 7.99	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W / -0 W) Power at MPP¹ P _{MPP} [W] 375 380 385 Short Circuit Current¹ I _{SC} [A] 10.62 10.65 10.68 Open Circuit Voltage¹ V _{OC} [V] 44.96 44.99 45.03 Current at MPP I _{MPP} [A] 10.09 10.14 10.20 Voltage at MPP V _{MPP} [V] 37.18 37.46 37.74 Efficiency¹ η [%] ≥19.8 ≥20.1 ≥20.3 SIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT² Power at MPP P _{MPP} [W] 280.8 284.6 288.3 Short Circuit Current I _{SC} [A] 8.55 8.58 8.60 Open Circuit Voltage V _{OC} [V] 42.39 42.43 42.46 Current at MPP I _{MPP} [A] 7.93 7.99 8.04	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W / -0 W) Power at MPP¹ P _{MPP} [W] 375 380 385 390 Short Circuit Current¹ I _{SC} [A] 10.62 10.65 10.68 10.71 Open Circuit Voltage¹ V _{OC} [V] 44.96 44.99 45.03 45.06 Current at MPP I _{MPP} [A] 10.09 10.14 10.20 10.26 Voltage at MPP V _{MPP} [V] 37.18 37.46 37.74 38.01 Efficiency¹ η [%] ≥19.8 ≥20.1 ≥20.3 ≥20.6 SIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT² Power at MPP P _{MPP} [W] 280.8 284.6 288.3 292.0 Short Circuit Current I _{SC} [A] 8.55 8.58 8.60 8.63 Open Circuit Voltage V _{OC} [V] 42.39 42.43 42.46 42.50 Current at MPP I _{MPP} [A] 7.93 7.99 8.04 8.09

 $^{1}\text{Measurement tolerances P}_{\text{MPP}} \pm 3\%; I_{\text{SC}}; V_{\text{OC}} \pm 5\% \text{ at STC}; 1000 \text{W/m}^{2}, 25 \pm 2\text{°C}, \text{AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according to IEC } 60904 - 3 \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM } 1.5 \text{ according } 1.$

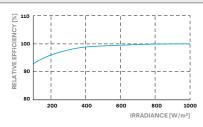
Q CELLS PERFORMANCE WARRANTY

RED TO

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.

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 Voc	β	[%/K]	-0.27
Temperature Coefficient of P _{MPP}	γ	[%/K]	-0.35	Nominal Module Operating Temperature	NMOT	[°C]	43±3

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	V_{SYS}	[V]	1000	PV module classification	Class II
Maximum Reverse Current	I _R	[A]	20	Fire Rating based on ANSI/UL 61730	C/TYPE 2
Max. Design Load, Push / Pull		[Pa]	3600/2660	Permitted Module Temperature	-40°C - +85°C
Max. Test Load, Push / Pull		[Pa]	5400/4000	on Continuous Duty	

QUALIFICATIONS AND CERTIFICATES

PACKAGING INFORMATION

IEC 61215:2016: IEC 61730:2016. This data sheet complies with DIN EN 50380. Certification holder Hanwha Q CELLS Australia Pty Ltd







packaging







687.5 kg





24 pallets 33 modules



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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