





BREAKING THE 21% EFFICIENCY BARRIER

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 21.7%.



LOW ELECTRICITY GENERATION COSTS

Higher yield per surface area, lower BOS costs and up to 175 watts more module power than standard 144 half-cell modules.



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 (2400 Pa).



A RELIABLE INVESTMENT



STATE OF THE ART MODULE TECHNOLOGY

Q.ANTUM DUO combines cutting edge cell separation and innovative 12-busbar design with Q.ANTUM Technology.

THE IDEAL SOLUTION FOR:

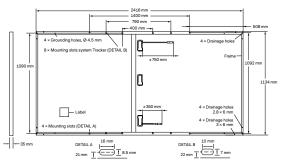




Q CELLS
Yield Security

¹ See data sheet on rear for further information.

Stäubli MC4-Evo2, Hanwha Q CELLS HQC4; IP68



ELECTRICAL CHARACTERISTICS

PO	WER CLASS			570	575	580	585	590
MIN	IIMUM PERFORMANCE AT STANDARD	TEST CONDITIO	NS, STC1 (PC	WER TOLERANCE	+5W/-0W)			
Minimum	Power at MPP¹	P _{MPP}	[W]	570	575	580	585	590
	Short Circuit Current ¹	I _{sc}	[A]	13.49	13.51	13.54	13.57	13.59
	Open Circuit Voltage ¹	V _{oc}	[V]	53.59	53.62	53.64	53.67	53.70
	Current at MPP	I _{MPP}	[A]	12.82	12.87	12.92	12.97	13.01
	Voltage at MPP	V _{MPP}	[V]	44.46	44.68	44.90	45.12	45.33
	Efficiency ¹	η	[%]	≥20.8	≥21.0	≥21.2	≥21.4	≥21.5
MIN	IIMUM PERFORMANCE AT NORMAL C	PERATING CONI	DITIONS, NM	OT ²				
	Power at MPP	P _{MPP}	[W]	427.6	431.4	435.1	438.9	442.6
Minimum	Short Circuit Current	I _{sc}	[A]	10.87	10.89	10.91	10.93	10.95
	Open Circuit Voltage	V _{oc}	[V]	50.54	50.56	50.59	50.62	50.64
	Current at MPP	I _{MPP}	[A]	10.09	10.13	10.17	10.22	10.26
	Voltage at MPP	V _{MPP}	[V]	42.39	42.58	42.77	42.96	43.14

 $^1\text{Measurement tolerances P}_{\text{MPP}}\pm3\%; \text{I}_{\text{SC}}; \text{V}_{\text{OC}}\pm5\% \text{ at STC}: 1000 \text{W/m}^2, 25\pm2^{\circ}\text{C}, \text{AM 1.5 according to IEC } 60904-3 \cdot ^2800 \text{W/m}^2, \text{NMOT}, \text{spectrum AM 1.5 } 1.5 \text{Measurement tolerances} = 1.5 \text{Measurement toler$

Q CELLS PERFORMANCE WARRANTY

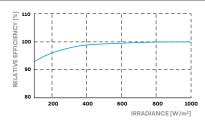
Connector

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]	-0.34	Nominal Module Operating Temperature	NMOT	[°C]	43±3

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	V _{SYS}	[V]	1500 PV module classification		Class II
Maximum Reverse Current	I _R	[A]	25	Fire Rating	С
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

IFC 61215:2016: IEC 61730:2016. This data sheet complies with DIN EN 50380.







Vertical

packaging













16 pallets 31 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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