





Q.ANTUM TECHNOLOGY: LOW LEVELIZED COST OF ELECTRICITY

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

 $\label{log-term} \mbox{Liong-term yield security with Anti LID and Anti PID Technology1,} \\ \mbox{Hot-Spot Protect and Traceable Quality Tra.QTM.}$



EXTREME WEATHER RATING

High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).



A RELIABLE INVESTMENT

Inclusive 25-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.



² See data sheet on rear for further information

THE IDEAL SOLUTION FOR:

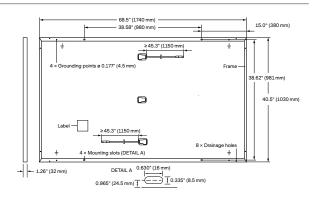


Rooftop arrays on residential buildings



Rooftop arrays on commercial/industrial buildings



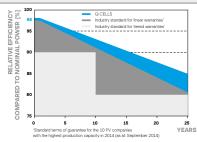


ELECTRICAL CHARACTERISTICS

WER CLASS			340	345	350	355
NIMUM PERFORMANCE AT STANDARD	TEST CONDITIO	NS, STC1 (PO	WER TOLERANCE +5 W / -0)W)		
Power at MPP¹	P _{MPP}	[W]	340	345	350	355
Short Circuit Current ¹	I _{sc}	[A]	10.68	10.73	10.79	10.84
Open Circuit Voltage ¹	V _{oc}	[V]	40.24	40.49	40.73	40.98
Current at MPP	I _{MPP}	[A]	10.16	10.22	10.27	10.33
Voltage at MPP	V_{MPP}	[V]	33.45	33.76	34.07	34.38
Efficiency ¹	η	[%]	≥19.0	≥19.3	≥19.5	≥19.8
NIMUM PERFORMANCE AT NORMAL OF	ERATING COND	DITIONS, NMO	OT ²			
Power at MPP	P _{MPP}	[W]	254.5	258.2	261.9	265.7
Short Circuit Current	I _{sc}	[A]	8.60	8.65	8.69	8.74
Open Circuit Voltage	V _{oc}	[V]	37.94	38.17	38.41	38.65
Current at MPP	I _{MPP}	[A]	8.00	8.04	8.09	8.13
Voltage at MPP	V _{MPP}	[V]	31.81	32.10	32.40	32.69
	Power at MPP¹ Short Circuit Current¹ Open Circuit Voltage¹ Current at MPP Voltage at MPP Efficiency¹ NIMUM PERFORMANCE AT NORMAL OP 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 CONDITION Power at MPP P _{MPP} Short Circuit Current I _{SC} Open Circuit Voltage V _{OC} Current at MPP I _{MPP}	Power at MPP¹ PMPP [W] Short Circuit Current¹ Isc [A] Current at MPP IMPP [W] Voltage at MPP VMPP [V] Efficiency¹ n [%] NIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMC Power at MPP PMPP [W] Short Circuit Current Isc [A] Current at MPP PMPP PMPP [W] Current at MPP Isc [A] Current at MPP Isc [A]	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W/-CP Power at MPP¹ P _{MPP} [W] 340 Short Circuit Current¹ I_{SC} [A] 10.68 Open Circuit Voltage¹ V_{OC} [V] 40.24 Current at MPP I_{MPP} [A] 10.16 Voltage at MPP V_{MPP} [V] 33.45 Efficiency¹ η [%] ≥19.0 NIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT² Power at MPP P_{MPP} [W] 254.5 Short Circuit Current I_{SC} [A] 8.60 Open Circuit Voltage V_{OC} [V] 37.94 Current at MPP I_{MPP} [A] 8.00	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W / -0 W) Power at MPP¹ P _{MPP} [W] 340 345 Short Circuit Current¹ I _{SC} [A] 10.68 10.73 Open Circuit Voltage¹ V _{OC} [V] 40.24 40.49 Current at MPP I _{MPP} [A] 10.16 10.22 Voltage at MPP V _{MPP} [V] 33.45 33.76 Efficiency¹ η [%] ≥19.0 ≥19.3 NIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT² Power at MPP P _{MPP} [W] 254.5 258.2 Short Circuit Current I _{SC} [A] 8.60 8.65 Open Circuit Voltage V _{OC} [V] 37.94 38.17 Current at MPP I _{MPP} [A] 8.00 8.04	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W / -0 W) Power at MPP¹ P _{MPP} [W] 340 345 350 Short Circuit Current¹ I _{SC} [A] 10.68 10.73 10.79 Open Circuit Voltage¹ V _{OC} [V] 40.24 40.49 40.73 Current at MPP I _{MPP} [A] 10.16 10.22 10.27 Voltage at MPP V _{MPP} [V] 33.45 33.76 34.07 Efficiency¹ η [%] ≥19.0 ≥19.3 ≥19.5 NIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT² Power at MPP P _{MPP} [W] 254.5 258.2 261.9 Short Circuit Current I _{SC} [A] 8.60 8.65 8.69 Open Circuit Voltage V _{OC} [V] 37.94 38.17 38.41 Current at MPP I _{MPP} [A] 8.00 8.04 8.09

¹Measurement 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 • ²800 W/m², NMOT, spectrum AM 1.5

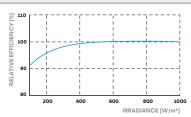
Q CELLS PERFORMANCE WARRANTY



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 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 Voc	β	[%/K]	-0.27
Temperature Coefficient of P _{MPP}	γ	[%/K]	-0.36	Nominal Module Operating Temperature	NMOT	[°F]	109±5.4 (43±3°C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage $V_{\scriptsize SYS}$	[V]	1000 (IEC)/1000 (UL)	PV module classification	Class II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI/UL 61730	TYPE 2
Max. Design Load, Push/Pull ³	[lbs/ft ²]	75 (3600 Pa) / 55 (2667 Pa)	Permitted Module Temperature	-40°F up to +185°F
Max. Test Load, Push / Pull ³	[lbs/ft ²]	113 (5400 Pa) / 84 (4000 Pa)	on Continuous Duty	(-40°C up to +85°C)

QUALIFICATIONS AND CERTIFICATES

PACKAGING INFORMATION

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UL 1703, CE-compliant, VDE Quality Tested IEC 61215:2016 IEC 61730:2016. U.S. Patent No. 9,893,215 (solar cells)

³ See Installation Manual







		lb	0-0	40'HC
Horizontal packaging			28 pallets	26 pallets
Vertical packaging			28 pallets	24 pallets

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. Q CELLS supplies solar modules in two different stacking methods, depending on the location of manufacture (modules are packed horizontally or vertically). You can find more detailed information in the document "Packaging and Transport Information", available from Q CELLS

Hanwha Q CELLS America Inc.