

powered by

Q.ANTUM

Q.PEAK-G5.1

305-315

ENDURING HIGH PERFORMANCE



Q.ANTUM TECHNOLOGY: LOW LEVELISED COST OF ELECTRICITY

Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 19.2%.



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 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).



MAXIMUM COST REDUCTIONS

Up to 10% lower logistics costs due to higher module capacity per box.



A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance warranty¹.

¹ See data sheet on rear for further information.

THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings



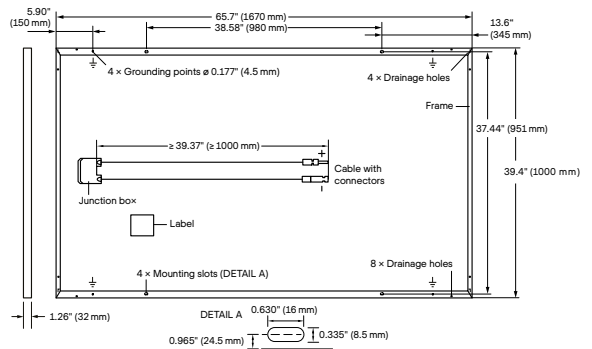
Rooftop arrays on commercial/industrial buildings



Ground-mounted solar power plants

MECHANICAL SPECIFICATION

Format	65.7in × 39.4in × 1.26in (including frame) (1670mm × 1000mm × 32mm)
Weight	40.8lbs (18.5kg) ±5%
Front Cover	0.13in (3.2mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodized aluminum
Cell	6 × 10 monocrystalline Q.ANTUM solar cells
Junction Box	3.35-4.53in × 2.36-3.15in × 0.59-0.75in (85-115mm × 60-80mm × 15-20mm), IP67, with bypass diodes
Cable	4mm ² Solar cable; (+) ≥39.37in (1000mm), (-) ≥39.37in (1000mm)
Connector	Stäubli MC4, Hanwha Q CELLS HQC4, Tonglin TL-Cable01S, Amphenol UTX; IP68



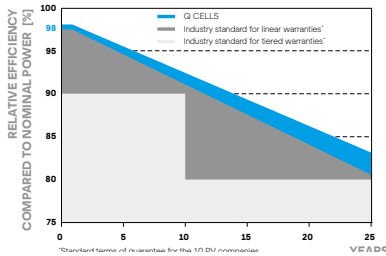
ELECTRICAL CHARACTERISTICS

POWER CLASS		305	310	315	
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5W / -0W)					
Minimum	Power at MPP ¹	P _{MPP} [W]	305	310	315
	Short Circuit Current ¹	I _{SC} [A]	9.82	9.89	9.96
	Open Circuit Voltage ¹	V _{OC} [V]	40.08	40.37	40.65
	Current at MPP	I _{MPP} [A]	9.33	9.42	9.52
	Voltage at MPP	V _{MPP} [V]	32.68	32.89	33.10
	Efficiency ¹	η [%]	≥18.3	≥18.6	≥18.9
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ²					
Minimum	Power at MPP	P _{MPP} [W]	227.6	231.3	235.0
	Short Circuit Current	I _{SC} [A]	7.91	7.97	8.02
	Open Circuit Voltage	V _{OC} [V]	37.72	37.99	38.26
	Current at MPP	I _{MPP} [A]	7.34	7.42	7.50
	Voltage at MPP	V _{MPP} [V]	30.99	31.17	31.34

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 • *800 W/m², NMOT, spectrum AM 1.5

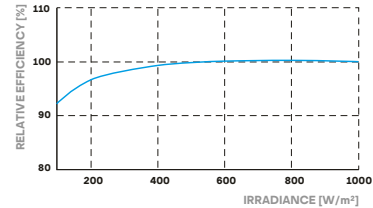
Q CELLS PERFORMANCE WARRANTY

PERFORMANCE AT LOW IRRADIANCE



At least 98% of nominal power during first year. Thereafter max. 0.6% degradation per year. At least 92.6% of nominal power up to 10 years. At least 83.6% 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.



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 V _{OC}	β [%/K]	-0.28
Temperature Coefficient of P _{MPP}	γ [%/K]	-0.39	Normal Module Operating Temperature	NMOT [°F]	109 ± 5.4 (43 ± 3 °C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V _{sys}	[V]	1000 (IEC)/1000 (UL)	Safety Class	II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI / UL 1703	C / TYPE 2
Max. Design Load, Push / Pull ³	[lbs / ft ²]	75 (3600 Pa) / 55 (2667 Pa)	Permitted Module Temperature on Continuous Duty	-40 °F up to +185 °F (-40 °C up to +85 °C)
Max. Test Load, Push / Pull ³	[lbs / ft ²]	113 (5400 Pa) / 84 (4000 Pa)		

³ See Installation Manual

QUALIFICATIONS AND CERTIFICATES

UL 1703, CE-compliant,
IEC 61215:2016, IEC 61730:2016, Application Class II



PACKAGING INFORMATION

Number of Modules per Pallet	32
Number of Pallets per 53' Container	30
Pallet Dimensions (L × W × H)	67.9 × 44.0 × 46.1 in (1725 × 1118 × 1170 mm)
Pallet Weight	1393 lbs (632 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.

Hanwha Q CELLS America Inc.

400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL inquiry@us.q-cells.com | WEB www.q-cells.us