

Q.ANTUM SOLAR MODULE

The new Q.PEAK DUO BLK-G5 solar module from Q CELLS impresses with its outstanding visual appearance and particularly high performance on a small surface thanks to the innovative Q.ANTUM DUO Technology. Q.ANTUM's world-record-holding cell concept has now been combined with state-of-the-art circuitry half cells and a six-busbar design, thus achieving outstanding performance under real conditions — both with low-intensity solar radiation as well as on hot, clear summer days.



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 19.3%.



INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behavior.



ENDURING HIGH PERFORMANCE

Long-term yield security with Anti LID Technology, Anti PID Technology 1 , Hot-Spot Protect and Traceable Quality Tra. Q^{TM} .



EXTREME WEATHER RATING

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



A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance guarantee².



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:













- ¹ APT test conditions according to IEC/TS 62804-1:2015, method B (-1500 V. 168 h)
- See data sheet on rear for further information.



0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology

Front Cover 0.13 in (3.2 mm)

Back Cover Composite film

Weight

Frame Black anodized aluminum

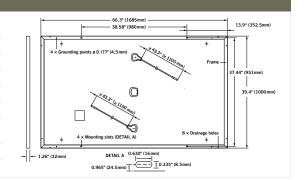
Cell 6 × 20 monocrystalline Q.ANTUM solar half-cells

Junction box $2.76-3.35 \text{ in} \times 1.97-2.76 \text{ in} \times 0.51-0.83 \text{ in}$

(70-85 mm \times 50-70 mm \times 13-21 mm), decentralized, IP67

Cable $4 \text{ mm}^2 \text{ Solar cable}; (+) \ge 43.3 \text{ in } (1100 \text{ mm}), (-) \ge 43.3 \text{ in } (1100 \text{ mm})$

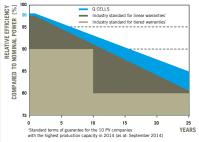
Connector Multi-Contact MC4, IP68



EL	ECTRICAL CHARACTERISTICS							
P0\	WER CLASS			300	305	310	315	320
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC1 (POWER TOLERANCE +5 W / -0 W)								
	Power at MPP ¹	\mathbf{P}_{MPP}	[W]	300	305	310	315	320
	Short Circuit Current ¹	I _{sc}	[A]	9.72	9.78	9.83	9.89	9.94
Minimum	Open Circuit Voltage ¹	V_{oc}	[V]	39.48	39.75	40.02	40.29	40.56
Μin	Current at MPP	I _{MPP}	[A]	9.25	9.31	9.36	9.41	9.47
	Voltage at MPP	\mathbf{V}_{MPP}	[V]	32.43	32.78	33.12	33.46	33.80
	Efficiency ¹	η	[%]	≥17.8	≥18.1	≥18.4	≥18.7	≥19.0
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ²								
	Power at MPP	\mathbf{P}_{MPP}	[W]	224.1	227.8	231.6	235.3	239.1
트	Short Circuit Current	I _{sc}	[A]	7.83	7.88	7.92	7.97	8.01
Minimum	Open Circuit Voltage	V_{oc}	[V]	37.15	37.40	37.66	37.91	38.17
Ξ	Current at MPP	I _{MPP}	[A]	7.28	7.32	7.37	7.41	7.45
	Voltage at MPP	\mathbf{V}_{MPP}	[V]	30.78	31.11	31.44	31.76	32.08

 $^1\text{Measurement tolerances P}_{\text{MPP}} \pm 3\,\%; I_{\text{Sc}}, V_{\text{OC}} \pm 5\,\% \text{ at STC: } 1000\,\text{W/m}^2, 25 \pm 2\,^\circ\text{C}, \text{AM } 1.5\,\text{G} \text{ according to IEC } 60904\text{--}3 \cdot ^2800\,\text{W/m}^2, \text{NMOT, spectrum AM } 1.5\,\text{G} \text{ according to IEC } 1000\,\text{W/m}^2, 10000\,\text{W/m}^2, 10000\,\text{W/m}^2, 10000\,\text{W/m}^2, 10000\,\text{W/m}^2, 100$

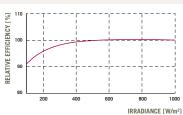
Q CELLS PERFORMANCE WARRANTY



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 $^{\circ}\text{C},\ 1000\,\text{W/m}^2).$

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]	-0.37	Normal Operating Module 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	C (IEC) / TYPE 1 (UL)				
Max. Design Load, Push / Pull (UL) ²	[lbs/ft²]	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 (UL) ²	[lbs/ft²]	113 (5400 Pa) / 84 (4000 Pa)	² see installation manual					

QUALIFICATIONS AND CERTIFICATES UL 1703; VDE Quality Tested; CE-compliant; IEC 61215:2016; IEC 61730:2016, Application class A Number of Modules per Pallet Number of Pallets per 53' Trailer Number of Pallets per 40' High Cube Container Pallet Dimensions (L x W x H) 69.3 in x 45.3 in x 46.9 in (1760 mm x 1150 mm x 1190 mm)

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.

Pallet Weight

Hanwha Q CELLS America Inc.

1415 lbs (642 kg)