

Q.ANTUM SOLAR MODULE

The new Q.PEAK DUO BLK-G6 solar module from Q CELLS impresses thanks to innovative Q.ANTUM DUO Technology, which enables particularly high performance on a small surface. 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 19.0%.



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 and Anti PID Technology¹, 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:













www.VDEinfo.com ID. 40032587

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



Back Cover Composite film

Weight

Frame Black anodized aluminum

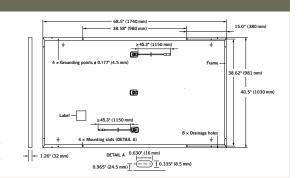
Cell 6 x 20 monocrystalline Q.ANTUM solar half-cells

Junction box $2.40-2.80 \text{ in} \times 1.61-2.01 \text{ in} \times 0.51-0.83 \text{ in}$

(61-71 mm \times 41-50 mm \times 13-21 mm), decentralized, IP67

Cable $4 \text{ mm}^2 \text{ Solar cable; (+)} \ge 45.3 \text{ in (1150 mm), (-)} \ge 45.3 \text{ in (1150 mm)}$

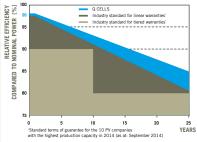
Connector Multi-Contact MC4, IP68



EL	ECTRICAL CHARACTERISTICS								
P0\	VER CLASS			320	325	330	335		
MII	IIMUM PERFORMANCE AT STANDARD TEST CON	DITIONS, STC1	POWER TO	ERANCE +5 W / -0 W)					
	Power at MPP ¹	\mathbf{P}_{MPP}	[W]	320	325	330	335		
_	Short Circuit Current ¹	I _{sc}	[A]	10.30	10.36	10.41	10.47		
Minimum	Open Circuit Voltage ¹	V _{oc}	[V]	39.65	39.90	40.15	40.41		
Μin	Current at MPP¹	I _{MPP}	[A]	9.80	9.86	9.91	9.97		
	Voltage at MPP	\mathbf{V}_{MPP}	[V]	32.64	32.97	33.29	33.62		
	Efficiency ¹	η	[%]	≥17.9	≥18.1	≥18.4	≥18.7		
MII	MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ²								
	Power at MPP	\mathbf{P}_{MPP}	[W]	239.1	242.8	246.5	250.3		
트	Short Circuit Current	I _{sc}	[A]	8.30	8.35	8.39	8.43		
Minimum	Open Circuit Voltage	V _{oc}	[V]	37.30	37.54	37.79	38.03		
Ξ	Current at MPP	I _{MPP}	[A]	7.72	7.76	7.80	7.84		
	Voltage at MPP	V_{MPP}	[V]	30.98	31.29	31.60	31.91		

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

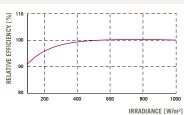
Q CELLS PERFORMANCE WARRANTY



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 °C, $1000\,W/m^2$).

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

QUALIFICATIONS AND CERTIFICATES PACKAGING INFORMATION UL 1703; VDE Quality Tested; CE-compliant; IEC 61215:2016; IEC 61730:2016, application class A Number of Modules per Pallet 32 Number of Pallets per 53' Trailer 29 Number of Pallets per 40' High Cube Container 26 Pallet Dimensions (L × W × H) 71.5 in × 45.3 in × 47.2 in (1815 mm × 1150 mm × 1200 mm)

Pallet Weight 1505 lbs (683 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.