

The new Q.PEAK DUO-G5 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 19.9%.



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 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:















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



Format

Cable

Front Cover **Back Cover** Composite film

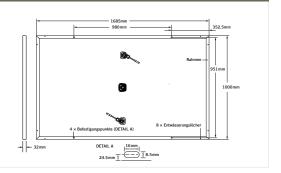
Frame Black anodized aluminum Cell 6 × 20 monocrystalline Q.ANTUM solar half-cells

2.76-3.35 in \times 1.97-2.76 in \times 0.51-0.83 in Junction box

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

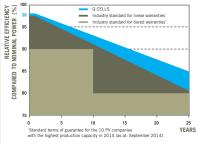
 $4\,\text{mm}^2$ Solar cable; (+) $\geq 43.3\,\text{in}$ (1100 mm), (-) $\geq 43.3\,\text{in}$ (1100 mm)

Multi-Contact MC4, IP65 and IP68 Connector



EL	ECTRICAL CHARACTERIS	TICS							
	WER CLASS	305	310	315	320	325	330		
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W / -0 W)									
Minimum	Power at MPP ²	P _{MPP}	[W]	305	310	315	320	325	330
	Short Circuit Current*	I _{sc}	[A]	9.93	9.98	10.04	10.09	10.14	10.20
	Open Circuit Voltage*	V _{oc}	[V]	39.35	39.61	39.87	40.13	40.40	40.66
	Current at MPP*	I _{MPP}	[A]	9.44	9.50	9.55	9.60	9.66	9.71
	Voltage at MPP*	\mathbf{V}_{MPP}	[V]	32.30	32.64	32.98	33.32	33.65	33.98
	Efficiency ²	η	[%]	≥18.1	≥18.4	≥18.7	≥19.0	≥19.3	≥19.6
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC3									
Minimum	Power at MPP ²	P_{MPP}	[W]	226.0	229.7	233.4	237.2	240.9	244.6
	Short Circuit Current*	I _{sc}	[A]	8.00	8.05	8.09	8.14	8.18	8.22
	Open Circuit Voltage*	V _{oc}	[V]	36.80	37.05	37.30	37.54	37.79	38.04
	Current at MPP*	I _{MPP}	[A]	7.43	7.47	7.51	7.56	7.60	7.64
	Voltage at MPP*	\mathbf{V}_{MPP}	[V]	30.43	30.75	31.07	31.39	31.70	32.01
1100	$^{1}1000\text{W/m}^{2}$, 25 °C, spectrum AM 1.5 G 2 Measurement tolerances STC ±3%; NOC ±5%			³ 800 W/m², NOCT, spectrum AM 1.5 G * typical values, actual values may differ				may differ	

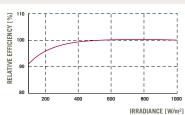
Q CELLS PERFORMANCE WARRANTY



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 COE	FFICIENTS
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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 Cell Temperature	NOCT	[°F]	113 ±5.4 (45 ±3°C)

PROPERTIES FOR SYSTEM D	ESIGN			
Maximum System Voltage \mathbf{V}_{SYS}	[V]	1000 (IEC) / 1000 (UL)	Safety Class	II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating	C (IEC) / TYPE 1 (UL)
Design load, push (UL) ²	[lbs/ft²]	75 (3600 Pa)	Permitted module temperature on continuous duty	-40°F up to +185°F (-40°C up to +85°C)
Design load, pull (UL) ²	[lbs/ft²]	55.6 (2666 Pa)	² see installation manual	

QUALIFICATIONS AND CERTIFICATES PACKAGING INFORMATION UL 1703; VDE Quality Tested; CE-compliant; IEC 61215 (Ed.2); IEC 61730 (Ed.1) application class A







32
30
ner 26
$69.3 \text{in} \times 45.3 \text{in} \times 46.9 \text{in}$ (1760 mm × 1150 mm × 1190 mm)
1415 lbs (642 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.