





# 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 19.5%.



### **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).



### A RELIABLE INVESTMENT

Inclusive 25-year product warranty and 25-year linear performance warranty<sup>2</sup>.



# STATE OF THE ART MODULE TECHNOLOGY

Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.

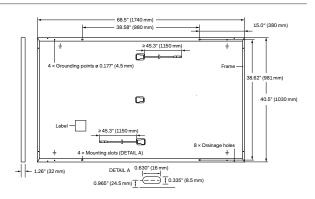
## THE IDEAL SOLUTION FOR:





 $<sup>^{\</sup>rm 1}$  APT test conditions according to IEC/TS 62804-1:2015, method B (–1500 V, 168 h)

<sup>&</sup>lt;sup>2</sup> See data sheet on rear for further information

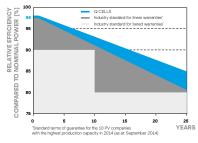


### **ELECTRICAL CHARACTERISTICS**

PO	VER CLASS			330	335	340	345
MIN	IIMUM PERFORMANCE AT STANDARD TEST	CONDITIC	NS, STC1 (PC	OWER TOLERANCE +5W/-0	)W)		
	Power at MPP¹	P <sub>MPP</sub>	[W]	330	335	340	345
_	Short Circuit Current <sup>1</sup>	I <sub>sc</sub>	[A]	10.41	10.47	10.52	10.58
un u.	Open Circuit Voltage <sup>1</sup>	V <sub>oc</sub>	[V]	40.15	40.41	40.66	40.92
Mini	Current at MPP	I <sub>MPP</sub>	[A]	9.91	9.97	10.02	10.07
_	Voltage at MPP	$V_{MPP}$	[V]	33.29	33.62	33.94	34.25
	Efficiency <sup>1</sup>	η	[%]	≥18.4	≥18.7	≥19.0	≥19.3
MIN	IIMUM PERFORMANCE AT NORMAL OPERAT	ING CONI	DITIONS, NIV	IOT <sup>2</sup>			
	Power at MPP	P <sub>MPP</sub>	[W]	247.0	250.7	254.5	258.2
Ę	Short Circuit Current	I <sub>sc</sub>	[A]	8.39	8.43	8.48	8.52
ij	Open Circuit Voltage	V <sub>oc</sub>	[V]	37.86	38.10	38.34	38.59
₫	Current at MPP	I <sub>MPP</sub>	[A]	7.80	7.84	7.89	7.93
	Voltage at MPP	V <sub>MPP</sub>	[V]	31.66	31.97	32.27	32.57

¹Measurement tolerances P<sub>MPP</sub> ±3%; I<sub>SC</sub>; V<sub>OC</sub> ±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

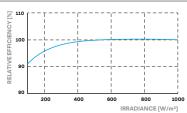
### Q CELLS PERFORMANCE WARRANTY



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 <sub>SC</sub>	α	[%/K]	+0.04	Temperature Coefficient of Voc	β	[%/K]	-0.27
Temperature Coefficient of Pugg	v	[%/K]	-0.36	Normal Module Operating Temperature	NMOT	[°F]	109+5 4 (43+3°C)

# PROPERTIES FOR SYSTEM DESIGN

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

### **QUALIFICATIONS AND CERTIFICATES**

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



<sup>3</sup> See Installation Manual





	PACKAGING	INFORMATION
Number of Modules pe	r Pallet	
Number of Pallets per 5	3' Trailer	

Number of Pallets per 40' HC-Container 24  $71.5 \times 45.3 \times 48.0$  in  $(1815 \times 1150 \times 1220$  mm) Pallet Dimensions (L×W×H) 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.

# subject to technical changes @ Q CELLS Q.PEAK DUO BLK-G6+\_330-345\_2019-06\_Rev01\_NA

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