

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 LEVELISED 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 behaviour.



### **ENDURING HIGH PERFORMANCE**

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



### **EXTREME WEATHER RATING**

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



### A RELIABLE INVESTMENT

Inclusive 12-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.











www.VDEinfo.com ID. 40032587

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

### THE IDEAL SOLUTION FOR:







**MECHANICAL SPECIFICATION**  $1685 \, \text{mm} \times 1000 \, \text{mm} \times 32 \, \text{mm}$  (including frame) 1685mm Reviewed for Code Compliance 980mm Permitting and Inspections Department 18.7 kg

Front Cover 3.2 mm thermally pre-stressed glass with anti-reflection technology **Back Cover** Composite film Black anodised aluminium

4 mm<sup>2</sup> Solar cable; (+) 1100 mm, (-) 1100 mm

Cell 6 × 20 monocrystalline Q.ANTUM solar half cells  $70-85 \, \text{mm} \times 50-70 \, \text{mm} \times 13-21 \, \text{mm}$ **Junction box** Protection class IP67, with bypass diodes

Connector Multi-Contact, MC4, IP65 and IP68

**Format** 

Weight

Frame

Cable

4 × Mounting slots (DETAIL A) → 32mm 

Approved with Conditions

12/19/2018

EL	FOTDICAL CHARACTERICTICS						
EL	ECTRICAL CHARACTERISTICS						
PO	WER CLASS			315	320	325	330
MII	NIMUM PERFORMANCE AT STANDARD TE	ST CONDITIONS, STO	(POWER TOL	ERANCE +5 W / -0 W)			
	Power at MPP <sup>2</sup>	$P_{MPP}$	[W]	315	320	325	330
	Short Circuit Current*	I <sub>sc</sub>	[A]	10.04	10.09	10.14	10.20
E E	Open Circuit Voltage*	V <sub>oc</sub>	[V]	39.87	40.13	40.40	40.66
Minimum	Current at MPP*	I <sub>MPP</sub>	[A]	9.55	9.60	9.66	9.71
_	Voltage at MPP*	$V_{\mathrm{MPP}}$	[ <b>V</b> ]	32.98	33.32	33.65	33.98
	Efficiency <sup>2</sup>	η	[%]	≥18.7	≥19.0	≥19.3	≥19.6
MII	NIMUM PERFORMANCE AT NORMAL OPER	ATING CONDITIONS,	NOC3				
	Power at MPP <sup>2</sup>	$P_{MPP}$	[W]	233.4	237.2	240.9	244.6
E	Short Circuit Current*	I <sub>sc</sub>	[A]	8.09	8.14	8.18	8.22
Minimum	Open Circuit Voltage*	V <sub>oc</sub>	[ <b>V</b> ]	37.30	37.54	37.79	38.04
Σ	Current at MPP*	I <sub>MPP</sub>	[A]	7.51	7.56	7.60	7.64
	Voltage at MPP*	V <sub>MPP</sub>	[ <b>V</b> ]	31.07	31.39	31.70	32.01

### **Q CELLS PERFORMANCE WARRANTY**

 $^11000\,\mathrm{W/m^2}$ , 25 °C, spectrum AM 1.5 G

RELATIVE EFFICIENCY 40MINAL POWER [%]

# At least 98% of nominal power during first year. Thereafter max. 0.54 % degradation per year. At least 93.1 % of

<sup>2</sup> Measurement tolerances STC ±3%; NOC ±5% <sup>3</sup> 800 W/m², NOCT, spectrum AM 1.5 G

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 organisation of your respective country.

# RELATIVE EFFICIENCY 200 400 600 800 1000 IRRADIANCE [W/M²]

PERFORMANCE AT LOW IRRADIANCE

\* typical values, actual values may differ

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 $\mathbf{V}_{\text{oc}}$	β	[%/K]	-0.28
Temperature Coefficient of $P_{\mbox{\tiny MPP}}$	Y	[%/K]	-0.37	Normal Operating Cell Temperature	NOCT	[°C]	45

PROPERTIES FOR SYSTEM DESIGN							
Maximum System Voltage	$\mathbf{V}_{\mathrm{sys}}$	[V]	1000	Safety Class	II		
Maximum Reverse Current	I <sub>R</sub>	[A]	20	Fire Rating	С		
Push/Pull Load (Test-load in accordance with IEC 61215)		[Pa]	5400/4000	Permitted Module Temperature On Continuous Duty	-40°C up to +85°C		

**PARTNER** 

### **QUALIFICATIONS AND CERTIFICATES**

VDE Quality Tested, IEC 61215 (Ed. 2); IEC 61730 (Ed. 1), Application class A This data sheet complies with DIN EN 50380.

25 YEARS





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.

# Specifications subject to technical changes © Hanwha Q CELLS Q.PEAK DUO-G5\_315-330\_2017-07\_Rev01\_EN