

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.

# THE IDEAL SOLUTION FOR:











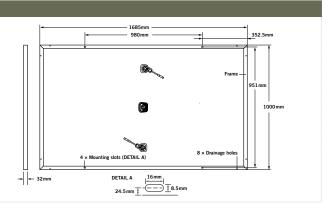




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- <sup>1</sup> APT test conditions according to IEC/TS 62804-1:2015, method B (-1500V, 168h)
- See data sheet on rear for further information.





EL	ECTRICAL CHARACTERISTICS								
PO	WER CLASS	315	320	325	330				
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W / -0 W)									
	Power at MPP <sup>2</sup>	$\mathbf{P}_{\text{MPP}}$	[W]	315	320	325	330		
_	Short Circuit Current*	I <sub>sc</sub>	[A]	10.04	10.09	10.14	10.20		
Minimum	Open Circuit Voltage*	$V_{oc}$	[ <b>V</b> ]	39.87	40.13	40.40	40.66		
Min	Current at MPP*	I <sub>MPP</sub>	[A]	9.55	9.60	9.66	9.71		
_	Voltage at MPP*	$\mathbf{V}_{\text{MPP}}$	[ <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	MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC3								
	Power at MPP <sup>2</sup>	$\mathbf{P}_{\text{MPP}}$	[W]	233.4	237.2	240.9	244.6		
트	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		
Ξ	Current at MPP*	I <sub>MPP</sub>	[A]	7.51	7.56	7.60	7.64		
	Voltage at MPP*	$V_{\mathrm{MPP}}$	[ <b>V</b> ]	31.07	31.39	31.70	32.01		

1000 W/m², 25 °C, spectrum AM 1.5G 2 Measurement tolerances STC ±3%; NOC ±5% 3 800 W/m², NOCT, spectrum AM 1.5G \*typical values, actual values may differ

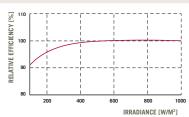
# Q CELLS PERFORMANCE WARRANTY

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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 organisation of your respective country.

### PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions ( $25\,^{\circ}$ C,  $1000\,\text{W/m}^2$ ).

TEMPERATU	IRF CC	DEFEIGI	2TM

Temperature Coefficient of I <sub>sc</sub>	α	[%/K]	+0.04	Temperature Coefficient of $\mathbf{V}_{\mathrm{oc}}$	β	[%/K]	-0.28
Temperature Coefficient of P <sub>MPP</sub>	γ	[%/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

# QUALIFICATIONS AND CERTIFICATES

# PARTNER

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





**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 GmbH

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