

EAK-DUO-G5 315-33

Q.ANTUM SOLAR MODULE

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 Technology¹, Hot-Spot Protect and Traceable Quality Tra.Q[™].



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 warranty².



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

THE IDEAL SOLUTION FOR:





Rooftop arrays on commercial/industrial









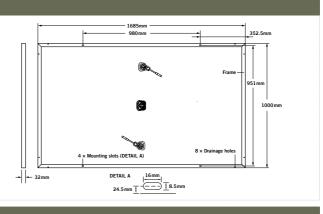
- ¹ APT test conditions according to IEC/TS 62804-1-2015. method B (-1500V, 168h)
- ² See data sheet on rear for further information.



Engineered in Germany

MECHANICAL SPECIFICATION

Format	$1685\text{mm}\times1000\text{mm}\times32\text{mm}$ (including frame)						
Weight	18.7 kg						
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology						
Back Cover	Composite film						
Frame	Black anodised aluminium						
Cell	6×20 monocrystalline Q.ANTUM solar half cells						
Junction box	70-85 mm \times 50-70 mm \times 13-21 mm Protection class IP67, with bypass diodes						
Cable	4 mm² Solar cable; (+) 1100 mm, (-) 1100 mm						
Connector	Multi-Contact, MC4, IP65 and IP68						

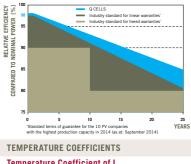


ELECTRICAL CHARACTERISTICS

PO	WER CLASS			315	320	325	330
MI	NIMUM PERFORMANCE AT STANDARD TEST COND	ITIONS, ST	C ¹ (POWER TO	LERANCE +5 W / –0 W)			
	Power at MPP ²	P _{MPP}	[W]	315	320	325	330
	Short Circuit Current*	I _{sc}	[A]	10.04	10.09	10.14	10.20
Minimum	Open Circuit Voltage*	Voc	[V]	39.87	40.13	40.40	40.66
Mini	Current at MPP*	I _{MPP}	[A]	9.55	9.60	9.66	9.71
-	Voltage at MPP*	V _{MPP}	[V]	32.98	33.32	33.65	33.98
	Efficiency ²	η	[%]	≥18.7	≥19.0	≥19.3	≥19.6
MI	NIMUM PERFORMANCE AT NORMAL OPERATING C	ONDITIONS	, NOC ³				
	Power at MPP ²	P _{MPP}	[W]	233.4	237.2	240.9	244.6
E	Short Circuit Current*	I _{sc}	[A]	8.09	8.14	8.18	8.22
Minimum	Open Circuit Voltage*	V _{oc}	[V]	37.30	37.54	37.79	38.04
M	Current at MPP*	I _{MPP}	[A]	7.51	7.56	7.60	7.64
	Voltage at MPP*	V _{MPP}	[V]	31.07	31.39	31.70	32.01

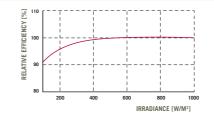
1000 W/m², 25 °C, spectrum AM 1.5 G ² Measurement tolerances STC ± 3 %; NOC ± 5 % ³ 800 W/m², NOCT, spectrum AM 1.5 G ⁺ typical values, actual values may differ

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 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 W/m²).

TEMPERATURE COEFFICIENTS							
Temperature Coefficient of I _{sc}	α	[%/K]	+0.04	Temperature Coefficient of \mathbf{V}_{oc}	β	[%/K]	-0.28
Temperature Coefficient of P _{MPP}	Ŷ	[%/K]	-0.37	Normal Operating Cell Temperature	NOCT	[°C]	45
PROPERTIES FOR SYSTEM DESIGN							
Maximum System Voltage	V _{sys}	[V]	1000	Safety Class		11	
Maximum Reverse Current	I _R	[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.

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

Sonnenallee 17-21, 06766 Bitterfeld-Wolfen, Germany | TEL +49 (0)3494 66 99-23444 | FAX +49 (0)3494 66 99-23000 | EMAIL sales@q-cells.com | WEB www.q-cells.com

