

# Q.PEAK 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 Technology<sup>1</sup>, Hot-Spot Protect and Traceable Quality Tra.Q<sup>™</sup>.



### **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:





Rooftop arrays on commercial/industrial







ID. 40032587

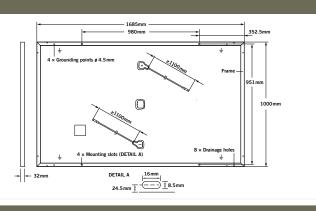
- <sup>1</sup> APT test conditions according to IEC/TS 62804-1:2015, method B (-1500V, 168h)
- See data sheet on rear for further information.



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	$6 \times 20$ monocrystalline Q.ANTUM solar half cells
Junction box	70-85mm  imes 50-70mm  imes 13-21mm Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) 1100 mm, (-) 1100 mm
Connector	Multi-Contact MC4, IP68

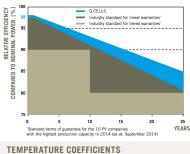


#### ELECTRICAL CHARACTERISTICS

PO	WER CLASS			315	320	325	330
MI	NIMUM PERFORMANCE AT STANDARD TEST COM	IDITIONS, ST	C <sup>1</sup> (POWER TO	LERANCE +5 W / –0 W)			
	Power at MPP <sup>1</sup>	P <sub>MPP</sub>	[W]	315	320	325	330
	Short Circuit Current <sup>1</sup>	I <sub>sc</sub>	[A]	10.04	10.09	10.14	10.20
Minimum	Open Circuit Voltage <sup>1</sup>	V <sub>oc</sub>	[V]	39.87	40.13	40.40	40.66
Mini	Current at MPP	I <sub>MPP</sub>	[A]	9.55	9.60	9.66	9.71
-	Voltage at MPP	V <sub>MPP</sub>	[V]	32.98	33.32	33.65	33.98
	Efficiency <sup>1</sup>	η	[%]	≥18.7	≥19.0	≥19.3	≥19.6
MI	NIMUM PERFORMANCE AT NORMAL OPERATING	CONDITIONS	, NMOT <sup>2</sup>				
	Power at MPP	PMPP	[W]	235.3	239.0	242.8	246.5
Ę	Short Circuit Current	Isc	[A]	8.09	8.13	8.17	8.22
Minimum	Open Circuit Voltage	V <sub>oc</sub>	[V]	37.52	37.77	38.02	38.27
	Current at MPP	I <sub>MPP</sub>	[A]	7.52	7.56	7.60	7.64
	Voltage at MPP	V <sub>MPP</sub>	[V]	31.30	31.62	31.94	32.25

<sup>1</sup>Measurement tolerances P<sub>MPP</sub> ± 3%; I<sub>SC</sub>, V<sub>0C</sub> ± 5% at STC: 1000 W/m<sup>2</sup>, 25 ± 2°C, AM 1.5G according to IEC 60904-3 · <sup>2</sup>800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5G

**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.



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

TEMPERATURE COEFFICIENTS											
Temperature Coefficient of I <sub>sc</sub>		[%/K]	+0.04	Temperature Coefficient of $\mathbf{V}_{\text{oc}}$	β	[%/K]	-0.28				
Temperature Coefficient of $\mathbf{P}_{_{\mathrm{MPP}}}$	Y	[%/K]	-0.37	Normal Module Operating Temperature	NMOT	[°C]	43±3				
PROPERTIES FOR SYSTEM DESIGN											
Maximum System Voltage**	V <sub>sys</sub>	[V]	1000	Safety Class	11						
Maximum Reverse Current	I <sub>R</sub>	[A]	20	Fire Rating	С						
Max. Design Load, Push / Pull		[Pa]	3600/2667	Permitted Module Temperature	-40°C up to +85°C						
Max. Test Load, Push / Pull		[Pa]	5400/4000	000 on Continuous Duty							
				Permitted Module Temperature on Continuous Duty	–40°C up to +85°C		°C				

PARTNER

#### QUALIFICATIONS AND CERTIFICATES

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VDE Quality Tested, IEC 61215:2016; IEC 61730:2016, 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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