

Q.PEAK DUO-G5-305-33

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.



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







- ¹ 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	6×20 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



PUER CLASS 305 310 315 320 325 330 MUMPERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5 W / -0W) Power at MPP ² P _{MPP} [W] 305 310 315 320 325 330 Short Circuit Current* Isc [A] 9,93 9,98 10.04 10.09 10.14 10.20 Open Circuit Voltage* Voc [V] 39,35 39,61 39.87 40.13 40.40 40.66 Current at MPP* I _{MPP} [A] 9,44 9,50 9.55 9.60 9.66 9.71 Voltage at MPP* I _{MPP} [A] 9,44 9.50 33.32 33.65 33.98 Efficiency ² η [V] 32,30 32,64 32.98 33.32 33.65 33.98 Efficiency ² η [V] 218,1 ≥18,7 ≥19.0 ≥19.3 ≥19.6 Power at MPP ² P _{MPP} [W] 226,0 229,7
Power at MPP ² P _{MPP} [W] 305 310 315 320 325 330 Short Circuit Current* Isc [A] 9,93 9,98 10.04 10.09 10.14 10.20 Open Circuit Voltage* Voc [V] 39,35 39,61 39.87 40.13 40.40 40.66 Current at MPP* Impp [A] 9,44 9,50 9.55 9.60 9.66 9.71 Voltage at MPP* [M] 32,30 32,64 32.98 33.32 33.65 33.98 Efficiency ² η [%] ≥18,1 ≥18,4 ≥18.7 ≥19.0 ≥19.3 ≥19.6 MUM PERFORMANCE AT NORMAL OPERATING CONDITIONS. W ² ≥18,1 ≥18,4 ≥18.7 ≥19.0 ≥19.3 ≥19.6
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Power at MPP ² P _{MPP} [W] 226,0 229,7 233.4 237.2 240.9 244.6 Short Circuit Current* Image: Image
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Open Circuit Voltage* V _{oc} [V] 36,80 37,05 37.30 37.54 37.79 38.04
E Current at MPP* I MPP [A] 7,43 7,47 7.51 7.56 7.60 7.64
Voltage at MPP* V _{MPP} [V] 30,43 30,75 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



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, $1000 \, W/m^2$).

α	[%/K]	+0.04	Temperature Coefficient of \mathbf{V}_{oc}	β	[%/K]	-0.28
Ŷ	[%/K]	-0.37	Normal Operating Cell Temperature	NOCT	[° C]	45
$\mathbf{V}_{\mathrm{sys}}$	[V]	1000	Safety Class		II	
I _R	[A]	20	Fire Rating		С	
	[Pa]	5400/4000	Permitted Module Temperature On Continuous Duty		-40°C up to +85°C	
	α Υ V _{sys} I _R	α [%/K] γ [%/K] V _{sys} [V] I _R [A] [Pa]	α [%/K] +0.04 γ [%/K] -0.37 V [%/K] 0.00 I I 1000 I [A] 20 [Pa] 5400/4000	α [%/K] +0.04 Temperature Coefficient of V _{oc} γ [%/K] -0.37 Normal Operating Cell Temperature V [%/K] 1000 Safety Class I _R [A] 20 Fire Rating [Pa] 5400/4000 Permitted Module Temperature On Continuous Duty	$\begin{tabular}{ c c c c } \hline \alpha & [\%/K] & +0.04 & Temperature Coefficient of V_{oc} & \beta \\ \hline \gamma & [\%/K] & -0.37 & Normal Operating Cell Temperature & NOCT \\ \hline \hline V_{svs} & [V] & 1000 & Safety Class \\ \hline I_R & [A] & 20 & Fire Rating \\ \hline & [Pa] & 5400/4000 & Permitted Module Temperature \\ \hline & On Continuous Duty & Continuous Duty \\ \hline \hline \end{array}$	α [%/K] +0.04 Temperature Coefficient of V _{oc} β [%/K] γ [%/K] -0.37 Normal Operating Cell Temperature NOCT [°C] V [%/K] -0.37 Normal Operating Cell Temperature NOCT [°C] V [%/K] -0.37 Normal Operating Cell Temperature NOCT [°C] Vsvs [V] 1000 Safety Class II I _R [A] 20 Fire Rating C [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.

<u>e</u> CE

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.

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