

AND DESCRIPTION OF THE PARTY OF

Q.ANTUM SOLAR MODULE

powered by

Q.ANTUM

The Q.ANTUM solar module Q.PLUS L-G4.2 is the strongest module of its type on the market globally. Powered by 72 Q CELLS solar cells Q.PLUS L-G4.2 was specially designed for large solar power plants to reduce BOS costs. Only Q CELLS offers German engineering quality with our unique triple Yield Security.



Q.ANTUM TECHNOLOGY: LOW LEVELIZED COST OF ELECTRICITY

Higher yield per surface area and lower BOS costs and higher power classes.



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 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 (2400 Pa).



A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance warranty².







- ¹ APT test conditions: Cells at -1500V against grounded, with conductive metal foil covered module surface, 25 °C, 168 h
- ² See data sheet on rear for further information.



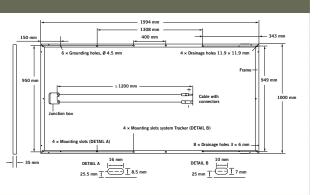
THE IDEAL SOLUTION FOR:



Engineered in Germany

MECHANICAL SPECIFICATION

Format	$1994\text{mm} \times 1000\text{mm} \times 35\text{mm}$ (including frame)
Weight	24 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodised aluminium
Cell	6×12 Q.ANTUM solar cells
Junction box	85-111 × 60-80 × 15-19 mm, Protection class ≥ IP67, with bypass diodes
Cable	$4mm^2$ Solar cable; (+) $\geq\!1200mm$, \geq (-) $1200mm$
Connector	Amphenol UTX, IP68

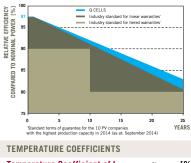


ELECTRICAL CHARACTERISTICS

PO	WER CLASS		330	335	340
MI	NIMUM PERFORMANCE AT STANDARD	TEST CONDITIONS, STC ¹ (POWER TO	LERANCE +5W /- 0W)		
	Power at MPP ²	PMPP	330	335	340
_	Short Circuit Current*	I _{sc}	9.49	9.54	9.59
unu	Open Circuit Voltage*	V _{oc}	46.55	46.81	47.07
Minimum	Current at MPP*	I _{MPP}	8.91	8.97	9.03
-	Voltage at MPP*	V _{MPP}	37.02	37.33	37.63
	Efficiency ²	η	≥16.5	≥16.8	≥17.1
MI	NIMUM PERFORMANCE AT NORMAL OF	PERATING CONDITIONS, NOC ³			
	Power at MPP ²	PMPP	244.7	248.4	252.1
Ę	Short Circuit Current*	I _{sc}	7.65	7.69	7.73
Minimum	Open Circuit Voltage*	V _{oc}	43.44	43.68	43.92
ž	Current at MPP*	I _{MPP}	6.99	7.04	7.09
	Voltage at MPP*	V _{MPP}	35.01	35.29	35.56

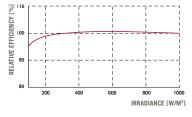
1000 W/m², 25°C, spectrum AM 1.5G $^{\rm 2}$ Measurement tolerances STC ±3%; NOC ±5% ³800 W/m², NOCT, spectrum AM 1.5 G * typical values, actual values may differ

Q CELLS PERFORMANCE WARRANTY



At least 97 % of nominal power during first year. Thereafter max. 0.6% degradation per year. At least 92% of nominal power after 10 years. At least 83% of nominal power after 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°C, 1000W/m²).

TEMPERATURE COEFFICIENTS												
Temperature Coefficient of \mathbf{I}_{sc}	α	[%/K]	+0.04	Temperature Coefficient of \mathbf{V}_{oc}	β	[%/K]	-0.29					
Temperature Coefficient of P _{MPP}	γ	[%/K]	-0.40	Normal Operating Cell Temperature	NOCT	[° C]	45					
PROPERTIES FOR SYSTEM DESIGN												
Maximum System Voltage	V _{sys}	[V]	1500 (IEC) / 1500 (UL)	Safety Class		11						
Maximum Reverse Current	I _R	[A]	15	Fire Rating		C / TYPE 1						
Wind/Snow Load (in accordance with IEC 61215)		[Pa]	2400/5400	Permitted Module Temperature On Continuous Duty		-40°C up to +85°	С					

PARTNER

QUALIFICATIONS AND CERTIFICATES

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.

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