



powered by
Q.ANTUM DUO Z

Q.PEAK DUO BLK ML-G9+ / AC 375-380

Q.ANTUM DUO Z SOLAR MODULE
WITH INTEGRATED MICROINVERTER



BREAKING THE 20% EFFICIENCY BARRIER

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 20.3%.



INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behavior.



ENDURING HIGH PERFORMANCE

Long-term yield security with Anti LID Technology, Anti PID Technology¹, Hot-Spot Protect, Traceable Quality Tra.Q™.



EXTREME WEATHER RATING

High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).



A RELIABLE INVESTMENT

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



STATE OF THE ART MODULE TECHNOLOGY

Q.ANTUM DUO Technology and the integrated high-powered Enphase IQ 7+ Microinverter achieving maximum system efficiency.



RELIABLE ENERGY MONITORING

Seamless management with the intelligent Enphase Enlighten™ monitoring system.

¹ APT test conditions according to IEC / TS 62804-1:2015, method A (-1500 V, 96 h)

² See data sheet on rear for further information.

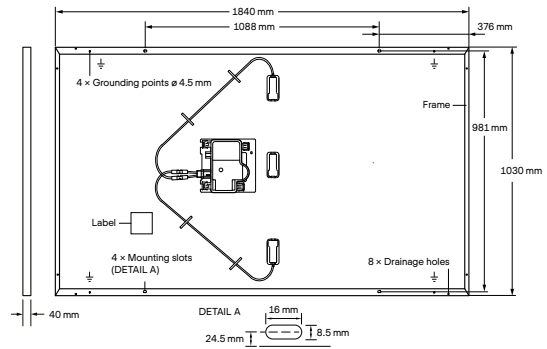
THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings

MECHANICAL SPECIFICATION

Format	1840 mm × 1030 mm × 40 mm (including frame)
Weight	20.6 kg
Front Cover	2.8 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodised aluminium
Cell	6 × 22 monocrystalline Q.ANTUM solar half cells
Junction box	53-101 mm × 32-60 mm × 15-18 mm Protection class IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥ 1200 mm, (-) ≥ 1200 mm
Connector	Stäubli MC4; IP68



AC OUTPUT ELECTRICAL CHARACTERISTICS

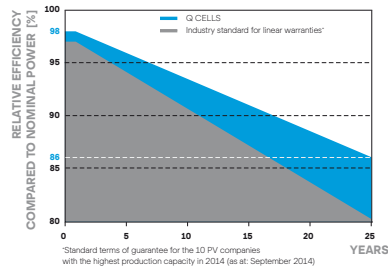
IQ7PLUS-72-ACM-INT				
Peak Output Power	[VA]	295	DC port backfeed under single fault	5.8 Arms
Max. Continuous Output Power	[VA]	290	Max. Units per 20 A (L-L) Branch Circuit	13
Nominal (L-L) Voltage / Range	[V]	230/184~276	Overvoltage Class AC Port	III
Max. Continuous Output Current	[A]	1.26	AC Port Backfeed Current	0 mA
Nominal Frequency	[Hz]	50	Power Factor Setting	1
Extended Frequency Range	[Hz]	45 - 55	Power Factor (adjustable)	0.85 leading ... 0.85 lagging

DC ELECTRICAL CHARACTERISTICS

POWER CLASS	375		380		375		380		
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5 W / -0 W)									
Min. Power at MPP ¹	P _{MPP}	[W]	375	380	Min. Current at MPP	I _{MPP}	[A]	9.98	10.04
Min. Short Circuit Current ¹	I _{SC}	[A]	10.47	10.50	Min. Voltage at MPP	V _{MPP}	[V]	37.57	37.85
Min. Open Circuit Voltage ¹	V _{OC}	[V]	45.01	45.04	Min. Efficiency ¹	η	[%]	≥ 19.8	≥ 20.1

¹ Measurement tolerances P_{MPP} ± 3%; I_{SC}; V_{OC} ± 5% at STC: 1000 W/m², 25 ± 2 °C, AM 1.5 according to IEC 60904-3

Q CELLS PERFORMANCE WARRANTY

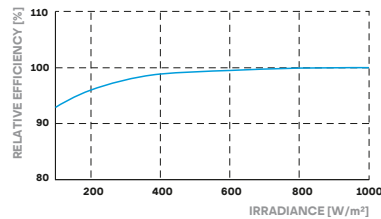


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.

¹Standard terms of guarantee for the 10 PV companies with the highest production capacity in 2014 (as at September 2014)

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I _{SC}	α	[%/K]	+0.04	Temperature Coefficient of V _{OC}	β	[%/K]	-0.27
Temperature Coefficient of P _{MPP}	γ	[%/K]	-0.35	Nominal Module Operating Temperature	NMOT	[°C]	43 ± 3

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	V _{SYS}	[V]	1000	PV module classification	Class II
Maximum Reverse Current	I _R	[A]	20	Fire Rating based on ANSI / UL 61730	C / TYPE 2
Max. Design Load, Push / Pull		[Pa]	3600 / 2660	Permitted Module Temperature on Continuous Duty	-40 °C - +85 °C
Max. Test Load, Push / Pull		[Pa]	5400 / 4000		

QUALIFICATIONS AND CERTIFICATES

Solar module: IEC 61215:2016; IEC 61730:2016 certified by TÜV Rheinland.
Enphase micro inverter: AS 4777.2, RCM, IEC/EN 61000-6-3, IEC/EN 62109-1, IEC/EN 62109-2



PACKAGING INFORMATION

Vertical packaging	1891mm	1130mm	1200mm	577.6kg	28 pallets	24 pallets	26 modules
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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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