ENPHASE ENERGIZED

powered by Q.ANTUM DUO Z

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

Q.ANTUM DUO Z SOLAR MODULE WITH INTEGRATED MICROINVERTER

EUPD RESEARCH TOP BRAND PV MODULES EUROPE 2021

ntv GERMANY'S MOST POPULAR PROVIDER Life & Living Award 2021 1st Place Solar Technology Customer rating from 11 brands www.disq.de DEUTSCHES INSTITUT FÜR SERVICE-QUALITÄT GmbH & Co. KG

Q CELLS Yield Security

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 Technology[1], 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 12-year product warranty and 25-year linear performance warranty[2].

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:

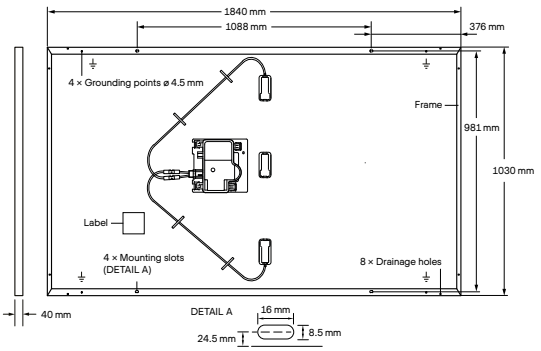
Rooftop arrays on residential buildings

Engineered in Germany

Q CELLS

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 mm² Solar cable; (+) ≥1200 mm, (–) ≥1200 mm
Connector	Stäubli MC4, Hanwha Q CELLS HQC4; IP68



AC OUTPUT ELECTRICAL CHARACTERISTICS

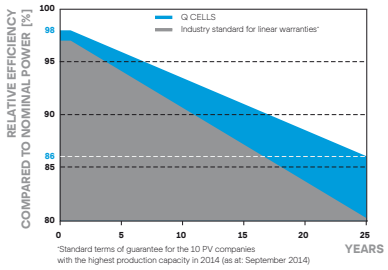
IQ7PLUS-72-ACM-INT				
Peak Output Power	[VA]	295	DC port backfeed under single fault	5.8 Arms
Max. Continuous Output Power	[VA]	290	Max. Units per 20 A (L-L) Branch Circuit	13
Nominal (L-L) Voltage / Range	[V]	230 / 184 ~ 276	Overvoltage Class AC Port	III
Max. Continuous Output Current	[A]	1.26	AC Port 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

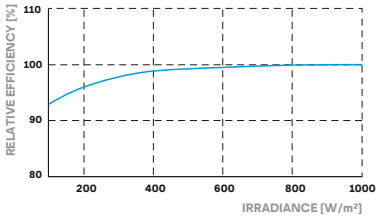
Q CELLS PERFORMANCE WARRANTY



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.

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

CE

PACKAGING INFORMATION

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

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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Engineered in Germany

Q CELLS