powered by Q.ANTUM DUO

Q.PEAK DUO BLK-G6+ / AC
340-345

Q.ANTUM DUO SOLAR MODULE WITH INTEGRATED MICROINVERTER

ASSEMBLED IN THE USA

25 YR Warranty
Product & Performance

Q CELLS
Yield Security

EUPD RESEARCH
TOP BRAND PV
MODULES
EUROPE
2020

Q.ANTUM TECHNOLOGY: LOW LEVELIZED COST OF ELECTRICITY
Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 19.5 %.

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 25-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.

RAPID SHUTDOWN COMPLIANT
Built-in rapid shutdown with no additional components required.

THE IDEAL SOLUTION FOR:

Rooftop arrays on residential buildings

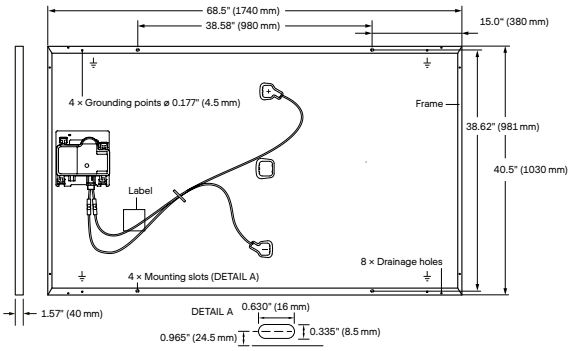
[1] APT test conditions according to IEC/TS 62804-1:2015, method B (–1500 V, 168 h)
[2] See data sheet on rear for further information

Engineered in Germany

Q CELLS

MECHANICAL SPECIFICATIONS

Format	68.5 × 40.6 × 1.57 in (including frame) (1740 × 1030 × 40 mm)
Weight	47.2 lbs (21.4 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodized aluminum
Cell	6 × 20 monocrystalline Q.ANTUM solar half cells
Junction Box	2.09-3.98 × 1.26-2.36 × 0.59-0.71 in (53-101 × 32-60 × 15-18 mm), Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥ 45.3 in (1150 mm), (–) ≥ 33.5 in (850 mm)
Connector	Stäubli MC4; IP68



AC OUTPUT ELECTRICAL CHARACTERISTICS

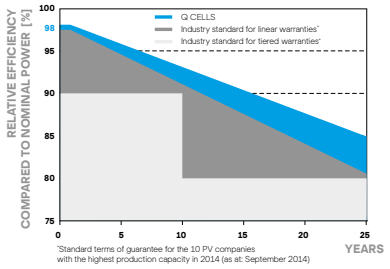
IQ7PLUS-72-ACM-US OR IQ7PLUS-72-E-ACM-US				
Peak Output Power	[VA]	295	AC Short Circuit Fault Current over 3 Cycles	5.8 Arms
Max. Continuous Output Power	[VA]	290	Max. Units per 20 A (L-L) Branch Circuit	13
Nominal (L-L) Voltage / Range	[V]	240 / 211 ~ 264	Overvoltage Class AC Port	III
Max. Continuous Output Current	[A]	1.21	AC Port Backfeed Current	18 mA
Nominal Frequency	[Hz]	60	Power Factor Setting	1
Extended Frequency Range	[Hz]	47 - 68	Power Factor (adjustable)	0.85 leading ... 0.85 lagging

DC ELECTRICAL CHARACTERISTICS

POWER CLASS			340	345				340	345
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / –0 W)									
Min. Power at MPP[1]	P_{MPP}	[W]	340	345	Min. Current at MPP	I_{MPP}	[A]	10.02	10.07
Min. Short Circuit Current[1]	I_{SC}	[A]	10.52	10.58	Min. Voltage at MPP	V_{MPP}	[V]	33.94	34.25
Min. Open Circuit Voltage[1]	V_{OC}	[V]	40.66	40.92	Min. Efficiency[1]	η	[%]	≥19.0	≥19.3

[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

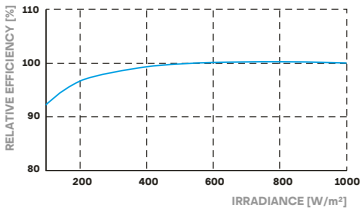
Q CELLS PERFORMANCE WARRANTY



At least 98 % of nominal power during first year. Thereafter max. 0.54 % 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 organization 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]	–0.36	Nominal Module Operating Temperature	NMOT	[°F]	109±5.4 (43±3°C)

PROPERTIES FOR DC SYSTEM DESIGN

Maximum System Voltage V_{SYS}	[V]	1000	PV Module Classification	Class II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI / UL 1703	TYPE 2
Max. Design Load, Push / Pull[3]	[lbs / ft²]	75 (3600 Pa) / 55 (2667 Pa)	Permitted Module Temperature on Continuous Duty	–40 °F up to +185 °F (–40 °C up to +85 °C)
Max. Test Load, Push / Pull[3]	[lbs / ft²]	113 (5400 Pa) / 84 (4000 Pa)		

[3] See Installation Manual

QUALIFICATIONS AND CERTIFICATES

Solar module: UL 1703,
U.S. Patent No. 9,893,215 (solar cells);
Enphase micro inverter: UL 1741-SA, UL 62109-1, UL1741/IEEE1547, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01, Rapid Shutdown Compliant per NEC-2014 & 2017 & C22.1-2015

PACKAGING INFORMATION

Number of Modules per Pallet	26
Number of Pallets per Trailer (24 t)	28
Number of Pallets per 40' HC-Container (26 t)	26
Pallet Dimensions (L × W × H)	70.1 × 42.5 × 47.6 in (1780 × 1080 × 1208 mm)
Pallet Weight	1310 lbs (594 kg)

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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