powered by
Q.ANTUM DUO

Q.PEAK DUO-G5
315-335

ENDURING HIGH
PERFORMANCE

EUPD RESEARCH
TOP BRAND PV
MODULES
EUROPE
2020

VDE
11/2016
Quality Tested
✓ high reliability
✓ low degradation
✓ optimized durability
✓ continous line monitoring
www.VDEinfo.com
ID. 40032587

Q CELLS
YIELD SECURITY
✓ ANTI PID TECHNOLOGY (APT)
✓ HOT-SPOT PROTECT (HSP)
✓ TRACEABLE QUALITY (TRA.Q™)
✓ ANTI LID TECHNOLOGY (ALT)

inter
solar
award

2018
WINNER

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 20.2%.

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
Technology[1], 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 warranty[2].

STATE OF THE ART MODULE TECHNOLOGY
Q.ANTUM DUO combines cutting edge cell separation
and innovative wiring with Q.ANTUM Technology.

[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.

THE IDEAL SOLUTION FOR:
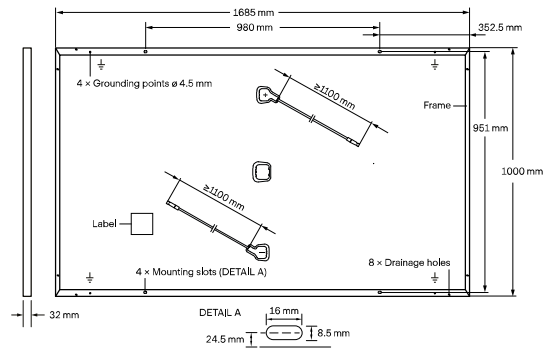
Rooftop arrays on
residential buildings

Rooftop arrays on
commercial / industrial
buildings

Ground-mounted
solar power plants

Engineered in Germany

Q CELLS

MECHANICAL SPECIFICATION

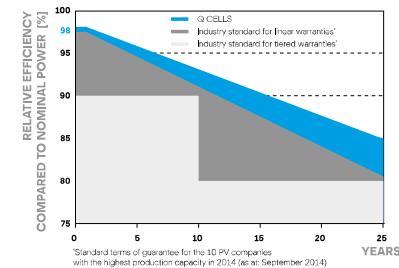|	
Format	1685 mm × 1000 mm × 32 mm (including frame)
Weight	18.7 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodised aluminium
Cell	6 × 20 monocrystalline Q.ANTUM solar half cells
Junction box	53–101 mm × 32–60 mm × 15–18 mm Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥1100 mm, (−) ≥1100 mm
Connector	Stäubli MC4, Hanwha Q CELLS HQC4, Amphenol UTX, Renhe 05-6, Tongling TL-Cable01S, JMTHY JM601; IP68 or Friends PV2e; IP67

1685 mm · 980 mm · 352.5 mm · 4 × Grounding points ø 4.5 mm · ≥1100 mm · Frame · 951 mm · 1000 mm · Label · ≥1100 mm · 4 × Mounting slots (DETAIL A) · 8 × Drainage holes · 32 mm · DETAIL A · 16 mm · 24.5 mm · 8.5 mm

ELECTRICAL CHARACTERISTICS

POWER CLASS				315	320	325	330	335
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / −0 W)								
Power at MPP[1]	P_{MPP}	[W]		315	320	325	330	335
Short Circuit Current[1]	I_{SC}	[A]		10.04	10.09	10.14	10.20	10.25
Open Circuit Voltage[1]	V_{OC}	[V]		39.87	40.13	40.40	40.66	40.92
Current at MPP	I_{MPP}	[A]		9.55	9.60	9.66	9.71	9.76
Voltage at MPP	V_{MPP}	[V]		32.98	33.32	33.65	33.98	34.31
Efficiency[1]	η	[%]		≥18.7	≥19.0	≥19.3	≥19.6	≥19.9
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT[2]								
Power at MPP	P_{MPP}	[W]		235.8	239.5	243.2	247.0	250.7
Short Circuit Current	I_{SC}	[A]		8.09	8.13	8.17	8.22	8.26
Open Circuit Voltage	V_{OC}	[V]		37.59	37.84	38.09	38.34	38.59
Current at MPP	I_{MPP}	[A]		7.52	7.56	7.60	7.64	7.69
Voltage at MPP	V_{MPP}	[V]		31.36	31.68	32.00	32.31	32.62

[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 • [2]800 W/m², NMOT, spectrum AM 1.5

Q CELLS PERFORMANCE WARRANTY

Q CELLS · Industry standard for linear warranties¹ · Industry standard for tiered warranties¹ · RELATIVE EFFICIENCY COMPARED TO NOMINAL POWER [%] · YEARS · ¹Standard terms of guarantee for the 10 PV companies with the highest production capacity in 2014 (as at: September 2014)

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

RELATIVE EFFICIENCY [%] · IRRADIANCE [W/m²]
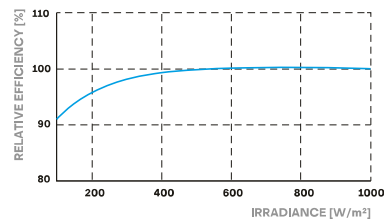
Typical module performance under low irradiance conditions in comparison to STC conditions (25°C, 1000 W/m²).

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	[°C]		43±3

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	V_{SYS}	[V]	1000 (IEC) / 1000 (UL)	PV module classification	Class II
Maximum Reverse Current	I_R	[A]	20	Fire Rating based on ANSI / UL 1703	C / TYPE 2
Max. Design Load, Push / Pull		[Pa]	3600 / 2667	Permitted Module Temperature on Continuous Duty	−40°C - +85°C
Max. Test Load, Push / Pull		[Pa]	5400 / 4000		

QUALIFICATIONS AND CERTIFICATES

VDE Quality Tested, IEC 61215:2016; IEC 61730:2016;
This data sheet complies with DIN EN 50380.

VDE · CE · c CSA us Certified UL 1703 (254141)

PACKAGING INFORMATION

Number of Modules per Pallet	32
Number of Pallets per Trailer (24 t)	30
Number of Pallets per 40' HC-Container (26 t)	26
Pallet Dimensions (L × W × H)	1745 × 1130 × 1170 mm
Pallet Weight	639 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.

Engineered in Germany

Q CELLS