

Q.PEAK DUO-G8+ 345-360

CONCERNMENT OF THE

ENDURING HIGH PERFORMANCE

A TO PART OF MURDERS



EUPD RESEARCH

TRACEABLE QUALITY

ANTI LID TECHNOLO





Q.ANTUM TECHNOLOGY: LOW LEVELISED COST OF ELECTRICITY

www.VDEinfo.com ID. 40032587

Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 20.4%.



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 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 (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 combines cutting edge cell separation and innovative 12-busbar design with Q.ANTUM Technology.

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

THE IDEAL SOLUTION FOR:



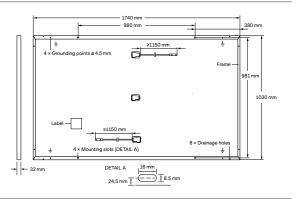


Rooftop arrays on commercial/industrial buildings



MECHANICAL SPECIFICATION

| Format | 1740mm 	imes 1030mm 	imes 32mm (including frame) |
|--------------|---|
| Weight | 19.9 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; (+) ≥1150 mm, (–) ≥1150 mm |
| Connector | Stäubli MC4, Hanwha Q CELLS HQC4, Amphenol UTX, Renhe 05-6, Tongling TL-Cable01S, JMTHY JM601; IP68 or Friends PV2e; IP67 |

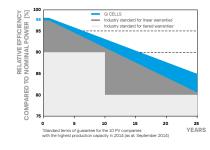


ELECTRICAL CHARACTERISTICS

| PO | WER CLASS | | | 345 | 350 | 355 | 360 |
|---------|------------------------------------|------------------|---------------------------|----------------------|-------|-------|-------|
| MII | NIMUM PERFORMANCE AT STANDA | RD TEST CONDITIO | NS, STC ¹ (PO) | VER TOLERANCE +5 W / | -0W) | | |
| Minimum | Power at MPP ¹ | P _{MPP} | [W] | 345 | 350 | 355 | 360 |
| | Short Circuit Current ¹ | I _{sc} | [A] | 10.68 | 10.74 | 10.79 | 10.84 |
| | Open Circuit Voltage ¹ | V _{oc} | [V] | 40.45 | 40.70 | 40.95 | 41.19 |
| | Current at MPP | I _{MPP} | [A] | 10.17 | 10.22 | 10.28 | 10.33 |
| | Voltage at MPP | V _{MPP} | [V] | 33.92 | 34.24 | 34.55 | 34.85 |
| | Efficiency1 | η | [%] | ≥19.3 | ≥19.5 | ≥19.8 | ≥20.1 |
| MII | NIMUM PERFORMANCE AT NORMAL | OPERATING CON | DITIONS, NMC |)T ² | | | |
| | Power at MPP | P _{MPP} | [W] | 258.4 | 262.1 | 265.9 | 269.6 |
| Minimum | Short Circuit Current | I _{sc} | [A] | 8.61 | 8.65 | 8.69 | 8.74 |
| | Open Circuit Voltage | V _{oc} | [V] | 38.14 | 38.38 | 38.61 | 38.85 |
| | Current at MPP | I _{MPP} | [A] | 8.00 | 8.05 | 8.09 | 8.13 |
| | Voltage at MPP | V _{MPP} | [V] | 32.28 | 32.57 | 32.87 | 33.16 |
| | | | | | | | |

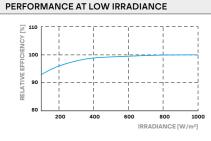
¹Measurement tolerances P_{MPP} ±3%; I_{Sci} V_{oc} ±5% at STC: 1000W/m², 25±2°C, AM 1.5 according to IEC 60904-3 • ²800 W/m², NMOT, spectrum AM 1.5

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 organisation of your respective country.



Typical module performance under low irradiance conditions in comparison to STC conditions (25 $^{\circ}\text{C},$ 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 | Normal Module Operating Temperature | NMOT | [°C] | 43±3 |

PROPERTIES FOR SYSTEM DESIGN

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

QUALIFICATIONS AND CERTIFICATES

PACKAGING INFORMATION

| VDE Quality Tested, IEC 61215:2016; IEC 61730:2016, Application Class II; | Number of Modules per Pallet | 32 |
|---|--|-----------------------|
| This data sheet complies with DIN EN 50380. | Number of Pallets per Trailer (24t) | 28 |
| | Number of Pallets per 40' HC-Container (26t) | 24 |
| | Pallet Dimensions (L \times W \times H) | 1815 × 1150 × 1220 mm |
| UL 1703 (254141) | Pallet Weight | 683 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.

Hanwha Q CELLS GmbH

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