powered by Q.ANTUM DUO

# Q.PLUS DUO L-G5.2
## 360-375

EXCELLENT RELIABILITY
AND OUTSTANDING YIELDS

pv magazine award 2017 top innovation

Photon
Q.PRO-G2 235
Best polycrystalline solar module 2014
Q CELLS
174 modules tested

EUPD RESEARCH
TOP BRAND PV
MODULES
EUROPE
2018

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

### LOW ELECTRICITY GENERATION COSTS
Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 19.1%.

### 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 and Anti PID Technology[1], Hot-Spot Protect and Traceable Quality Tra.Q™.

### EXTREME WEATHER RATING
High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (2400 Pa).

### A RELIABLE INVESTMENT
Inclusive 12-year product warranty and 25-year linear performance guarantee[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.

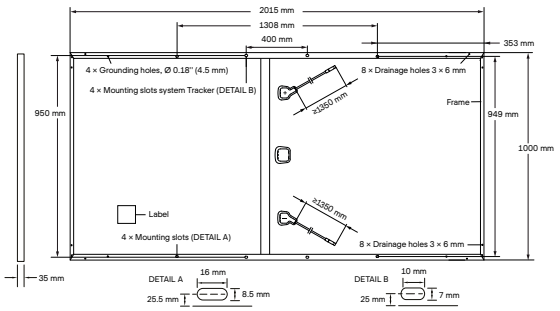
### THE IDEAL SOLUTION FOR:
Ground-mounted solar power plants

Engineered in Germany

Q CELLS

## MECHANICAL SPECIFICATION

| | |
|---|---|
| Format | 2015 mm × 1000 mm × 35 mm (including frame) |
| Weight | 23.5 kg |
| Front Cover | 3.2 mm thermally pre-stressed glass with anti-reflection technology |
| Back Cover | Composite film |
| Frame | Anodised aluminium |
| Cell | 6 × 24 multicrystalline Q.ANTUM solar half cells |
| Junction box | 70-82 mm × 50-70 mm × 13-21 mm, Protection class IP67, with bypass diodes |
| Cable | 4 mm² Solar cable; (+) ≥1350 mm, ≥(–)1350 mm |
| Connector | Stäubli MC4-Evo2, JMTHY PV-JM601A, Renhe 05-8, IP68 |

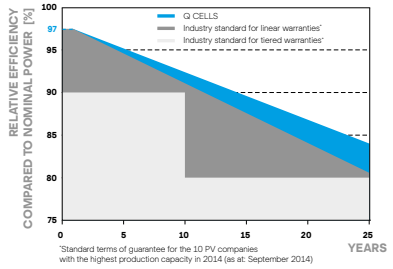



## ELECTRICAL CHARACTERISTICS

| POWER CLASS | | | | 360 | 365 | 370 | 375 |
|---|---|---|---|---|---|---|---|
| MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / –0 W) | | | | | | | |
| Minimum | Power at MPP[1] | $P_{MPP}$ | [W] | 360 | 365 | 370 | 375 |
| | Short Circuit Current[1] | $I_{SC}$ | [A] | 9.87 | 9.92 | 9.96 | 10.01 |
| | Open Circuit Voltage[1] | $V_{OC}$ | [V] | 46.80 | 47.03 | 47.26 | 47.49 |
| | Current at MPP | $I_{MPP}$ | [A] | 9.35 | 9.41 | 9.47 | 9.54 |
| | Voltage at MPP | $V_{MPP}$ | [V] | 38.52 | 38.79 | 39.05 | 39.32 |
| | Efficiency[1] | η | [%] | ≥18.1 | ≥18.3 | ≥18.8 | ≥18.8 |
| MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT[2] | | | | | | | |
| Minimum | Power at MPP | $P_{MPP}$ | [W] | 267.7 | 271.4 | 275.2 | 278.9 |
| | Short Circuit Current | $I_{SC}$ | [A] | 7.95 | 7.99 | 8.03 | 8.06 |
| | Open Circuit Voltage | $V_{OC}$ | [V] | 43.94 | 44.16 | 44.38 | 44.59 |
| | Current at MPP | $I_{MPP}$ | [A] | 7.35 | 7.40 | 7.46 | 7.51 |
| | Voltage at MPP | $V_{MPP}$ | [V] | 36.44 | 36.68 | 36.91 | 37.14 |

[1]Measurement tolerances $P_{MPP}$ ±3%; $I_{SC}$; $V_{OC}$ ±5% at STC: 1000 W/m², 25±2 °C, AM 1.5G according to IEC 60904-3 • [2]800 W/m², NMOT, spectrum AM 1.5G

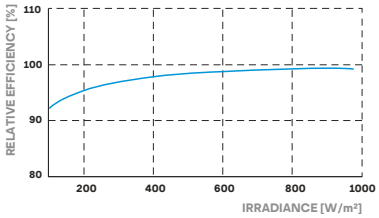
### Q CELLS PERFORMANCE WARRANTY




At least 97% of nominal power during first year. Thereafter max. 0.54% degradation per year. At least 92.0% of nominal power up to 10 years. At least 84% 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] | –0.28 |
| Temperature Coefficient of $P_{MPP}$ | γ | [%/K] | –0.37 | Normal Module Operating Temperature | NMOT | [°C] | 43±3 |

## PROPERTIES FOR SYSTEM DESIGN

| | | | | | |
|---|---|---|---|---|---|
| Maximum System Voltage | $V_{SYS}$ | [V] | 1500 | Safety Class | II |
| Maximum Reverse Current | $I_R$ | [A] | 20 | Fire Rating | C |
| Max. Design Load, Push / Pull | | [Pa] | 3600 / 1600 | Permitted Module Temperature on Continuous Duty | –40 °C - +85 °C |
| Max. Test Load, Push / Pull | | [Pa] | 5400 / 2400 | | |

## QUALIFICATIONS AND CERTIFICATES

IEC 61215:2016; IEC 61730:2016, Application Class II;
This data sheet complies with DIN EN 50380.

## PACKAGING INFORMATION

| | |
|---|---|
| Number of Modules per Pallet | 29 |
| Number of Pallets per Trailer (24 t) | 26 |
| Number of Pallets per 40' HC-Container (26 t) | 22 |
| Pallet Dimensions (L × W × H) | 2080 × 1150 × 1190 mm |
| Pallet Weight | 742 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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Engineered in Germany