

# Q.MAXX-G2

## 345-360

ENDURING HIGH PERFORMANCE



### 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 20.4%.



### 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, 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<sup>1</sup>.



### STATE OF THE ART MODULE TECHNOLOGY

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

<sup>1</sup> See data sheet on rear for further information.

### THE IDEAL SOLUTION FOR:



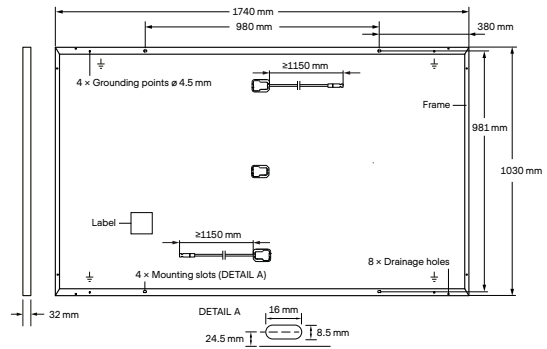
Rooftop arrays on residential buildings



Rooftop arrays on commercial / industrial buildings

## MECHANICAL SPECIFICATION

|              |  |
|--------------|--|
| Format       | 1740 mm × 1030 mm × 32 mm (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<br>Protection class IP67, with bypass diodes |
| Cable        | 4 mm <sup>2</sup> Solar cable; (+) ≥ 1150 mm, (-) ≥ 1150 mm                  |
| Connector    | Stäubli MC4; IP68  |

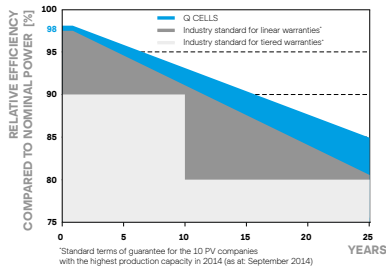


## ELECTRICAL CHARACTERISTICS

| POWER CLASS   |                                    | 345           | 350    | 355    | 360    |        |
|---|------------------------------------|---------------|--------|--------|--------|--------|
| MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC <sup>1</sup> (POWER TOLERANCE +5 W / -0 W) |                                    |               |        |        |        |        |
| Minimum   | Power at MPP <sup>1</sup>          | $P_{MPP}$ [W] | 345    | 350    | 355    | 360    |
|   | Short Circuit Current <sup>1</sup> | $I_{SC}$ [A]  | 10.68  | 10.74  | 10.79  | 10.84  |
|   | Open Circuit Voltage <sup>1</sup>  | $V_{OC}$ [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  |
|   | Efficiency <sup>1</sup>            | $\eta$ [%]    | ≥ 19.3 | ≥ 19.5 | ≥ 19.8 | ≥ 20.1 |
| MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT <sup>2</sup>                           |                                    |               |        |        |        |        |
| Minimum   | Power at MPP                       | $P_{MPP}$ [W] | 258.4  | 262.1  | 265.9  | 269.6  |
|   | 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  |

<sup>1</sup>Measurement tolerances  $P_{MPP} \pm 3\%$ ;  $I_{SC}$ ;  $V_{OC} \pm 5\%$  at STC: 1000 W/m<sup>2</sup>, 25 ± 2°C, AM 1.5 according to IEC 60904-3 • 2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5

### Q CELLS PERFORMANCE WARRANTY

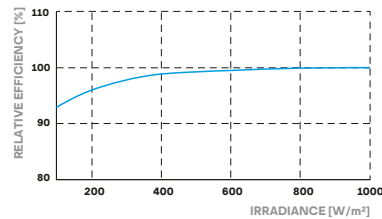


<sup>1</sup>Standard terms of guarantee for the 10 PV companies with the highest production capacity in 2014 (as at September 2014)

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



Typical module performance under low irradiance conditions in comparison to STC conditions (25°C, 1000 W/m<sup>2</sup>).

### TEMPERATURE COEFFICIENTS

|                                      |                |       |                                      |               |        |
|--------------------------------------|----------------|-------|--------------------------------------|---------------|--------|
| Temperature Coefficient of $I_{SC}$  | $\alpha$ [%/K] | +0.04 | Temperature Coefficient of $V_{OC}$  | $\beta$ [%/K] | -0.27  |
| Temperature Coefficient of $P_{MPP}$ | $\gamma$ [%/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 / 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.



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## PACKAGING INFORMATION

|  |                       |
|--|-----------------------|
| Number of Modules per Pallet                 | 32                    |
| Number of Pallets per Trailer (24t)          | 28                    |
| Number of Pallets per 40' HC-Container (26t) | 26                    |
| Pallet Dimensions (L × W × H)                | 1791 × 1130 × 1200 mm |
| Pallet Weight                                | 681 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.

Made in China

Hanwha Q CELLS Australia Pty Ltd

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