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, 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.

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

Q.PEAK DUO-G5
315-335
ENDURING HIGH PERFORMANCE

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
### 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 × 16-18 mm
  Protection class IP67, with bypass diodes
- **Cable**: 4 m² Solar cable; (+) ≥ 1110 mm, (-) ≥ 1100 mm
- **Connector**: Stäubli MC4, Hanwha Q CELLS HQC4, IP68

### ELECTRICAL CHARACTERISTICS

#### POWER CLASS

<table>
<thead>
<tr>
<th>MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC (POWER TOLERANCE +5 W / −0 W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power at MPP: P_{mpp} [W]</td>
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<tr>
<td>Short Circuit Current: I_{sc} [A]</td>
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<tr>
<td>Open Circuit Voltage: V_{oc} [V]</td>
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<tr>
<td>Voltage at MPP: V_{mpp} [V]</td>
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<tr>
<td>Efficiency: η [%]</td>
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#### MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT

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</tbody>
</table>

#### 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

#### PERFORMANCES AT LOW IRRADIANCE

- 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.

### Q CELLS PERFORMANCE WARRANTY

- **Performance Warranty**: 25 years
  - 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.

### PROPERTIES FOR SYSTEM DESIGN

- **Maximum System Voltage**: V_{dc} [V] 1000
- **Maximum Reverse Current**: I_{r} [A] 20
- **Max. Design Load, Push / Pull**: P_{max} [Pa] 3600 / 2667
- **Max. Test Load, Push / Pull**: P_{test} [Pa] 5400 / 4000

### PACKAGING INFORMATION

- **Horizontal packaging**: 1730mm × 1040mm × 1208mm × 32 pallets × 32 modules
- **Vertical packaging**: 1760mm × 1150mm × 1190mm × 32 pallets × 32 modules

### QUALIFICATIONS AND CERTIFICATES

- **Fire Rating based on ANSI / UL 61730**
- **PERFORMANCE AT LOW IRRADIANCE**

### 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. Q CELLS supplies solar modules in two different stacking methods, depending on the location of manufacture (modules are packed horizontally or vertically). You can find more detailed information in the document "Packaging and Transport Information", available from Q CELLS.

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Engineered in Germany