The new high-performance module Q.PLUS BFR-G4.1 is the ideal solution for all applications thanks to its innovative cell technology Q.ANTUM. The world-record cell design was developed to achieve the best performance under real conditions – even with low radiation intensity and on clear, hot summer days.

**Q.ANTUM TECHNOLOGY: LOW LEVELIZED COST OF ELECTRICITY**
Higher yield per surface area and lower BOS costs and higher power classes and an efficiency rate of up to 17.4%.

**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 PID Technology\(^1\), Hot-Spot Protect and Traceable Quality Tra.Q\(\text{TM}\).

**EXTREME WEATHER RATING**
High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).

**MAXIMUM COST REDUCTIONS**
Up to 10% lower logistics costs due to higher module capacity per box.

**A RELIABLE INVESTMENT**
Inclusive 12-year product warranty and 25-year linear performance warranty\(^2\).

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1. APT test conditions: Cells at -1500 V against grounded, with conductive metal foil covered module surface, 25°C, 168h
2. See data sheet on rear for further information.
MECHANICAL SPECIFICATION

Format 1670 mm × 1000 mm × 32 mm (including frame)
Weight 18.8 kg
Front Cover 3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover Composite film
Frame Black anodised aluminium
Cell 6 × 10 Q.ANTUM solar cells
Junction box 66-77 mm × 115-90 mm × 15-19 mm
Protection class IP67, with bypass diodes
Cable 4 mm² Solar cable; (+) 1000 mm, (-) 1000 mm
Connector Multi-Contact, MC4, IP65 and IP68

QUALIFICATIONS AND CERTIFICATES

Q CELLS PERFORMANCE WARRANTY

PERFORMANCE AT LOW IRRADIANCE

TEMPERATURE COEFFICIENTS

<table>
<thead>
<tr>
<th></th>
<th>α (%/K)</th>
<th>β (%/K)</th>
<th>γ (%/K)</th>
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<tbody>
<tr>
<td>Short Circuit Current</td>
<td>+0.04</td>
<td>-0.29</td>
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<tr>
<td>Open Circuit Voltage</td>
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<tr>
<td>Voltage at MPP</td>
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PROPERTIES FOR SYSTEM DESIGN

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<tr>
<td>Maximum System Voltage</td>
<td>1000</td>
<td>Safety Class</td>
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<tr>
<td>Maximum Reverse Current</td>
<td>20</td>
<td>Fire Rating</td>
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<tr>
<td>Wind/Snow Load (Test-load in accordance with IEC 61215)</td>
<td>4000/5400</td>
<td>Permitted Module Temperature</td>
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<td>On Continuous Duty</td>
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<tr>
<td></td>
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<td>-40°C up to +85°C</td>
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QUALIFICATIONS AND CERTIFICATES

VDE Quality Tested, IEC 61215 (Ed. 2), IEC 61730 (Ed. 1), Application class A
This data sheet complies with DIN EN 50380.

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