The new high-performance module Q.PEAK BLK-G4.1 is the ideal solution for residential buildings 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 18.3%.

**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\(^1\), 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).

**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 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

Engineered in Germany
**MECHANICAL SPECIFICATION**

Format 1670 mm × 1000 mm × 32 mm (including frame)

Weight 18.5 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 monocrystalline Q.ANTUM solar cells

Junction box 66-77 mm × 90-115 mm × 15-20 mm, Protection class ≥ IP67, with bypass diodes

Cable 4 mm² Solar cable; (+) 1000 mm, (−) 1000 mm

Connector Multi-Contact MC4, IP68

**ELECTRICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Power Class</th>
<th>285</th>
<th>290</th>
<th>295</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power at MPP</td>
<td>P_{MP}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short Circuit Current</td>
<td>I_{SC}</td>
<td>9.56</td>
<td>9.63</td>
<td>9.70</td>
</tr>
<tr>
<td>Open Circuit Voltage</td>
<td>V_{OC}</td>
<td>38.91</td>
<td>38.19</td>
<td>39.48</td>
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<tr>
<td>Current at MPP</td>
<td>I_{MP}</td>
<td>8.98</td>
<td>9.07</td>
<td>9.17</td>
</tr>
<tr>
<td>Voltage at MPP</td>
<td>V_{MP}</td>
<td>31.73</td>
<td>31.96</td>
<td>32.19</td>
</tr>
</tbody>
</table>

**TEMPERATURE COEFFICIENTS**

| Temperature Coefficient of I_{SC} | α (%/K) | +0.04 |
| Temperature Coefficient of V_{OC} | β (%/K) | −0.28 |

| Normal Module Operating Temperature | NMOT (°C) | 43 ± 3 |

**PROPERTIES FOR SYSTEM DESIGN**

| Maximum System Voltage | V_{sys} (V) | 1000 |
| Maximum Reverse Current | I_{R} (A) | 20 |
| Max. Design Load, Push / Pull | P_{load} (Pa) | 3600/2667 |
| Max. Test Load, Push / Pull | P_{test} (Pa) | 5400/4000 |

**QUALIFICATIONS AND CERTIFICATES**

VDE Quality Tested, IEC 61215:2016; IEC 61730:2016, 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.