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 20.3%.

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 Technology¹, 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 (2400 Pa).

A RELIABLE INVESTMENT
Inclusive 12-year product warranty and 25-year linear performance warranty².

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:
- Rooftop arrays on commercial/industrial buildings
- Ground-mounted solar power plants

Engineered in Germany
MECHANICAL SPECIFICATION

Format: 79.3 in x 39.4 in x 1.38 in (including frame) (2015 mm x 1000 mm x 35 mm)
Weight: 50.7 lbs (23 kg)
Front Cover: 0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover: Composite film
Frame: Anodized aluminum
Cell: 6 x 24 monocrystalline Q.ANTUM solar half cells
Junction Box: 2.09-3.98 x 1.26-2.36 x 0.59-0.71 in (53-101 x 32-60 x 15-18 mm), Protection class IP67, with bypass diodes
Cable: 4mm² Solar cable; (+) ≥ 53.1 in (1350 mm), (−) ≥ 53.1 in (1350 mm)
Connector: Stäubli MC4-Evo2, Hanwha Q CELLS HQC4, Amphenol UTX, Renhe 05-8, JMTHY JM601A, Tongling Cable015-F, IP68 or Friends PV2e; IP67

ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>POWER CLASS</th>
<th>380</th>
<th>385</th>
<th>390</th>
<th>395</th>
<th>400</th>
<th>405</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power at MPP P_MPP [W]</td>
<td>380</td>
<td>385</td>
<td>390</td>
<td>395</td>
<td>400</td>
<td>405</td>
</tr>
<tr>
<td>Short Circuit Current I_SC [A]</td>
<td>10.05</td>
<td>10.10</td>
<td>10.14</td>
<td>10.19</td>
<td>10.24</td>
<td>10.28</td>
</tr>
<tr>
<td>Open Circuit Voltage V_OC [V]</td>
<td>47.95</td>
<td>48.21</td>
<td>48.48</td>
<td>48.74</td>
<td>49.00</td>
<td>49.26</td>
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<tr>
<td>Voltage at MPP V_MPP [V]</td>
<td>39.71</td>
<td>40.05</td>
<td>40.38</td>
<td>40.71</td>
<td>41.04</td>
<td>41.36</td>
</tr>
<tr>
<td>Efficiency η [%] ≥ 18.9</td>
<td>≥ 19.1</td>
<td>≥ 19.4</td>
<td>≥ 19.6</td>
<td>≥ 19.9</td>
<td>≥ 20.1</td>
<td></td>
</tr>
</tbody>
</table>

Q CELLS PERFORMANCE WARRANTY

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.

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 |

Nominal Module Operating Temperature NMOT [°F] 109 ± 5.4 (43 ± 3 °C)

PERFORMANCE AT LOW IRRADIANC

Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V_MAX [V] 1500 (IEC) / 1500 (UL)
Maximum Series Fuse Rating [A/DC] 20
Max. Design Load, Push / Pull [lbs / ft²] 75 (3600 Pa) / 33 (1800 Pa)
Max. Test Load, Push / Pull [lbs / ft²] 113 (5400 Pa) / 50 (2400 Pa)

QUALIFICATIONS AND CERTIFICATES

UL 6730, CE-compliant
IEC 62158-2016, IEC 61730-2016
U.S. Patent No. 9,893,215

Packaging Information

Horizontal packaging
<table>
<thead>
<tr>
<th>Dimension</th>
<th>81.1 in</th>
<th>40.9 in</th>
<th>47.1 in</th>
<th>1565 lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>pallets</td>
<td>24</td>
<td>22</td>
<td>29</td>
<td></td>
</tr>
</tbody>
</table>

Vertical packaging
<table>
<thead>
<tr>
<th>Dimension</th>
<th>84.6 in</th>
<th>45.3 in</th>
<th>46.1 in</th>
<th>1603 lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>pallets</td>
<td>27</td>
<td>22</td>
<td>29</td>
<td></td>
</tr>
</tbody>
</table>

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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