BREAKING THE 21% EFFICIENCY BARRIER
Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 21.6%.

LOW ELECTRICITY GENERATION COSTS
Higher yield per surface area, lower BOS costs and up to 80 watts more module power than standard 144 half-cell modules.

ENDURING HIGH PERFORMANCE
Long-term yield security with Anti LID Technology, Anti PID Technology², Hot-Spot Protect and Traceable Quality Tra.Q™.

EXTREME WEATHER RATING
High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (3000 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 A (-1500 V, 96 h)
² See data sheet on rear for further information.
MECHANICAL SPECIFICATION

Format 87.2 in × 41.1 in × 1.38 in (including frame)  
(2216 mm × 1045 mm × 35 mm)
Weight 58.4 lbs (26.5 kg)
Front Cover 0.13 in (3.2 mm) thermally pre-stressed glass with  
anti-reflection technology
Back Cover Composite film
Frame Anodized aluminum
 Junction Box 2.09-3.98 in × 1.26-2.36 in × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), IP67, with bypass diodes
Cable 4 mm² Solar cable; (+) ≥ 27.6 in (700 mm), (−) ≥ 13.8 in (350 mm)*
Connector Stäubli MC4, Stäubli MC4-Evo2, Hanwha Q CELLS HQC4, IP68

*Long cables (+) ≥ 57.1 in (1450 mm), (−) ≥ 57.1 in (1450 mm) for landscape installation are available upon request.

ELECTRICAL CHARACTERISTICS

POWER CLASS 475 480 485 490 495

MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC (POWER TOLERANCE +5 W / −0 W)

<table>
<thead>
<tr>
<th>Power at MPP</th>
<th>PMPP [W]</th>
<th>475</th>
<th>480</th>
<th>485</th>
<th>490</th>
<th>495</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Circuit Current</td>
<td>ISC [A]</td>
<td>11.24</td>
<td>11.26</td>
<td>11.29</td>
<td>11.31</td>
<td>11.34</td>
</tr>
<tr>
<td>Open Circuit Voltage</td>
<td>VOC [V]</td>
<td>53.58</td>
<td>53.61</td>
<td>53.64</td>
<td>53.68</td>
<td>53.71</td>
</tr>
<tr>
<td>Current at MPP</td>
<td>IMPP [A]</td>
<td>10.66</td>
<td>10.71</td>
<td>10.76</td>
<td>10.81</td>
<td>10.86</td>
</tr>
<tr>
<td>Voltage at MPP</td>
<td>VMPPP [V]</td>
<td>44.54</td>
<td>44.81</td>
<td>45.07</td>
<td>45.33</td>
<td>45.59</td>
</tr>
<tr>
<td>Efficiency</td>
<td>η [%]</td>
<td>≥ 20.5</td>
<td>≥ 20.7</td>
<td>≥ 20.9</td>
<td>≥ 21.2</td>
<td>≥ 21.4</td>
</tr>
</tbody>
</table>

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT

| Power at MPP | PMPP [W] | 356.4 | 360.1 | 363.9 | 367.6 | 371.4 |
| Open Circuit Voltage | VOC [V] | 50.53 | 50.56 | 50.59 | 50.62 | 50.65 |
| Current at MPP | IMPP [A] | 8.39 | 8.43 | 8.47 | 8.52 | 8.56 |
| Voltage at MPP | VMPPP [V] | 42.49 | 42.72 | 42.94 | 43.17 | 43.39 |

Q CELLS PERFORMANCE WARRANTY

PERFORMANCE AT LOW IRRADIANCE

At least 96% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% 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.

TEMPERATURE COEFFICIENTS

| Temperature Coefficient of ISC | α [% / K] | +0.04 | | Temperature Coefficient of VOC | β [% / K] | −0.27 |
| Temperature Coefficient of PMPP | γ [% / K] | −0.34 |

Q CELLS PERFORMANCE WARRANTY

PERFORMANCE AT LOW IRRADIANCE

At least 96% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage | VMAX [V] | 1500 (IEC)/1500 (UL) |
PV module classification | Class II |
Max. Design Load, Push/Pull | [lbs/ft²] | 75 (3600 Pa)/42 (2000 Pa) |
Max. Test Load, Push/Pull | [lbs/ft²] | 113 (5400 Pa)/63 (3000 Pa) |

QUALIFICATIONS AND CERTIFICATES

UL 61730, CE-compliant,  
IEC 61215:2016,  
UL 61730:2016,  
U.S. Patent No. 9,893,215  
(solar cells),  
Certification in process.

PACKAGING INFORMATION

Horizontal packaging | 89.4 in (2270 mm) |
| 43.1 in (1100 mm) |
| 47.6 in (1210 mm) |
| 58.4 lbs (26.5 kg) |
| 22 pallets |
| 1809 lbs 22 pallets |
| 20 modules |

SPECIFICATIONS ARE SUBJECT TO TECHNICAL CHANGES © Q CELLS INC. 2009-2016. Q.PEAK DUO XL-G10.c_475-495_2021-08_Rev03_NA

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.