Q.PLUS DUO-G5
300-315
ENDURING HIGH PERFORMANCE

LOW ELECTRICITY GENERATION COSTS
Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 19.0%.

INNOVATIVE ALL-WEATHER TECHNOLOGY
Optimal yields, whatever the weather with excellent low-light and temperature behavior.

ENDURING HIGH PERFORMANCE
Long-term yield security with Anti LID and Anti PID Technology\(^1\), 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 (4000 Pa).

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

STATE OF THE ART MODULE TECHNOLOGY
Q.ANTUM DUO combines cutting edge cell 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 residential buildings
- Rooftop arrays on commercial and industrial buildings

Engineered in Germany
MECHANICAL SPECIFICATION

Format	66.3 in × 39.4 in × 1.26 in (including frame)
(1685mm × 1000mm × 32mm)

Weight	41.2 lbs (18.7 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 × 20 multicrystalline Q.ANTUM solar half cells

Junction Box	2.09-3.98 in × 1.26-2.36 in × 0.59-0.71 in

Cable	4 mm² Solar cable; (+) ≥ 43.3 in (1100 mm), (−) ≥ 43.3 in (1100 mm), IP67, with bypass diodes

Connector	Stäubli MC4, Amphenol UTX, Renhe 05-6, Tonglin TL-Cable01S, JMTHY JM601, IP68 or Friends PV2e; IP67

Electrical Characteristics

<table>
<thead>
<tr>
<th>POWER CLASS</th>
<th>300</th>
<th>305</th>
<th>310</th>
<th>315</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Power at MPP</td>
<td>P_MPP [W]</td>
<td>300</td>
<td>305</td>
<td>310</td>
</tr>
<tr>
<td>Open Circuit Voltage</td>
<td>V_OC [V]</td>
<td>39.00</td>
<td>39.23</td>
<td>39.46</td>
</tr>
<tr>
<td>Voltage at MPP</td>
<td>V_MPP [V]</td>
<td>32.10</td>
<td>32.37</td>
<td>32.63</td>
</tr>
<tr>
<td>Efficiency</td>
<td>η [%]</td>
<td>≥17.8</td>
<td>≥18.1</td>
<td>≥18.4</td>
</tr>
</tbody>
</table>

Minimum Performance at Normal Operating Conditions, NMOT

| Power at MPP | P_MPP [W] | 224.3 | 228.0 | 231.8 | 235.5 |
| Short Circuit Current | I_SC [A] | 7.95 | 8.00 | 8.04 | 8.09 |
| Open Circuit Voltage | V_OC [V] | 36.69 | 36.91 | 37.12 | 37.34 |
| Current at MPP | I_MPP [A] | 7.35 | 7.41 | 7.48 | 7.54 |
| Voltage at MPP | V_MPP [V] | 30.53 | 30.77 | 31.00 | 31.22 |

Q CELLS PERFORMANCE WARRANTY

Performance at Low Irradiance

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 [°F] = 109 ±5.4 (43 ±3 °C)

Properties for System Design

- Maximum System Voltage, VSYS [V] = 1000 (IEC)/1000 (UL)
- Safety Class: II
- Fire Rating based on ANSI/UL 1703: C (IEC)/TYPE 2 (UL)
- Permitted Module Temperature on Continuous Duty: -40°F up to +185°F (~-40°C up to +85°C)

Qualifications and Certificates

- Number of Modules per Pallet: 32
- Number of Pallets per 53’ Trailer: 30
- Number of Pallets per 40’ HC-Container: 26
- Pallet Dimensions (L × W × H): 69.3 × 45.3 × 46.9 in (1760 × 1150 × 1190 mm)
- Pallet Weight: 1415 lbs (642 kg)

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.