Because we want UAV integrators to reach the optimal productivity, we have designed the QUANTA UAV SERIES, a small, low-power and highly accurate inertial navigation system which provides orientation and navigation data, in real-time and post-processing.
The Quanta UAV Series is a powerful and easy INS+GNSS solution designed for UAV survey applications. Thanks to centimeter level position, it eliminates the need for Ground Control Points (GCP). Its precise orientation and position reduce processing time.

The Exact Combination for UAV Direct Georeferencing

<table>
<thead>
<tr>
<th>SMALL FORM FACTOR, LIGHTWEIGHT</th>
<th>GPS-GLONASS-GALILEO-BEIDOU</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRECISE AND ROBUST ROLL/PITCH</td>
<td>ROBUST REAL-TIME RTK</td>
</tr>
<tr>
<td>SINGLE OR DUAL ANTENNA HEADING</td>
<td>THE EASIEST PPK SOFTWARE</td>
</tr>
</tbody>
</table>

For your Payload and your Autopilot

All Quanta INS are calibrated from -40 to 80°C for a consistent behavior in all weather conditions.

Best-in-Class Inertial Navigation Systems

<table>
<thead>
<tr>
<th>Roll/Pitch</th>
<th>Quanta UAV</th>
<th>Quanta UAV Extra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real-time RTK</td>
<td>0.03°</td>
<td>0.008°</td>
</tr>
<tr>
<td>Post-processing</td>
<td>0.025°</td>
<td>0.005°</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Heading</th>
<th>Quanta UAV</th>
<th>Quanta UAV Extra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real-time RTK</td>
<td>0.5° Single Ant.</td>
<td>0.06° Dual Antenna</td>
</tr>
<tr>
<td>Post-processing</td>
<td>0.08°</td>
<td>0.025°</td>
</tr>
</tbody>
</table>

| Position Horizontal | 1cm + 1ppm | 1cm + 1ppm |
Qinertia uses inertial data and raw GNSS observables to provide astonishing attitude, heading and position performance, thanks to a forward, backward and merge processing.

**QINERTIA POST-PROCESSING SOFTWARE**

Qinertia uses inertial data and raw GNSS observables to provide astonishing attitude, heading and position performance, thanks to a forward, backward and merge processing.

**EVALUATION KIT**

The evaluation kit consists of the evaluation board, antennas, cable, and accessories.

**QINERTIA POST-PROCESSING SOFTWARE**

Qinertia uses inertial data and raw GNSS observables to provide astonishing attitude, heading and position performance, thanks to a forward, backward and merge processing.

**Extensive Quality Indicators**

- Interactive quality indicators assessment
- Display of separation, standard deviation, bias, scale factor, lever arm
- Statistics report generation (RMS, min/max)

**More Productivity For Your UAV**

**Photogrammetry**

Quanta UAV reduces the need of GCPs and overlapping thanks to precise orientation and position data. You can extend your survey mission.

**LiDAR**

Quanta UAV directly geotags your point cloud in real-time and with more accuracy in post-processing.

**Single or Dual Antenna**

If a single antenna solution tends to be more practical, the dual antenna mode allows a more precise heading, an ideal set up for low dynamics flights such as pipes or electrical lines surveys.

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**Centimetric position after your mission**

Obtain the centimetric position without the constraint of an RTK radio link. Just drag and drop your base station, Qinertia PPP function will automatically determine your base station coordinates.

**Extensive Quality Indicators**

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- Display of separation, standard deviation, bias, scale factor, lever arm
- Statistics report generation (RMS, min/max)

**1 YEAR FREE**

Tightly Coupled INS/GNSS Fusion

Modern & Intuitive User Interface

+ 7,000 Base Stations always up-to-date
Specifications

All parameters apply from -40° to 85°C temperature range, unless otherwise stated.
Full specifications can be found in the Quanta Hardware Manual available upon request.

INTERFACE

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Quanta UAV</th>
<th>Quanta UAV Extra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>76 g</td>
<td>345 g</td>
</tr>
<tr>
<td>Dimensions</td>
<td>51.5 x 78.75 x 20 mm</td>
<td>CNC: 51.5 x 78.75 x 20 mm</td>
</tr>
<tr>
<td>MTBF (computed)</td>
<td>50,000 hours</td>
<td>50,000 hours</td>
</tr>
<tr>
<td>Operating vibrations</td>
<td>8 g RMS (20 Hz to 2 kHz per MIL-STD-810G)</td>
<td>8 g RMS (20 Hz to 2 kHz per MIL-STD-810G)</td>
</tr>
<tr>
<td>Humidity</td>
<td>95% non condensing</td>
<td>95% non condensing</td>
</tr>
</tbody>
</table>

INTELLIGENT WEB INTERFACE

Connect your sensor and configure it throughout the intuitive web interface.

3D VIEW

The 3D View helps you to check your mechanical installation, especially your sensor position, your alignments, and levers arms.