Family of Systems

Trinity Tactical
Trinity Pro
Twister
Reliant
Vector

Trinity™ Tactical

eVTOL Fixed-Wing sUAS

Highly automated GIS tactical mapping drone

Trinity Tactical is a fixed-wing electric vertical take-off and landing (eVTOL) aerial mapping solution that rapidly delivers accurate spatial imagery. Deployable in less than three minutes, Trinity Tactical is easy to use and autonomously performs mapping for Geographic Information System (GIS) and terrain visualization missions with QBase 3D mission planning software. The durable, rucksack portable system is cyber-secure with AES 128 data link encryption.

Technical Specifications

Wingspan
2.4 m

Maximum Take-Off Weight (MTOW)
4.8 - 5.75 kg

Flight Time
90 minutes

Data Link Range
5 - 7.5 km

Data Link Frequency
2.2 GHz (encrypted)

Packing Size
100.2 x 83 x 27 cm
(39.4 x 32.7 x 10.6 in)

Cruise Speed
17 m/s (optimal)

Operating Temperature
-12 °C to +50 °C

IP Rating
IP55

Max. Coverage
7.5 km or 4.7 mi

Maximum Take-Off Altitude
4800 m

Wind Tolerance
11 m/s in hover phase
14 m/s during cruise

Cameras

Phase One P5

Phase One P5 stands as the world's pioneering GIS mapping sensor. The **128-megapixel** medium format camera delivers unprecedented image detail and resolution down to 0.3/0.8 cm RMS XY/Z absolute accuracy.

Qube 640

The Qube 640 LiDAR sensor has a 176° FOV, enhancing vegetation penetration. It supports vertical scanning, minimizing edge mismatches, and integrates an 8MP RGB camera for concurrent LiDAR capture and colorization in flight.

Sony ILX-LR1

The Sony ILX-LR1 is a **61 MP** resolution and 35 mm full-frame RGB camera. Enabling 260 ha coverage at 1 cm/px GSD.

Oblique D2M

The Oblique D2M is a powerful oblique imaging system consisting of five high-resolution 26 MP multidirectional cameras, making it the ideal tool for large scale 3D photogrammetry.

QUANTUM SYSTEMS

Document Number: QS_INT_Trinity_Tactical_Techsheet_241009 / Release date: October 2024
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