



Trinity™ Tactical

eVTOL aerial mapping sUAS

Delivering mission-critical mapping data to the tactical edge.

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 Specification



Take-off Weight
4.8 - 5.75 kg (10.6 - 12.7 lbs)



Maximum Take-Off Altitude
4,800 m (15,748 ft)



Frequency
2.2 GHz (encrypted)



Wingspan
2.4 m (7.85 ft)



Command and Control Range
7.5 km (4.7 mi) with laptop



Payload Capacity
Max 1,000 g (2.2 lbs)

Flight Performance

Max. Flight Time	90 minutes	Optimal Cruise Speed	18 m/s (35 kn)
Area Coverage	700 ha (1,730 ac)	Max Wind Tolerance (hover)	11 m/s (21.4 kn)
Terrain avoidance	Via DEM data and LiDAR	Max Wind Tolerance (cruise)	18 m/s (35 kn)
Linear Coverage	90 km (56 mi) in total	Landing and take-off type	eVTOL
Operating Temperature	-12 °C to 50 °C (10.4 °F to 122 °F)		

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 0.1/0.3 inch RMS XY/Z* absolute accuracy.



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.



Sony RX1R II

The Sony RX1R II is a CMOS full-frame camera, with fixed focal lengths and 42.4 MP resolution. It is ideal for all applications in everyday surveying and monitoring applications, especially in the mining, civil survey, and agriculture sector.



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.



Qube 240

The Qube 240 is a geomatics grade LiDAR scanner providing essential information by generating an accurate point cloud of the processed environment through 240,000 distance measurements per second.



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.



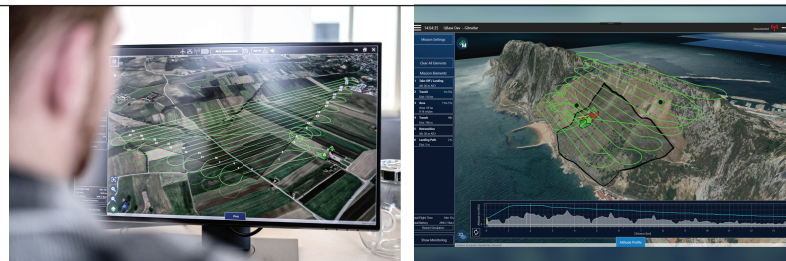
MicaSense Altum-PT

Multispectral camera featuring five high resolution spectral bands (red, green, blue, red-edge and near infrared), a panchromatic sensor and a thermal infrared sensor.

QBase 3D Software

The most convenient software solution to plan automated tactical mapping and terrain visualization missions.

Simple and easy to use
Safe and precise flight paths



QUANTUM SYSTEMS

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