



## Trinity™ Tactical

eVTOL aerial mapping sUAS

Trinity Tactical is a fixed-wing electric vertical take-off and landing (eVTOL) aerial mapping solution that rapidly delivers accurate spatial imagery to operators in GNSS-denied environments. Deployable in less than two minutes, Trinity Tactical is easy to use and autonomously performs Geographic Information System (GIS) mapping and terrain visualization missions with QBase 3D mission planning software. The durable, rucksack portable system is cyber-secure with AES-256 data link encryption and can be integrated with TAK.

### Technical Specifications



#### TAKE-OFF WEIGHT

10.6 - 12.1 lbs (4.8 - 5.5 kg)



#### MAXIMUM FLIGHT ALTITUDE

14,763.8 ft (4,500 m)



#### FREQUENCY

2.2 GHz (encrypted)



#### WINGSPAN

7.85 ft (2.4 m)



#### COMMAND & CONTROL RANGE

3.1 - 4.7 m (5 - 7.5 km)  
w/ laptop



#### PAYLOAD CAPACITY

Max. 2.2 lbs (1,000 g)

### Flight Performance

|                         |   |
|-------------------------|---|
| Max. Flight Time        | 90+ minutes                                       |
| Area Coverage           | 1,730 ac (700 ha) @ 120m AGL (depends on overlap) |
| Ground Resolution       | 1 cm @ 70 m AGL with Sony RX1 RII                 |
| Wind Tolerance (Ground) | Up to 7.5 kn (9 m/s)                              |
| Linear Coverage         | 90 km (56 mi) in total                            |

|                           |                                     |
|---------------------------|-------------------------------------|
| Optimal Cruise Speed      | 33 kn (17 m/s)                      |
| Wind Tolerance (Cruise)   | 23.3 kn (12 m/s)                    |
| Operating Temperature     | 10.4 °F to 122 °F (-12 °C to 50 °C) |
| Terrain Avoidance         | Via DEM data, optional via LiDAR    |
| Landing and Take-off Type | eVTOL                               |

# Payloads



**MICASENSE REEDGE-P**  
Multispectral camera featuring five spectral bands and a panchromatic sensor. Calibration panel DLS2 not included.



**SONY RX1R LL**  
CMOS full-frame sensor and fixed focal length lens with 2.4 megapixel resolution.



**QUBE 240 LIDAR**  
Active LiDAR system with 240,000 points per second. Includes one year of Yellowscan CloudStation software.



**MICASENSE ALTUM-PT**  
Multispectral camera featuring five high resolution spectral bands, a panchromatic sensor and a thermal infrared sensor. Calibration panel DLS2 not included.

# QBase 3D Software

**Intuitive, all-in-one mission planning, flight monitoring and data post-processing software for automated tactical mapping and terrain visualization missions.**

- + 3D flight planning
- + Advanced terrain following
- + Live telemetry data
- + High data accuracy with built-in PPK

