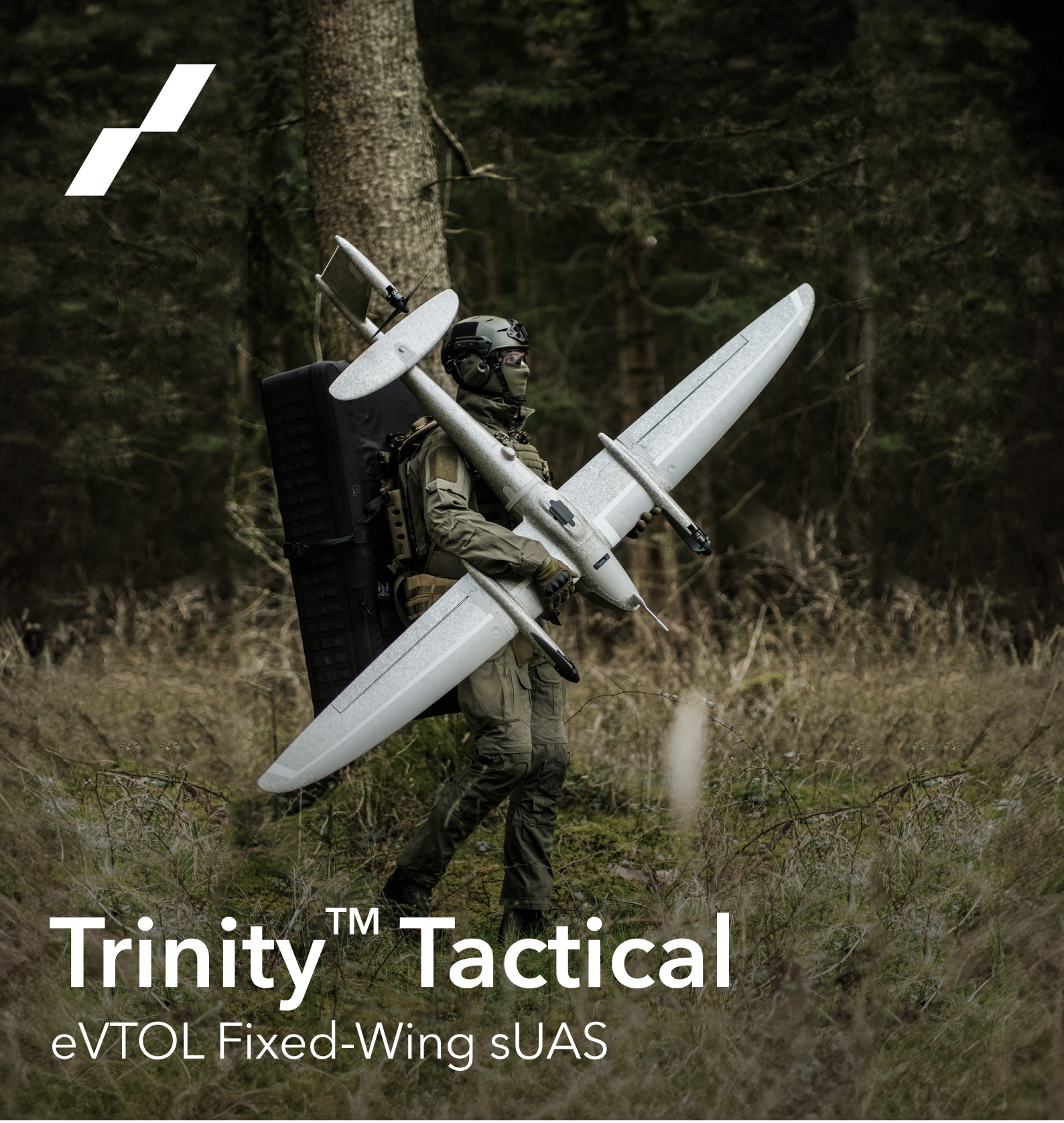

Trinity™ Tactical

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 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.

Flight Performance

Max. Flight Time	90+ minutes	Max. Wind Tolerance (cruise)	12 m/s / 26 mph
Optimal Cruise Speed	17 m/s / 38 mph	Max. Wind Tolerance (ground)	4 m/s / 8.6 mph
Linear Coverage	90 km / 56 mi	Max. Operating Altitude (MSL)	4,500 m / 14,764 ft
Area Coverage	700 ha / 1,730 ac @ 120 m AGL	Operating Temperature	-12 °C to 50 °C / 10.4 °F to 122 °F

Technical Specifications

Take-off Weight
4.8 to 5.5 kg / 10.6 to 12.1 lbs

Payload Capacity
2,000 g / 2.2 lbs

Frequency
2.2 GHz (encrypted)

Wingspan
2.4 m / 7.85 ft

Ground Control Station
Toughbook

C2 Range
5 to 7.5 km / 3.1 to 4.7 mi with laptop

Sensors

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.

Qube 640

The Qube 640 LiDAR sensor has a 176° FOV. 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.

QBase 3D Software

With the QBase 3D software, efficient flight paths are automatically generated using the mission parameters entered by the operator. The operator can adjust parameters in QBase 3D during the mission at any time.

QUANTUM SYSTEMS

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