Trinity™ Pro

eVTOL fixed-wing sUAS

Future-proof, reliable and easy-to-use professional mapping solution

Trinity Pro is our flagship eVTOL fixed-wing drone revolutionizing aerial mapping. Combining the agility of multi-rotors with the efficiency of fixed-wings, Trinity Pro covers vast areas efficiently, ensuring extended flight times and enhanced data capture. Equipped with the Quantum-Skynode autopilot and Linux mission computer, it seamlessly integrates with advanced sensors and AI, optimizing data insights. Its modular design enables quick setup in under two minutes by a single operator. With over 115,000 flight hours worldwide, Trinity Pro sets a new standard in reliability and performance for diverse industry applications, including mining, cadastre forestry and agriculture.

Technical Specifications

Wingspan
2.394 m

Maximum Take-Off Weight (MTOW)
5.75 kg

Flight Time
90 minutes[1]

Data Link Range
5 - 7.5 km

Data Link Frequency
2.4 GHz

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

Cruise Speed
17 m/s (optimal)

IP Rating
IP55

Operating Temperature
-12 °C to +50 °C

Max. Coverage
100 km or 700 ha

Maximum Take-Off altitude
4800 m

Wind Tolerance
11 m/s in hover phase
14 m/s during cruise[2]

[1]Subject to export regulation. Limited to 59 min by default.
[2]Subject to export regulation. Limited to 12.8 m/s or 25 kn by default.

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.

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.

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.

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