



VectorTM

Mid-Range eVTOL UAS

Combat-proven ISR platform for land and maritime operations.

Vector is an eVTOL (electric vertical take-off and landing) fixed-wing sUAS that delivers real-time, high-resolution video for intelligence, surveillance and reconnaissance missions. Designed with operational efficiency and flexibility in mind, Vector is a rucksack portable solution that can be operational in three minutes, and take-off and land autonomously in confined spaces without the need for additional tools or equipment.

The Quantum-Skynode flight control computer is at the heart of Vector, reducing the cognitive load of the operator with onboard computing power and AI capabilities that support and enable GNSS-denied navigation, as well as object detection, classification and tracking. Its open systems architecture allows for continuous expansion of the system's capabilities.

Flight Performance

Max. Flight Time	180 minutes	Max. Wind Tolerance (ground)	19 kn / 22 mph
Speed Range	29-39 kn / 33-45 mph	Max. Wind Tolerance (air)	23 kn / 26 mph
IP Rating	IP54	Max. Take-Off Altitude (MSL)	3,000 m / 9,843 ft
Operating Temperature	-20 °C to +45 °C / -4 °F to 113 °F	Max. Operating Altitude (MSL)	4,500 m / 14,764 ft

Technical Specifications



Take-off Weight
8.5 kg / 18.7 lbs



AI/Mission Processor
NVIDIA Jetson ORIN NX 16 GB



Encrypted IP Mesh
AES-256



Wingspan
2.8 m / 9.2 ft



Ground Control Station
Auterion Skynav or Toughbook



Frequency
2.2-2.5 GHz (encrypted)*



Length
1.5 m / 4.9 ft



Mission Control Software
QBase Tactical



C2 & Video Range
40 km with Short Range Antenna (SRA)**

*Dual S & C-Band options available
**80 km Mid-Range Antenna (MRA) option available

Sensors



NextVision Raptor



Trillium HD40-LV

EO Zoom	40x optical 2x digital	10x optical 2x digital
EO Resolution	1280 x 720 px	1280 x 720 px
IR Zoom	8x digital	4x digital
IR Resolution	1280 x 720 px	640 x 480 px

Additional Capabilities GeoLock. Object Tracking. KLV-Stream. 360° Continuous Rotation. Image Stabilization. Optional Laser Illuminator.

2-in-1 System

Operators can easily switch from the Vector fixed-wing configuration to the Scorpion multicopter, depending on their mission needs. The main fuselage, ground controller, data link, sensors, and AI capabilities remain while the wings and tail are exchanged for front and tail booms.

