ScorpionTM Short-Range Multicopter UAS

Agile platform for urban and stationary ISR missions.

Scorpion is an electric vertical take-off and landing (eVTOL) short-range multicopter sUAS that provides real-time situational awareness via high-resolution video. With intelligent cruise speed control between 0 and 29 knots and the ability to continually hover, perch and stare, operators can rely on Scorpion to perform missions in dense urban environments with ease. Onboard artificial intelligence performs object detection, classification, and tracking of incoming video, reducing the cognitive load on the operators. GNSS-denied navigation is also supported.

Flight Performance

Max. Flight Time	45 minutes	Max. Wind Tolerance (ground)	19 kn / 22 mph
Speed Range	0-29 kn / 0-33 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 7 kg / 15.4 lbs Wingspan

Wingspan 1.37 m / 4.5 ft



Length 1.42 m / 4.6 ft

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

Sensors





Ground Control Station Auterion Skynav or Toughbook



Mission Control Software QBase Tactical



Encrypted IP Mesh AES-256

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Frequency 2.2-2.5 GHz (encrypted)^{*}



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

NextVision Raptor

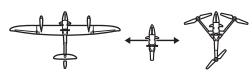


EO Zoom	40x optical 2x digital	10x optical 2x digital
EO Resolution	1280 х 720 рх	1280 х 720 рх
IR Zoom	8x digital	4x digital
IR Resolution	1280 х 720 рх	640 x 480 px
Additional Capabilities	GeoLock. Object Tracking. KLV-Stream. 360° Continuous Rotation.	

Image Stabilization. Optional Laser Illuminator.

2-in-1 System

The alternative configuration of the Vector 2-in-1 system, Scorpion uses the same main fuselage, avionics hardware, ground controller, data link, sensors, and AI capabilities as Vector. The operator can easily swap from the fixed-wing configuration to multicopter in a matter of seconds by removing the wings and tail, and attaching front and tail booms.





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