



Vector™ & Scorpion™

The ultimate 2-in-1 ISR system

About us

Quantum Systems is more than just a drone manufacturer; we are an aerial data intelligence company that provides multi-sensor data collection products to government agencies and commercial customers. Our electric vertical take-off and landing (eVTOL) systems boast industry-leading endurance, ease of operation, and reliability.

We believe in dual-use, bringing commercial innovation and speed to the defence industry and field-proven and

most robust systems to the business world. Customers in the public and private sectors alike use our versatile UAS for defense, security, humanitarian, and geospatial operations.

With a world-class team and nearly a decade of experience in drones, robotics and imagery collection, Quantum Systems has a proven technology stack and a strong track record of building best-in-class sUAS systems that provide mission-critical data to operators.

The ultimate 2-in-1 ISR system

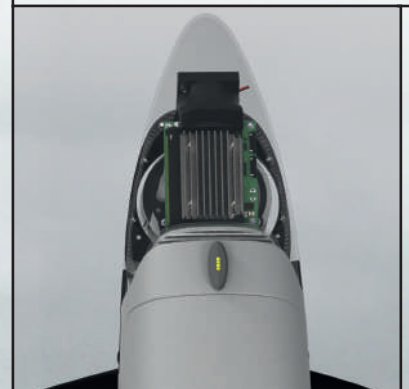


Vector eVTOL fixed-wing sUAS

Autonomous Group 1 sUAS designed for mobile disconnected military and security operations. Vertical take-off and landing in confined areas.

Equipped with AES-256 encrypted mesh network radio, tactical hand controller and laptop (optional).

Wingspan 2.8 m | 9.2 ft
Weight < 8.5 kg
Wind 14 m/s | 27 kn



Advantages of the 2-in-1 system

- Max. Efficacy
- Anti block airspeed sensor
- Easy to use
- Max. launch altitude 3000 m MSL
- Max. operating altitude 4500 m MSL

The 2-in-1 system comprising Vector™ and Scorpion™ shares a common main fuselage, ground controller, data link, sensors, and AI capabilities.

IP54 Low audio and visual footprint



Scorpion Multicopter sUAS

Multicopter variant of Vector sUAS ISR platform that uses the same center fuselage to enable quick change between the two platforms. Scorpion excels in providing persistent surveillance in confined urban environments with the ability to hover in place. The gimbaled sensors, encrypted data link and control link remain.

Wingspan	1.37 m 4.5 ft
Weight	< 8.0 kg
Wind	10 m/s 19.4 kn

AI board

Onboard AI Processing
with NVIDIA Jetson Orin

Smart Battery

- Self heating
- Self monitoring
- Adaptable to aviation regulation



3h



2h

Multicharger



Rugged simultaneous charging and discharging of all operating system.

One person
set-up

No tools
needed

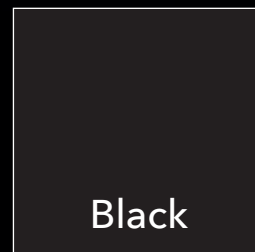
Easy to
carry

- Tactical Backpack carrying case
- Fast deployment - less than 3 mins

Backpack



Multicam



Black

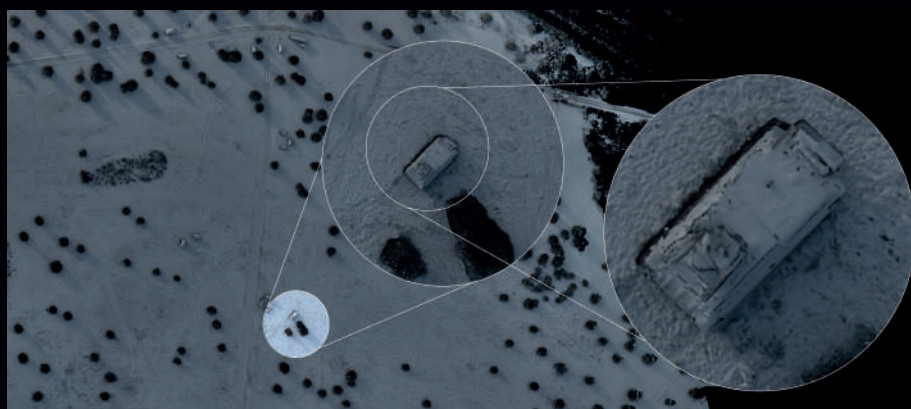
Compact portable carrying for the whole tactical deployment system.

Gimbaled Sensors



Raptor

- **IR 1280 x 720 px**
8x Digital
LWIR uncooled 8 - 14 μ m
17.5° W.FOV - 2.2° D.FOV
- **EO 1280 x 720 px**
40x Optical
2x Digital
60° WFOV - 1.5° NFOV -
0.75° DFOV
- **Image Stabilization**
- **+45° to 135° tilt**
- **Laser option**



Visible Channel

Person

Detect 10 km

Recognize 6 km

Identify 3 km

Vehicle

Detect 40 km

Recognize 10 km

Identify 6 km

Thermal Channel

Person

Detect 4.5 km

Recognize 1.3 km

Identify 0.6 km

Vehicle

Detect 6 km

Recognize 1.6 km

Identify 0.8 km

Datalink



Technical Specifications

Datalinks

- Encrypted AES256
- Latency 7 ms average
- In motion usability
- MIMO Beamforming Technology

Handheld



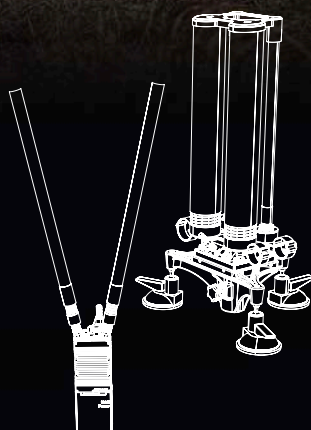
Battery
12 hours



Rugged
IP 68



C2 & Video Range
15 km



Stationary



Battery
12 hours



Rugged
IP 68



C2 & Video Range
35 km



Ground Control System



Interoperability

- MISB ST 0902 (STANAG 4609) compatible live video stream with KLV Metadata
- Combat Management system (ATAK, Sitaware, Telepak)
- CursorOnTarget (COT) protocol
- C4IS capable
- Extreme plug in architecture

Skynav



Touch-Display
7"



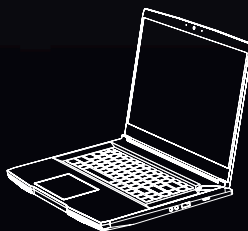
Hot
swappable



Battery
8 hours



Rugged
IP 65



Toughbook



Touch-Display
14"



Hot
swappable



Battery
up to 38 hours



Rugged
IP 53



Mission Control Software

Vector can be operated using QBase Tactical or Auterion Mission Control.

QBase Tactical

- Intuitive workflow
- Real-time reconnaissance
- Inflight changes
- Target tracking
- GeoLock

GNSS & Link Loss capabilities

Real-time automated
system monitoring

Awareness



Sensor switch and
sensor fusion

Waypoint
mission

POI

Add-Ons

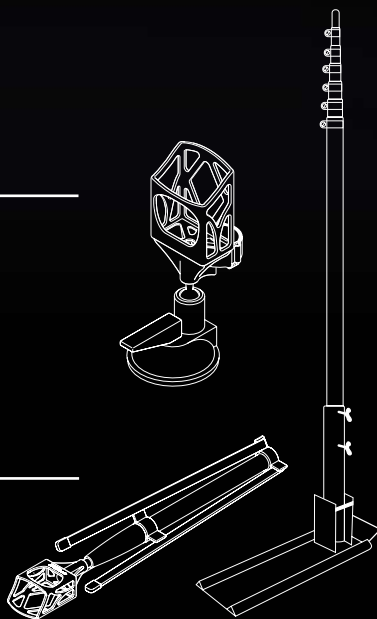
Mount

- Attachable on every flat surface



Tripod

- Up to 2.20 m
- Packable
- Tactical & lightweight solution



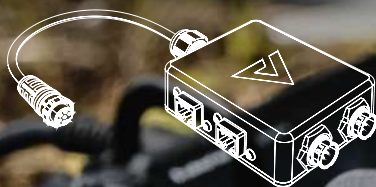
Mast

- Up to 6 m
- Maximum range increase
- Rugged & fast deployment



Datalink Switch

- Multiple GCS simultaneously
- Portable and rugged
- Safest transmission due to cable connection



Data Extension Cable

↔ Connection
12 m



