

# VESPER

MILITARY-GRADE ISR



## READY FOR SELECT CUSTOMERS

The Vesper UAV from Vantage Robotics provides field operators with American-made ISR, extended flight time, unmatched low light performance, and 3-axis stabilized tri-sensor payload. This complete aerial reconnaissance system was designed to solve all pain points of operators utilizing aerial data collection in the field today.

Our light, rugged, and truly portable stealth drone is backpack ready, easy to use, and has been tested with thousands of hours of flight. Vesper's modular design and uncompromising build quality meets the needs of a range of mission-critical operations at a moments notice.

## BENEFITS



### CAMERA

2x low light EO + IR, 320p thermal, 18x zoom, 3-axis stabilized gimbal



### FLIGHT TIME

55 minute flight time, 45 mph flight speed, inaudible at 60m



### PORTABLE & ROBUST

2 lb packed weight in IP67 waterproof and crush-proof case



### SECURE

AES-256 encryption, secure boot, NDAA compliant, designed, sourced, and built in USA

 **VANTAGE**ROBOTICS | ABOUT US

**American drone solutions that pack smart features into safe, small, and innovative form factors.**

Vantage Robotics is a technology and design leader embraced by commercial and defense customers. In order to provide the world's most elegant, sophisticated, and reliable unmanned aerial platforms, we have tapped into the most innovative American engineering talent right here in California. Our products offer extended flight time, sophisticated sensors, stealth, state-of-the-art industrial design, and best in class user experiences in safe, compact, US made drones trusted by governments and commercial customers alike.



## SPECIFICATIONS

### + AIRCRAFT

- 55 minute flight time with Recon Rotor Set
- 32 minute flight time with Shrouded Rotor Set
- 650 g AUW
- >10,000 ft flight ceiling
- 70 km/h flight speed
- <40 dBA at 60 meter range
- Not visible at 100 meters seen against terrain
- Operational in 50 km/h wind
- -20 - 45 C operational temperature range
- IP-53 ingress protection
- 45 km flight range
- Redundant GNS, GNSS, VIO, and optical flow for position control indoors and outdoors
- Front and rear obstacle avoidance cameras, downward facing sonar

### + MODULARITY

- Multiple battery options: Stealth, Endurance and Illuminated
- Multiple rotor set options: Shrouded for indoor and flight near people, Recon for endurance, stealth and speed
- Field replaceable gimbal can be swapped in minutes

### + PORTABILITY

- Deployable within two minutes
- IP67 waterproof field case
- Withstands 90 kg crush and 1m drop in case
- 1 kg/ 2300 cm<sup>3</sup> packed in field case
- Watertight, dustproof, dent-proof transport case, with hasps and foam-lined interior

### + GIMBAL & CAMERA

- 3-axis stabilized gimbal
- User controllable +30 - -90 degree gimbal pitch control
- Dual EO sensors + thermal
- Dual 4K Sony IMX 334 EO image sensors, 3840x2160px 8 MP still images
- <0.01 lx low light capability
- 18x combined optical and digital zoom (3.5 - 63 degree HFOV)
- 6 mm f/1.0 navigation lens
- 25 mm f/2.4 telephoto lens
- Thermal sensor: 320 x 240p uncooled vanadium oxide sensor with 65 mK sensitivity
- 1080 or 4K MPEG-4 video recording format

### + SECURITY

- Designed, sourced, and built in USA
- AES-256 encryption on all communications and data storage
- GPS-denied capable with VIO
- Maintain control & useable video during high packet loss
- Bonded construction prevents tampering
- No remote data transmission

### + COMMUNICATIONS

- 8 km maximum data link range
- Max data rate of 25 Mbits/s
- 900 MHz, 1.8 GHz, 2.4 GHz radio options
- Selectable 1, 2, 4, or 8 MHz bandwidths
- Wi-Fi for short range rapid data transfer to GCS or PC

# VESPER

THE NEXT GENERATION ISR