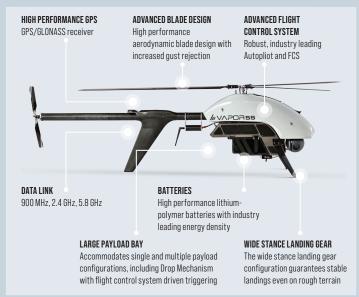# VAPOR® 55 ALL-ELECTRIC HELICOPTER UAS

The all-electric VAPOR 55 Helicopter UAS delivers flight control performance, endurance, and payload flexibility. Featuring military-grade components, intelligent HW/SW system design, and high energy density lithium-polymer battery, VAPOR delivers enhanced flight stability and up to one hour of flight time on a single battery charge.

With an expansive modular payload bay, and up to 10 lbs. useable payload capacity, VAPOR is multi-mission capable, with access to a variety of available integrated sensors and third party payloads including EO/IR, survey grade PPK mapping, LiDAR and hyperspectral sensors, and Drop/Delivery Mechanism. Every VAPOR Helicopter UAS incorporates proprietary HeliSynth™ technology for system level optimization including advanced autopilot, payload control & operation, and mission performance efficiency.

HIGH PERFORMANCE GPS
GPS/GLONASS receiver

ADVANCED BLADE DESIGN
High performance aerodynamic blade design with increased gust rejection

ADVANCED FLIGHT CONTROL SYSTEM
Robust, industry leading Autopliot and FCS

DATA LINK
900 MHz, 2.4 GHz, 5.8 GHz

BATTERIES
High performance lithium-polymer batteries with industry leading energy density

LARGE PAYLOAD BAY
Accommodates single and multiple payload configurations, including Drop Mechanism with flight control system driven triggering

WIDE STANCE LANDING GEAR
The wide stance landing gear configuration guarantees stable landings even on rough terrain

SPECIFICATIONS

GROSS WEIGHT	55 lbs (24.9 kg)
USEABLE PAYLOAD	10 lbs (4.5 kg)
GROUND SPEED LIMIT	33 mph (15 m/s)
MAX ENDURANCE	Cruise: 60 mins, Hover: 45 mins
RANGE	35 miles (56 km)
DIMENSIONS	Aircraft: 6.4 ft (1,941 mm) x 2.2 ft (672 mm) x 1.9 ft (583 mm) Rotor Diameter: 7.5 ft (2,291 mm)
OPERATING ALTITUDE	0-12,000 MSL
MAX WIND PEAK	20 kts (23 MPH); Gusts 40 kts (45 MPH)
DATA LINKS	900 MHz, 2.4 GHz, 5.8 GHz, Satellite
PAYLOAD OPTIONS	EO/IR Sensor • Lidar • Hyperspectral • PPK Mapping • Drop Mechanism • 1+ Multi-Payload

KEY FEATURES

- *Precision Flight Control Performance*
  - *Fully automatic flight operation allows VAPOR to complete missions without operator intervention, with dynamic re-tasking to ensure safety, reliability and mission execution*
  - *Advanced Blade Design and 3 Blade Rotor with low RPM deliver enhanced flight stability, increased gust rejection and maximized payload performance*
- *Endurance — Up to one hour of flight time on a single battery charge*
- *Automated Mission Execution — Enables operators to plan, simulate and execute missions automatically*
- *Payload Flexibility — Choose from available integrated sensors or custom-configure with third party payloads*

NEED MORE OPTIONS?
Contact your AV Representative to discuss Payload Integration and Custom Configuration options.

AV AeroVironment™ PROCEED WITH CERTAINTY