VAPOR® 55 MX ALL-ELECTRIC HELICOPTER UAS

The VAPOR® 55 MX all-electric helicopter unmanned aircraft system (UAS) is extremely versatile and can be easily configured to support a variety of mission requirements for defense, commercial and industrial applications. The all-weather VAPOR UAS incorporates a modular design that makes integration of high-performance single or multiple sensor payloads quick and easy. It features a sleek, modular, low-profile design that is rugged and portable with its telescoping tail and fold-up landing gear. Specifically built for heavier payloads and longer distances, VAPOR is unmatched by any quadcopter or other helicopter UAS with its 24-pounds of flexible payload capacity, and up to 105 minutes of endurance with a 3rd battery option.

SPECIFICATIONS

OPTICAL SENSOR	Trillium HD-25 (standard), Other options HD-45-LV-CZ, HD-45-CZ-GS, HD-55-LV-CZ, HD-55-MV HD, HD-25-LV
GROUND SPEED LIMIT	33 mph (15 m/s)
DIMENSIONS	Aircraft: 6 ft x 2.2 ft x 2.1 ft (1.8 m x 0.67 m x 0.64 m) // Rotor Diameter: 7.5 ft (2.29 m)
OPERATING ALTITUDE*	0–12,000 ft (3,657 m) MSL (density)
ENVIRONMENTAL OPERATIONAL LIMITS	Min: 0 °F (-17 °C) // Max: 120 °F (49 °C)
MAX WIND PEAK*	Sustained: 34.5 mph (30 kts)
DATA LINKS	900 MHz, 2.4 GHz or 5.89 GHz (video), Persistent Systems MPU5 (Standard), options Silvus, DTC
GROUND CONTROL	Live GPS position, full authority control, automatic or manual flight

DISTINCTIONS

》RANGE
Up to 19.8 miles (32 km)

》ENDURANCE
Cruise: 75 min, Hover: 60 min (2-batteries)*
Cruise: 105 min, hover: 80 min (3-batteries)*

》USABLE PAYLOAD**
Up to 24 lb (10.9 kg)
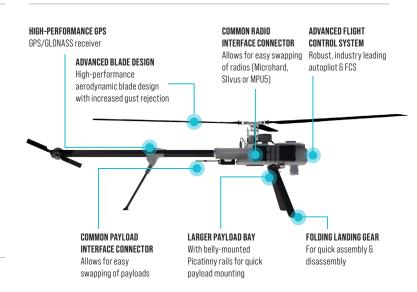
》GTOW WEIGHT*
Up to 68 lb (30.8 kg)

HIGH-PERFORMANCE GPS
GPS/GLONASS receiver

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

COMMON RADIO INTERFACE CONNECTOR
Allows for easy swapping of radios (Microhard, SIlvus or MPU5)

ADVANCED FLIGHT CONTROL SYSTEM
Robust, industry leading autopliot & FCS

COMMON PAYLOAD INTERFACE CONNECTOR
Allows for easy swapping of payloads

LARGER PAYLOAD BAY
With belly-mounted Picatinny rails for quick payload mounting

FOLDING LANDING GEAR
For quick assembly & disassembly

KEY FEATURES

》 *Payload flexibility—payload modules with rail design enables quick & easy payload integration for increased mission flexibility*

》 *Sleek, modular airframe design for easy assembly & disassembly*

》 *Flexible core architecture—key enabler for continuous development that will allow for seamless extensions & upgrades*

》 *Modular radio options—seamlessly operate with a low-cost encrypted radio or swap to hardened military radio*

EXAMPLES OF POSSIBLE PAYLOADS

EO/IR Sensor   SIGINT   Drop Mechanism***   Lidar   Hyperspectral   PPK Mapping   Multi-Payload

*Nose mounted Trillium HD-25 optical sensor Standard
**FAA restricts the max Gross Takeoff Weight (GTOW) of drones operating in the NAS to 55 lb unless you have special authorization.
***With HD-25 - up to a 15-18 lbs droppable payload

HARDCASE PACK OUT
12.9 in height x 16.1 in depth x 45.5 in width

RUCKSACK PACK OUT
25 in height x 9.5 in depth x 14.3 in width

AV AeroVironment™