Pulse Vapor 55TM Helicopter

Capabilities

The Pulse Aerospace Vapor 55TM is a tactical helicopter, unmanned aircraft system (UAS) capable of carrying larger payloads up to 24 lbs. Payload options include survey-grade airborne lidar and next generation high definition EO/IR brushless gimbals.

The Vapor 55TM includes an extensive safety feature set, a precision full-authority automatic flight control system, and easy to operate touchscreen ground control station.

The Vapor 55TM carries a 12 lb., front mounted sensor for up to 60 minutes on a single charge. Larger payloads can also be carried. The Vapor 55TM utilizes automatic rotor speed calibration for altitudes from sea level to over 10,000ft AMSL.

Photo Credit: Pulse Aerospace

DOI UAS Specifications

Main Rotor: Diameter 90 in
Dimensions: 77 x 26 x 23
Maximum Takeoff: Weight 55 lbs
Empty Weight: 19 lbs
Payload Weight: 10 lbs (33 lbs useful load)
Data Link: 2.4 GHz & 900 MHz, High Bandwidth, Encrypted, Digital
Endurance (Hover): 45 Minutes
Endurance (Cruise): 60 Minutes
Operational Radius: 5 Miles
Cruise Speed: 25 mph
Ceiling: 15,000 ft
Take Off Type: Automatic Vertical Take Off
Landing Type: Automatic Vertical Landing
Drive: Electric power plant with 2 stage transmission, torque tube tail drive, lithium battery
Avionics: Fully automatic flight control system, 3 or 5 axis redundant IMU options, Honeywell Digital Magnetometer, Survey Grade GPS + Glonass positioning
Aerodynamics: 3 blade semi-rigid fly-bar-less main rotor, high efficiency carbon fiber blades
Payload Compatibility: HD EO/MWIR brushless camera ball, Riegl VUX-1 LiDAR with survey grade GNSS/IMU, High resolution aerial photography imagers