



HELICOPTERS

# FLEXROTOR

Persistent Aerial Intelligence for  
Commercial Operations

AIRBUS





**Flexrotor is a VTOL unmanned aircraft system that brings ISR-grade persistence and sensor performance to commercial operations.**

Designed to operate beyond the reach of traditional infrastructure, Flexrotor delivers continuous, real-time aerial intelligence for missions that demand reliability and operational flexibility.

Its autonomous operations, compact deployment footprint, and modular payload architecture support extended commercial missions where consistent situational awareness is critical.

**PERFORMANCE**

**10 kg / 22 lbs**  
useful load (payload + fuel)

**25 kg / 55 lb**  
MTOW

 **12 to 14 hours**  
typical endurance

**78 km/h / 42 kt**  
minimum cruise speed

**2.2 m / 7.2 ft**  
rotor diameter

**2 m / 6.6 ft**  
length

**3 m / 9.8 ft**  
wingspan

 **77 kts (140km/h)**  
dash speed

**2.05 m x 0.57 m, x 0.38 m / 50 kg**  
case

 **> 5000 m / > 16400 ft**  
ceiling

**15 kg / 33 lbs**  
empty weight

**1300 m / 4300 ft**  
hover ceiling OGE (at 25 kg & without boost)

**28 cc 2 stroke; gasoline or heavy fuel options**  
engine

**30 min (if previously flown from location)**  
box to flight

**3.7 m x 3.7 m (12 ft x 12 ft)**  
landing zone

**inaudible at 900 m**  
auditory





# Key Capabilities for Commercial Operations

## Expeditionary

Airborne in under 30 minutes, including fueling and ground control setup.

## Transportability

Compact, modular design enables deployment from pickups, trailers, and other unimproved locations.

## Autonomous Operations

Fully autonomous VTOL and wing-borne flight reduces operator workload and supports small crew operations.

## Typical Endurance

12-14 hours of continuous flight supports persistent coverage for long-duration commercial missions.

## Confined-Space VTOL

Launch and recovery from a 3.7 m x 3.7 m area without runway or launch equipment.

## Engine Options

Available gasoline and heavy-fuel engine configurations support operational flexibility.

## Payload Versatility

Supports interchangeable EO/IR and radar payloads (up to 8 kg / 18 lb) optimized for commercial missions.

## Upgradeable Architecture

Sizable space, weight, and power enable integration of current and emerging sensor technologies.

## ITAR-Free Configuration

Commercial system in standard configuration, supporting streamlined procurement and deployment.

## Proven Operations

Mission-proven in demanding commercial environments, including extreme heat, high altitude, and winds with gusts up to 27 knots.





# Firefighting



**FIRE MANAGEMENT LIFECYCLE:**  
Supporting Every Phase of Wildfire Operations

**Early Detection**  
Monitor high-risk areas and identify new ignitions before escalation.

**Active Firefighting Support**  
Track fire movement, hotspots, and evolving conditions in real time.

**Crew Safety**  
Maintain persistent overwatch of ground crews and identify emerging hazards.

**Post-Fire Assessment**  
Survey damage, map fire perimeters, and detect residual hotspots to prevent re-ignition.

**FIREFIGHTING PAYLOAD CAPABILITIES**

**Overwatch PT-6 (EO/IR + AI)\***  
Wide-area EO/IR monitoring with automated detection of heat signatures and fire mapping.

**Hood Tech Alticam 06EOIR2**  
EO/IR imaging for visual assessment and thermal hotspot detection, day or night.

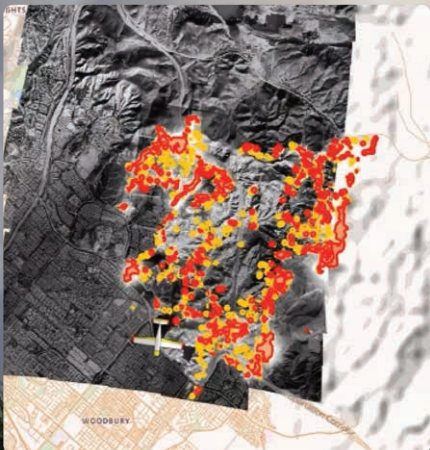
**Hood Tech Alticam 09EO3 or 09EOIR3**  
High-resolution EO and EO/IR imaging for detailed perimeter observation and standoff monitoring.

**IMSAR NSP-3\***  
All-weather terrain mapping and wide-area surveillance through smoke, cloud cover, and darkness.



*\*Full integration coming soon*

Flexrotor delivers continuous aerial intelligence across the fire management lifecycle, supporting early detection, active fire monitoring, crew safety, and post-fire assessment.





# Search & Rescue

Flexrotor supports search and rescue operations by providing wide-area aerial intelligence to locate, track, and support the recovery of missing persons.

## SEARCH & RESCUE LIFECYCLE: Supporting Every Phase of Search Operations

### Wide-Area Search

Survey large terrain to locate missing persons across land and remote environments.

### Target Detection & Tracking

Detect and track individuals using electro-optical and infrared sensors, day or night.

### Responder Coordination

Provide aerial overwatch to support ground teams and guide response efforts.

### Assessment & Recovery

Maintain situational awareness during recovery operations and post-mission review.



# Law Enforcement

Flexrotor provides aerial situational awareness for law enforcement operations, supporting perimeter monitoring, coordinated response, and post-incident review.



## LAW ENFORCEMENT OPERATIONS LIFECYCLE: Supporting Situational Awareness & Response

### Wide-Area Monitoring

Provide aerial coverage for rural, border, and remote operating environments.

### Incident Response Support

Deliver real-time aerial intelligence to support coordination between air and ground units.

### Perimeter & Overwatch

Maintain surveillance during planned operations and dynamic response scenarios.

### Post-Incident Assessment

Support investigation, documentation, and after-action review with recorded aerial data.





Flexrotor enables persistent monitoring of critical infrastructure, providing aerial intelligence for inspection, anomaly detection, and operational oversight across large and remote asset networks.

**MULTI-MISSION  
PAYLOAD CAPABILITIES**

# Infrastructure/Energy

**INFRASTRUCTURE & ENERGY LIFECYCLE:**  
Supporting Every Phase of Monitoring & Assessment

- Wide-Area Surveillance**  
Monitor linear assets such as pipelines, transmission corridors, and remote facilities.
- Inspection & Anomaly Detection**  
Identify structural issues, thermal anomalies, and environmental changes in real time.
- Operational Oversight**  
Provide aerial visibility of critical sites and ongoing field activities.
- Assessment & Reporting**  
Support post-event assessment, maintenance planning, and regulatory documentation.



- Hood Tech Alticam 06EOIR2**  
EO/IR imaging for visual assessment and thermal hotspot detection, day or night.
- Hood Tech Alticam 09EO3 or 09EOIR3**  
High-resolution EO and EO/IR imaging for long-range identification and detailed standoff observation.
- IMSAR NSP-3\***  
Wide-area terrain and surface mapping with surveillance capability in degraded visibility conditions.
- Overwatch PT-6 (EO/IR + AI)\***  
Wide-area EO/IR monitoring with automated detection of thermal and environmental anomalies.

*\*Full integration coming soon*



# Mission Proven

Flexrotor is a mature, fielded VTOL unmanned aircraft system trusted for long-duration commercial missions where reliability, persistence, and data quality are critical. With thousands of flight hours across demanding environments, Flexrotor has demonstrated consistent performance supporting emergency response, infrastructure monitoring, and public safety operations.

Designed for extended deployments, Flexrotor delivers dependable aerial intelligence in challenging conditions, including extreme heat, high altitude, and variable wind environments. Its autonomous operations, modular payload architecture, and expeditionary deployment model enable organizations to operate efficiently with minimal logistical burden.

Backed by Airbus Helicopters, Flexrotor combines proven aviation engineering with ISR-grade performance to deliver reliable aerial intelligence for today's commercial missions and tomorrow's operational needs.



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