



# LIZARD UAV SYSTEM

## KEY FEATURES

**Superior flight dynamics** → Helicopter provides endurance, adaptability, rapid time-to-target and incredible payload capacity. Operate up to **74 min**, reach your target at speeds up to **155km/h** and carry up to **15kg** payload.

**All-weather** → Lizard system provide unmatched reliability and performance in wind, rain, and dusty conditions thanks to its waterproof construction. Operate in harsh environments and gusty winds up to **22 m/s**.

**Tactical & Modular** → Single operator rapid deployment in less than **5 min** in a small area of **4 m²**, thanks to the modular tool-free mounting system and the fast vertical take-off of the helicopter.

**Max transportability** → Designed for ease of transport and logistics. Quick mounting systems for blades, tail boom and payload allow to pack Lizard system in its rugged transportable case in a matter of minutes.

**AI unit onboard** → Enhanced flight dynamics and data processing for advanced operations.

**Proprietary Flight Software** → Automatic flight optimized for helicopters, intuitive, and constantly evolving.

## MISSIONS OVERVIEW

**Advanced ISR** → Intelligence gathering, surveillance, and target acquisition in defense and security operations.

**SAR & Disaster Response** → Rapid deployment for locating missing persons, assessing disaster zones, and delivering criticalaid.

**Logistics & Resupply** → Transporting essential equipment, medical supplies, and provisions to remote or high-risk areas.

**Industrial & Infrastructure** → Inspection of oil & gas pipelines, power grids, and critical assets, ensuring operational safety and efficiency.

**Environmental & Research** → Climate monitoring, geospatial mapping, and ecosystem research in challenging environments.

## LIZARD 1000



### TECHNICAL SPECIFICATIONS

- Dimensions** ▶ 1792 x 398 x 628 mm
- Packed Dimensions** ▶ 1145 x 510 x 370 mm
- Rotor Diameter** ▶ 2254 mm
- Weight (without batteries)** ▶ 11.2 kg
- Payload Capacity** ▶ 15 kg
- Max Operational Weight** ▶ 38 kg
- Cruise Speed** ▶ 74 km/h -21 m/s
- Max horizontal Speed** ▶ 155 km/h - 43 m/s
- Max Flight Endurance[1]** ▶ 69 min
- Max Wind Resistance** ▶ 22 m/s
- Deployment Area** ▶ 4 m²
- Time Between Overhaul (TBO)** ▶ 200 h[2]
- Weather resistance** ▶ waterproof

## LIZARD 800



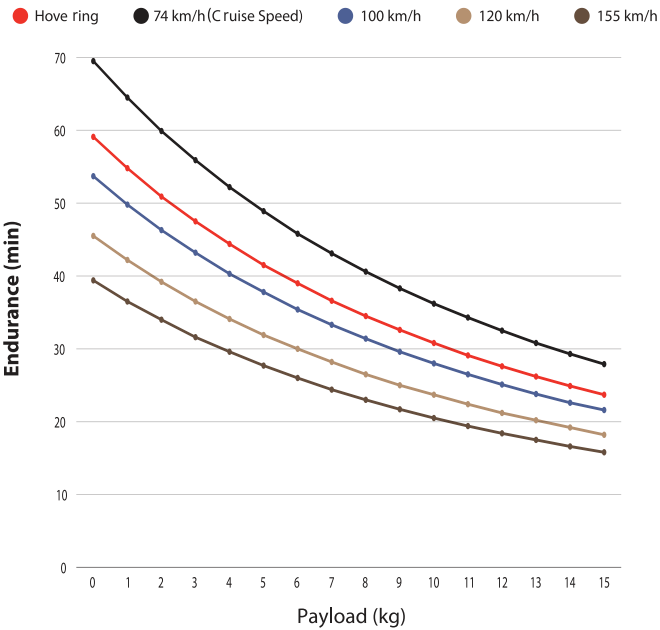
### TECHNICAL SPECIFICATIONS

- Dimensions** ▶ 1530 x 300 x 580 mm
- Packed Dimensions** ▶ 935 x 510 x 340 mm
- Rotor Diameter** ▶ 1794 mm
- Weight (without batteries)** ▶ 8.0 kg
- Payload Capacity** ▶ 10 kg
- Max Operational Weight** ▶ 25 kg
- Cruise Speed** ▶ 68 km/h -19 m/s
- Max horizontal Speed** ▶ 140 km/h - 39 m/s
- Max Flight Endurance[1]** ▶ 74 min
- Max Wind Resistance** ▶ 22 m/s
- Deployment Area** ▶ 2.5 m²
- Time Between Overhaul (TBO)** ▶ 200 h [2]
- Weather resistance** ▶ waterproof

[1]. The maximum flight endurance has been tested in laboratory and must be taken just as a reference. Payload, weather conditions, battery configuration and flight speed will affect this value.

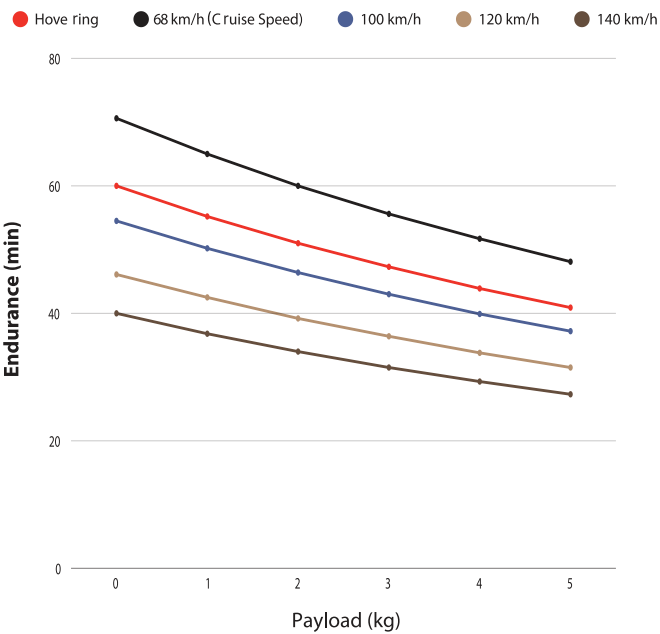
[2] Harsh conditions like sand, dust and water may affect durability of the platform and shorten required TBO

### LIZARD 1000 - Endurance Profile



- Key Parameters:
- Platform: LIZARD 1000
  - Battery configuration (set of 2): 1,4 kWh (each), 52 V (each)
  - Total weight (no payload): 24 kg

### LIZARD 800 - Endurance Profile



- Key Parameters:
- Platform: LIZARD 800
  - Battery configuration (set of 2): 1,2 kWh (each), 52 V (each)
  - Total weight (no payload): 20,2 kg

\*Laboratory tests were performed under neutral environmental conditions, employing the optimal efficiency configuration. Please note that this data should be regarded as a reference only, as various factors may impact operational endurance.

### EASE OF TRANSPORTATION



Tactical Backpack



Hard Rugged Case



# SPECIFIC APPLICATIONS

## MILITARY APPLICATIONS

### Tactical Reconnaissance and Border Surveillance

With a compact footprint (<2 m) and the ability to carry up to 15 kg of EO/IR and light radar sensors, LIZARD is ideal for rapid deployment from forward positions or pick-up trucks. Its endurance allows it to patrol up to 75 km of border within an hour.

### Convoy Protection / Force Protection

LIZARD can escort convoys at low altitude, is highly resistant to crosswinds, and can be deployed or recovered in less than 5 minutes – ideal for fast-moving operations.

### Coastal Maritime Operations (VBSS / Patrol)

With its compact design, LIZARD can be deployed from small cutters without the need for a hangar. It’s an efficient tool for inspecting suspect vessels ahead of boarding.

### Military Search & Rescue / Light MEDEVAC

Equipped with a barycentric hook up to 15kg, LIZARD can deliver medical kits or beacon devices. Thermal optics enable search in all conditions.

### Drone Carrier / Mothership

Installing a dedicated rack, LIZARD can autonomously deploy and manage FPV drones, acting as a force multiplier in offensive operations.

### Electronic Warfare (EW)

In autonomous flights, LIZARD can carry various jamming payloads for disrupting GPS or radio communications.

### Close Air Support – JTAC

Equipped with laser designators and IR/thermal sensors, LIZARD supports resupply missions and can guide laser-guided airstrikes.

### Tactical Communications Relay

Acts as an airborne repeater for ground units operating in remote or hostile environments.

### Covert ISTAR Operations

Thanks to its silent electric propulsion and reduced radar signature, LIZARD is ideal for covert reconnaissance, target designation, and battle damage assessment.

## CIVIL APPLICATIONS

### Power Line / Pipeline Inspection

Carries up to 15 kg of LiDAR and RGB payloads in a single flight. Its swashplate rotor system ensures stability in every condition and environment.

### Environmental Monitoring / Fire Surveillance

Supports hyperspectral and IR sensors for detecting fire hotspots and mapping CO2/CH4 emissions. Swappable batteries maximize up time.

### Emergency Logistics in Remote Areas

Transports up to 15 kg of medical supplies in thermally controlled boxes. Capable of landing in tight 2.5 - 4 m2 areas, for maximum flexibility.

### Offshore Inspection (Wind, O&G Platforms)

Corrosion-resistant body and ability to carry up to 15 kg of inspection tools (e.g., 4K gimbal + UT probe). Operates from small service vessels.

### Cave/Open-Pit & Stockpile Surveying

Carrying a LiDAR system up to 15kg, plus photogrammetry payload, LIZARD can survey entire pits without recharging thanks to its exceptional endurance.

### Precision Spraying & Crop Surveillance

Supports up to 15 kg of tanked payload; swashplate rotors ensure even distribution and stable flight. Swappable batteries ensure field efficiency.

### First Response Sea Rescue

With thermal optics and rescue payloads, LIZARD can locate and assist people overboard before rescue units arrive.

### Urban Law Enforcement & Public Safety

Low-noise operation and AI-powered tracking allow discreet surveillance and effective intervention in urban environments.

### IoT Infrastructure Data Relay

Performs flight routines to collect data from IoT sensor networks across critical infrastructure.

# ABOUT SABROBOTIX

Sabrobotix is an advanced technology company based in Italy, specializing in the design, prototyping, and production of high-performance aerial systems.

With a structured organization and in-house capabilities, we manufacture thousands of units per year, continuously expanding our production capacity.

Our state-of-the-art facility includes cutting-edge equipment for metal, composite, and plastic manufacturing. Backed by a team of skilled professionals, we deliver innovative and reliable UAV solutions for mission-critical applications.

“UAV helicopter platforms are set to revolutionize missions across defense and civil sectors, and we’re committed to leading this transformation”

**SABROBOTIX**

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# INFRASTRUCTURE

## HEADQUARTER IN ITALY

design, production and maintenance

30+

years of experience

120+

employees and technicians

20+

advanced production machines

ISO 9001

Quality Management Standard

## PRODUCED

120.000+

RC helicopters

300.000+

pair of carbon blades

2.000+

RC aircraft platforms

20.000+

carbon hydrofoils

## PARTNERSHIPS

Leonardo SPA

we are certified and approved suppliers for Leonardo, Italian key player in the defense industry

UniBo Aerospace

we are partner with the Aerospace Engineering department of Bologna

Zephyr

Italian partner to fine-tune our helicopter flight dynamics



**LIZARD**

**UAV HELICOPTER SYSTEM**

Production & Maintenance Made in Italy

