SPIDER

FUEL ENGINE ROTOR UAV
Tactical performance

SPIDER combines three important aspects of any helicopter UAV:
- Vertical takeoff and landing; hovering
- Long endurance due to its gas powered engine
- Heavy payload capacity enabling the use of high quality EO/IR Cameras and other sensors

Compared to full sized helicopters **SPIDER** significantly reduces life-cycle costs and provides operational advantages, while being able to perform the same type of missions.

A variety of payloads are available to ensure mission success: day, low light, night vision or IR.

Almenta can also integrate most customer-supplied payloads.

Reducing the need for personnel training, **SPIDER** can complete its entire mission fully autonomously, from take off to landing.

The complete system consists of:

- Two **SPIDER** helicopters:
  - Fully redundant flight control system
  - EO or IR payload
  - > 25Km range video transmitter (frequency band options: 900 Mhz, 1.3 GHz, 2.4 GHz, optionally encrypted)
- Ground control station:
  - Video receiver
  - Automatically steered directional antenna
  - Grid independent power supply
- Ruggedized laptop:
  - With VISIONAIR SW
  - Videocapture
  - Gamepad for payload control

Typically the system requires 2 crew members, however it can be safely deployed and operated by just one.

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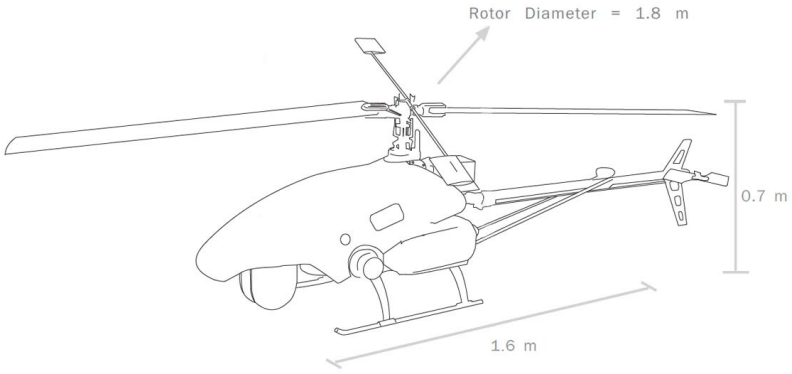
SPIDER

Technical specifications



USES
Military / Public Services:
Intelligence gathering, silent surveillance and reconnaisance, target acquisition, fire detection and monitoring law enforcement, combat in rural and urban areas, public safety missions.

Civil:
Fire assessment, environmental inspection,
search & rescue, border patrol and day/night traffic surveillance, agricultural and maritime applications, reconnaissance, surveillance and inspection, commercial applications.

POWER PLANT	
Two stroke gasoline piston engine	
DIMENSIONS	
Length	1.6 m
Height	0.7 m
Rotor diameter	1.8 m
LAUNCH and RECOVERY	
Vertical take-off and landing (VTOL)	
PAYLOADS	
EO/IR, gyro stabilized, geo-referenced	
STRUCTURE MATERIAL	
Aluminum	
PERFORMANCE	
Cruise speed	70 km/h
Endurance	3-4 hrs
Ceiling	3,000 m

COMPLETE SYSTEM TRANSPORT CASE	
Dimensions	1.80 m x 0.7 m x 0.9 m
Optional weatherized / ruggedized	
WEIGHT	
Max. takeoff weight	17 kg
Max. payload	2 kg

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