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# ALSEAMAR

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## BLACK BIRD SYSTEM

UAV EJECTION SYSTEM FROM A DEEPWATER SUBMARINE FOR  
STEALTH DATA COLLECTION



**innovation & services** at sea

Released from a **deepwater submarine**, the underwater vehicle reaches the surface to eject the drone for data recording.

The **X-SUB buoyant wire antenna** allows the submarine to **collect live data** from the drone, while staying in deep water for **optimal discretion**.

UAV DRONE

Type	Quadricopter - VTOL
Autonomy	Up to 40 minutes
Weight	1,5 kg
Maximum Take Off Weight (MTW)	750 g
Dimensions in the vehicle	Diameter: 9,4 cm / Height: 40 cm
Dimensions in the air	Diameter: 40 cm / Height: 40 cm
Air plan	Autonomous with or without GPS



UNDERWATER VEHICLE

Dimensions	Diameter: 4 inches / Height: 100 cm
Capsule immersion pressure resistance	30 bars
Vehicle ejection process from SNA	3 to 5 bars Double Air Blast technology
Pressurization of vehicle on board	Mini-compressor
Ejection order	Managed in the vehicle system with an electronic card as soon as the surface is detected.
Scuttling	Automatically after drone ejection



COMMUNICATION ANTENNA RELAY

Type	X-SUB wide band antenna with optical fiber
Dimensions	Diameter: 4 inches / Height: 100 cm
Optical fiber lenght	7000 m
Frequency range	Rx: Up to 3 GHz / Tx: up to 2 GHz
Communication type	Half-duplex
Simultaneous capacities	Rx: LB (AIS/ADSB/GPS...)



GROUND CONTROL SYSTEM - PILOTING SYSTEM

Remote control device	Touch pad or laptop
Mapping	On the touchscreen laptop
Mission plan	GPS points on the mapping
Changeable	Yes
Visualisation	Video displayed on a 18'' screen



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