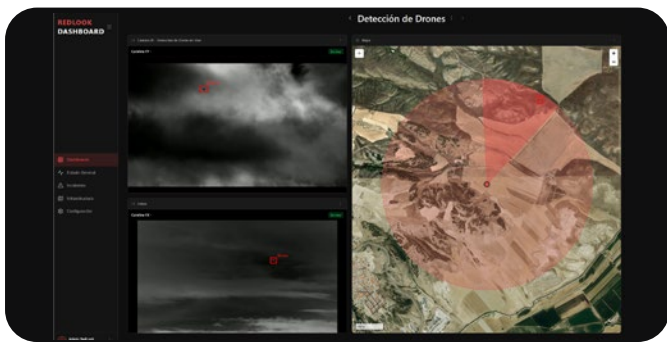


# Somerville C-UAS



Somerville C-UAS is SENSIA's infrared solution for surveillance, detection, tracking and visual identification of unmanned platforms in high-demand operational environments. Designed for the protection of critical infrastructure, strategic facilities and sensitive perimeters, the system delivers persistent and reliable observation capabilities, enhancing situational awareness and improving response capacity against unauthorised aerial incursions. Its value proposition is built on SENSIA's expertise in advanced infrared imaging and on a camera family engineered to provide a superior level of performance in security and defence operations.



Thanks to its modular approach and availability in different configurations, Somerville C-UAS can be adapted to a wide range of operational concepts and deployment requirements, from long-range surveillance to integration within layered protection architectures. Beyond its role as an observation and confirmation sensor, the system can be incorporated into command-and-control environments and operate in coordination with other third-party solutions, including systems intended for drone neutralisation or takedown, enabling a scalable, interoperable response aligned with each customer's operational needs.

## Drone detection and mitigation process



SENSIA maintains agreements with loitering and counter-UAS drone manufacturers, embedding SENSIA infrared payloads in interceptor platforms designed to defeat hostile UAVs. The Somerville C-UAS system delivers early warning and threat cueing of enemy drones and supports a drone-on-drone engagement concept, where interceptors equipped with SENSIA IR sensors enable effective tracking, interception, and kill.

## General Specifications

MODEL	MWIR MR	MWIR LR	MWIR XLR	LWIR MR	
IR CAMERA SPEC	Resolution	1280x720   1280x1024		1280x1024	
	Pixel pitch	10 µm		12 µm	
	NETD	<20 mk		<50 mk	
	Spectral band	CO <sub>2</sub> Notch filter		7-12 µm	
	Cooler MTTF	> 30000 h		Long life microbolometer	
	Lenses	Continuous zoom 21-400 mm	Continuous zoom 30-600 mm	Continuous zoom 60-900 mm	Continuous zoom 40-300 mm
	F number	4			1.5
EO CAMERA SPEC	Sensor Size	1/1,8"		1/1,8"	
	Minimum illumination	Colour: 0,00015 lux (F1.2) / 0,0017 lux (F4.0) B/W: 0,0001 lux (F1.2) / 0,0011 lux (F4.0)		Colour: 0,00014 lux (F1.2) / 0,0064 lux (F8.0) B/W: 0,0001 lux (F1.2) / 0,0042 lux (F8.0)	
	Focus	AF continuous, AF fast, Manual			
	Optical Zoom	40x			
	Focal length	21 mm- 420 mm	20 mm-800 mm	40 mm-1600 mm	20 mm-800 mm
POSITIONER SPEC	<b>Motion Range</b>				
	Azimuth	n x 360 °			
	Elevation	± 45 °			
	<b>Angular Speed</b>				
	Azimuth	(0.005 °/s to 30 °/s) *			
	Elevation	(0.005 °/s to 30 °/s) *			
	Elevation Positioning Accuracy	≤±0.1 mrad / ≤±0.1 mrad			
	Stabilization Accuracy	≤±0.31 / ≤±0.12 mrad RMS			
	Environmental Protection	IP 65			
	Temperature	-10 °C - +50 °C			
FUNCTIONALITIES	GPS & Compass	Optional			
	Automatic Threat Tracking	Included			
	AI-Assisted Threat Classification	Features advanced identification logic			
	Target Categories	Critical infrastructures (vessels, ground vehicles, personnel, and others on demand)			
	Integration	Optional connection with AIS (Automatic Identification System) and Radar			
	New	AI-powered RedLook Control Software			
	Joystick	Included			
	Automatic Threat Detection and Tracking	Included			

All system components are manufactured in Europe, and additional configurations and tailor-made adaptations can be defined according to each customer's operational requirements.

