



SERAPHIM OPTRONICS
Life-Saving Covert Surveillance



ROSS

THE NEXT GENERATION IN UNATTENDED IMAGING SENSORS

The ROSS is a wireless, all-in-one, lightweight (<10 lbs.) and compact (10.2" x 6.5") unattended imaging day & night surveillance system, embodying years of engineering and operational experience in the field. ROSS is a technological breakthrough due to its compactness, energy efficiency, survivability and inclusion of today's most advanced communications systems. The ROSS meets today's SWaP (Size, Weight and Power Consumption) trend and users' needs in a super attractive bundled package.

AN ARRAY OF APPLICATIONS

ROSS is an all-in-one powerful tool designed for various tactical terrain dominance applications such as border protection and gap filling, perimeter and force/facility protection as well as intelligence gathering and full surveillance.

ULTRA-PORTABILITY AND ENERGY EFFICIENCY

Small, lightweight, and single-person portable, the ROSS provides a wide range of advanced features including remote controlled day/night surveillance tools with a wide controllable field of view, with no external moving parts/movement and no light reflection.

HIGH SURVIVABILITY AND AUTONOMY

ROSS is engineered for ultimate survivability. Easily camouflaged, water-proof, and fitted with an anti-tamper alarm - activated when the system is touched, ROSS is built to withstand the harshest environments for long periods of time. The system provides automatic motion detection in VMD mode and transmission of alarms in automatic detection sentinel mode – with video stream upon detection. Additionally, it offers a 'house call' option, enabling direct surveillance of pre-memorized locations, a scan path with automatic cyclical scanning of pre-programmed targets and a scheduler for automatic daily operations.

EXCELLENT INTEGRATION CAPABILITY

For full area coverage, the ROSS can be bundled with variable seismic sensors that act as a ROSS extension. This allows the ROSS to monitor a variety of sensor fields, making it an optimal solution for infrastructure-free tactical assets protection, border and force protection and perimeter defense. ROSS also serves as a data HUB for other UGS, with the ability to continuously relay the video and event data to HQ.

KEY BENEFITS



Easily camouflaged

no external motion, noise or reflection



Plug and play

easy to use, intuitively operated



Open architecture

easily integrated with C4ISR various interfaces



Internal pan & tilt

Field of regard 90° with no external moving parts



Custom-fit rechargeable battery

Up to 58 hours at full mode operation
Up to 200 hours at sleep mode



Range of onboard communication options

integral WiFi, 4G, LTE (slot for SIM card), LAN for external SATCOM



Onboard real-time video

processing & recording VMD, internal SD card



Convenient platform

for integrated solutions to various operational requirements



Size, Weight & Power efficient

Extremely Size, Weight & Power (SWaP) efficient - withstands harsh operational environments, ideal for short and long duration missions

SHORT SPEC

Parameter	Metric	US
Size	66mm x 260 mm	10.2" x 6.5"
Weight	4.7 kg	10lbs
Power consumption	4.4 W/h	
Camera format- day	VGA (640 x 512)	
Camera format- thermal	VGA (640 x 512)	

