Multi-Sensor, Wide-Area Persistent Surveillance Systems

National Defense
Public Safety and Border Security
Humanitarian Assistance

LOGOS®
Technologies
The Art of Science®

ISR Systems and Solutions

Logos Technologies offers a broad range of wide-area persistent surveillance (WAPS) systems for a variety of mission sets. Each system provides a comprehensive solution that makes it possible to observe, monitor, and review the activities of an entire city-sized area, day and night, from a diversity of platforms, including aerostats and manned and unmanned aircraft.

Systems and Solutions Include:

- Full-field imaging and archiving
- Real-time mover tracking
- Server in the sky
- Multi-source data conditioning
- Flexible and low size, weight, and power (SWaP)
- Ground control/analysis equipment
- Portable, remote receiving stations
- CMMI and Agile software methodology

Long-Endurance, Stationary Surveillance Missions

Kestrel Block II
(EO/IR)

Wide-Area Persistent Surveillance Sensor for Aerostats – Kestrel provides 360-degree, day-night WAPS of a city-sized area and works in conjunction with high-resolution, full-motion video sensors to deliver a precise, penetrating look at target areas.

Simera
(EO)

Lightweight, Wide-Area Persistent Surveillance Sensor for Aerostats – Simera offers city-sized WAPS in a lightweight package. Weighing only 40 pounds, this sensor provides 360-degree daylight surveillance and is easily carried on tactical aerostats.

StratoWAAS
(In Development)

High-Altitude, Long-Endurance, Wide-Area Airborne Surveillance – StratoWAAS delivers multispectral, wide-area surveillance capabilities from an altitude of up to 80,000 feet, allowing it to stay aloft uninterrupted for weeks and even months at a time.

aerostat

day   night

Location-Flexible Surveillance Missions

Our manned and unmanned aircraft-mounted systems include:

- Onboard, high-speed edge processing
- Real-time access to live and recorded imagery
- Rapid, interchangeable mounting capability
- Lightweight configuration for easy Group 3 UAS integration

Platform-Flexible Systems

RedKite Pod (EO)

Powerful Wide-Area Surveillance in a Small, Adaptable Pod – The RedKite Pod offers a highly effective electro-optical wide-area motion imagery system in a small lightweight pod, easily affixed to a variety of manned and unmanned platforms.

BlackKite Pod (IR)

Powerful IR Wide-Area Surveillance in a Small, Adaptable Pod – The BlackKite Pod delivers mid-wave infrared wide-area motion imagery in a small lightweight pod that is platform-flexible, with mounting capability for both manned and unmanned platforms.

Multi-Modal Sensor Pod (MMSP)

Platform-Flexible, High-Performance Multi-Sensor System in a Compact Pod – The Multi-Modal Sensor Pod delivers both wide-area and high-resolution motion imagery, plus a third modality, such as hyperspectral or LIDAR, in a standalone podded system for rapid deployment on a wide range of platforms.

uav

helicopter · aircraft

day · night

hyperspectral · lidar

Systems for the Insitu Integrator™

RedKite-I (EO)

Wide-Area Surveillance System for the Insitu Integrator™ – RedKite-I offers the same powerful electro-optical wide-area motion imagery system as our podded version, configured to fit inside the payload bay of the Insitu Integrator.
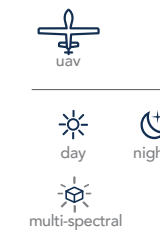
BlackKite-I (IR)

IR Wide-Area Surveillance System for the Insitu Integrator™ Offering the same superb capabilities as the podded system, BlackKite-I provides powerful IR wide-area surveillance from the payload bay of the Insitu Integrator.

Sea Eagle (In Development)

Wide-Area Shallow Water Mine Detection System – Configured to fit in the payload bay of tactical UAVs, such as the Insitu Integrator, Sea Eagle provides wide-area optical sensing for shallow water mine detection. It can also be configured to fit into a platform-flexible pod.

uav

day · night

multi-spectral

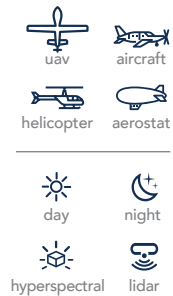## Large Data Processing

Multi-Modal Edge Processor

Processing, Exploitation, and Dissemination with Ultra-Low SWaP – Designed for ultra-low SWaP needs, the Multi-Modal Edge Processor ingests terabytes of data from multiple sensor sources and provides processing, exploitation, and dissemination in real time.

Hostile Fire Detection

Serenity

Mission-Ready Dual Sensor System to Detect and Locate Enemy Fire – Serenity provides reliable, actionable knowledge to ground troops under fire. Dual sensors, visual and acoustic, capture the signature of hostile fire and deliver precise source coordinates.

uav   aircraft

helicopter   aerostat

day   night

hyperspectral   lidar

Support Services

Data Processing

Flexible and Robust Processing Power for Faster Exploitation

Logos provides both onboard and ground-based advanced processing solutions that deliver rapid access to both real-time and forensic data. Our proven systems ingest and normalize large data sets from disparate collection sources, generate geospatial and temporal data tags, and correlate the data into one common operating picture. Ingestion rates include up to 1 billion pixels, 2 million spectra, and 6 Billion points per second.

Full-Spectrum Mission Support

Supplying and Training Analysts to Deliver the Complete Intelligence Picture

Logos analysts and operators are deployed worldwide to help evaluate, analyze, and correlate multiple-source data sets. They are trained to build a comprehensive intelligence picture by monitoring areas of interest, identifying patterns, and assessing risks and threats. Logos training also equips deployed personnel with advanced software and hardware knowledge and a solid understanding of payload optics and system electronics.

Customizable Solutions

Innovative ISR Solutions for Specific Mission Requirements

Logos conducts advanced research and development (R&D) and delivers customized solutions that exceed customer expectations, all within an efficient timeline. As a solutions-oriented provider, Logos offers demonstrated expertise for technology development and provides a wide range of support services.

Wide-Area Persistent Surveillance Operations and Mission Sets

National Defense

- Force protection
- Base/camp/port defense
- Operational surveillance
- Reconnaissance and overwatch
- Pattern-of-life analysis
- Hostile act forensics

Public Safety and Border Security

- Critical infrastructure protection
- Border surveillance and security
- Law enforcement and smart policing
- Event security
- Public safety
- Aerial patrol
- Incident investigation

Humanitarian Assistance

- Emergency management
- Large-scale accident response
- Natural disaster response
- Wildfire detection and control
- Refugee and IDP camp security
- Wildlife conservation
- Remedial activity verification