



elsight

SECURE AND RELIABLE CONNECTIVITY FOR UNMANNED AERIAL & GROUND SYSTEMS

**In Law Enforcement,
Drone First Responder
& Public Safety Applications**

For more information, **contact info@elsight.com or visit www.elsight.com**

Empower Unmanned Aerial Vehicles (UAV) and Unmanned Ground Systems (UGS) to transform law enforcement operations

Elsight's Halo connectivity platform provides secured, reliable, and continuous communications to ensure mission completion of drones and other unmanned systems. By aggregating cellular, satellite and RF communications into a bonded pipe, the Halo enables uninterrupted high-bandwidth data transmission for unmanned missions beyond the visual line of sight (BLVOS/NLOS). With multi-link bonded communications, the Halo allows for a wide range of safer and more successful law enforcement missions propelled by drones and other unmanned systems. It also enables one operator to manage many drones, robotic or autonomous systems.

Enhanced situational awareness and risk-free monitoring in BVLOS/NLOS conditions

UAVs and UGSs, such as drones and robots, have emerged as indispensable assets for law enforcement agencies worldwide, extending operational capabilities, lowering risk to personnel, and expediting efficient responses. However, an effective non-line-of sight UAV/drone operation relies on secure, uninterrupted communications for continuous data flow between drones and the command center. Halo's lightweight and small footprint module is quick to set up during emergencies or in areas without infrastructure.



Elsight empowers law enforcement/first responder teams with:



Real-time and accurate situational awareness

Equip law enforcement personnel with live information that is crucial for emergency decision-making, strategic planning, and executing complex missions in crowded urban environments or outdoor difficult terrain.



Prioritized data type

Data prioritization (video, C2, or telemetry) can be easily configured to align with operational needs, ensuring the transmission of the most critical data.



Risk-free monitoring

Long-range visual monitoring in challenging environments to capture visual evidence of specific targets, thereby gaining a strategic advantage.



Cyber secure

Multi-link cellular connectivity to avoid jamming. Data security packet splitting mechanism. Encryption up to AES-256-CBC.



Rapid deployment

Facilitate quick operational readiness, leveraging Halo's portable, small SWaP (size, weight, and power) footprint. On the fly, first responders can deploy a drone or other unmanned systems and benefit from extended visibility.



High-bandwidth transmission

Send high bandwidth video confidently for accurate real-time information.

Ensuring BVLOS (Beyond Visual Line of Sight) communication via multi-link connectivity



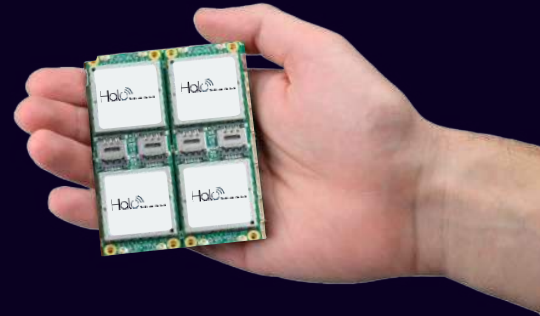
Boxed Halo

Elsight's Halo is an AI-powered connectivity solution for UAVs/UGSs that encrypts and aggregates multiple communication links (LTE, 5G, SatCom, and proprietary RF) into a secure and robust pipeline, ensuring unparalleled connection reliability for BVLOS / NLOS operations.

Halo employs advanced encryption and data-splitting to protect sensitive information from cyber threats, maintaining the integrity of law enforcement communication. The cybersecure solution splits all data forms - video, telemetry, and sensor data - into AES-256-CBC encrypted packets. Secure VPN tunneling delivers the encrypted data stream via the optimal link or links to the AllSight management platform (cloud-based or on-prem), where it is decrypted and recombined.

Leveraging an exceptionally small SWaP (size, weight, and power) footprint, Halo offers seamless integration with any UAV or drone model and size, ensuring full redundancy, high bandwidth, low latency, high security, and overall operational safety without sacrificing speed, weight or power. The compact, lightweight design is also suited for rapid deployment across various scenarios.

DFR teams can gather aerial-level situational awareness for better informed tactical decisions. Elsight's Halo assures instant, uninterrupted data for life-saving real-time intelligence.



SWAT Teams

Provides covert surveillance for tactical operations, counter-terrorism, vehicle pursuits, shootouts, and hostage-taking.



Event Management

Identifies patterns and problems during protests, gatherings, and large events to manage incidence response with precision accuracy.



Border Control

Tracks to swiftly identify and respond to illegal border crossings and criminal operations.



Search & Rescue Teams

Identifies inaccessible, rugged terrain or dangerous areas during post-earthquake or in other natural disasters for efficient disaster assessment, victim rescue, and overall management.



Firefighters

Locates entrance and exit points, burn spots, and people for effective and safer firefighting.



Emergency Response

Enables almost-instant aerial incident surveillance during emergency call response.



Crash And Crime

Scene documentation to expedite and enhance investigative processes without compromising critical data.



Traffic Monitoring

On major roads or intersections to direct heavy traffic or in a crisis.



Halo Features

Multi-link communication

LTE/5G, RF, SATcom

Enhanced security

Packet splitting mechanism
AES-256-CBC encryption

AI-powered

Real-time network prediction

Enables BVLOS solution certification

Small form factor

Less than 100g



AllSight cloud or on-prem management

At-a-glance information on status, location, network status, VPN status and more:

3D reception coverage mapping for efficient flight planning

Remote configuration (link prioritization, redundancy, etc.)

Secure Over-The-Air (OTA) updates

Easy integration

Built-in Remote ID network and broadcast

FAA and EASA compliant

Ethernet

2 Ports of 1 GB

USB

1 x USB 2.0
1 x MICRO USB for debug (internal)

WiFi & Bluetooth*

Dual Band WiFi (2.4/5 GHz)
802.11 a/b/g/n/ac
BT 2.1 +EDR, BT3.0, BT 4.2 (BLE)

*option to remove

Cellular

Embedded 5G/4G LTE/3G bands depending on the region

Serial

2 x RS232/422/485
1 x CAN BUS
1 X UART

Positioning Systems Supported

GPS | GLONASS | Galileo | BeiDou

Data Security

Data Security Packet splitting mechanism
Encryption up to AES-256-CBC

Advanced Communication

AI - Based
VPN: OpenVPN L2/3

Environmental Conditions

Operating: -10°C to 75 °C

Power Input

DC 9V – 30V

Power Consumption

6.5W (Avg.), 10W (Max)

TRUSTED BY

