

# Elsight Holo

For Secured, Connection-Confidence in Military & HLS NLOS-C2.



Unmanned Aerial Vehicles/Systems (UAVs, UAS) (Drones)



Autonomous Robotics

#### When completion of your mission relies on robust, secure, & continuous connectivity

Combine your multiple LTE & 5G cellular services, SatCom, and RF technologies to one secure pipeline in a single-bonded link for a continuous, robust connection to operate unmanned systems for video streaming, telemetry, and command & control. Elsight's Halo bonds all the available links to maintain high quality-of-service for your most critical data.

## Halo's immeasurable benefits

- Portable, low weight, power and size for an optimized SWaP
- Field-proven success in NLOS missions of over 150,000 flight hours
- Enables certification for BVLOS
- Supports MAVLink
- U.S. National Defense Authorization Act (NDAA) ready

As the lightest, smallest and lowest power-consuming bonded link for bi-directional and encrypted communications, Halo is a key enabler for your military unmanned NLOS-C2 mission.

## Halo's outstanding features

- Integration of cellular communications (3G/LTE/5G) with proprietary RF and SATcom links
- Fully configurable (e.g. link prioritization, redundancy, buffer size, and others)
- Real-time network prediction
- 3D reception coverage mapping for flight planning
- Cybersecurity enclosed:
  - Data security package splitting mechanism
  - Encryption up to AES-256-CBC
- Allsight cloud management platform (also available on-prem)
  - Multi-tier, multi-tenant environment
- Remote ID offering
- Secure Over-the-Air (OTA) updates

#### There's a Halo for **Every NLOS-C2 Mission**



2 x LTE + 1 x 5G: Less than 100 grams



4 x LTE: Less than 100 grams



**Halo Enclosed Box** 

# Your mission is too critical to rely on a single link solution.

Each option on its own has its failings. Creating a single bond with multiple options delivers countless benefits.

Direct RF Link	Satellite Links	A Single Cellular Link	Failover Solutions (RF/Cellular)	ELSIGHT HALO: A Single Bonded Link for Connection Confidence
Easily jammed, no redundancy	Usually expensive, no redundancy	Can be jammed, no redundancy	Offer some redundancy, but with communication drops	No jamming, battlefield-proven, offers full redundancy, high BW, low latency, cybersecurity and operational safety.
Requires line of sight between the unmanned vehicle and the operator	Requires open skies, bulky and heavy, high latency and low bandwidth	Reception "holes" in altitude and behind objects	Reception "holes" behind objects, low bandwidth and no link nor latency optimization	By aggregating all available IP links to one bonded link, unmanned systems (ground and aerial) ensure operational continuity for mission- critical outcomes.



Ethernet	2 Ports of 1 GB
USB	1 x USB 2.0 1 x MICRO USB for debug (internal)
WIFI & Bluetooth* *Option to remove	Dual Band WiFi (2.4/5 GHz) 802.11 a/b/g/n/ac BT 2.1 +EDR, BT3.0, BT 4.2 (BLE)
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 Package splitting mechanism Encryption up to AES-256-CBC
Advanced Communication	6 <sup>th</sup> Sense bonding technology VPN: OpenVPN L2/3
Environmental Conditions	Operating: -10°C to 75 °C
Power Input	DC 9V – 30V
Power Consumption	6.5W (Avg.), 10W (Max)

**Certified by** 

verizon∕ ∓ Mobile PTCRB



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S AT&T





**MISSION-COMPLETION** CONNECTIVITY

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