



# Elsight's Halo: When completion of your mission relies on robust, secure, & continuous connectivity

Combine multiple LTE & 5G cellular communications, SatCom, and RF technologies to a secure pipeline in a bonded link for continuous, robust connectivity and optimal data transmission in your unmanned systems. Take full control of prioritizing the quality-of-service (QoS) of your video stream, telemetry or command & control data. In every mission, Elsight's Halo enables you to control the costs incurred for using each of the links.

#### Halo's immeasurable benefits

- Portable, low weight, power and size for an optimized SWaP
- Field-proven success in BVLOS missions of more than 200,000 flight hours
- Enables certification for BVLOS flights
- Direct MAVLink support

### Halo's outstanding features

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

## There's a Halo for every mission!



2 x LTE + 1 x 5G Halo 5G Card Less than 100 grams



4 x LTE Halo LTE Card Less than 100 grams



Boxed Halo Supports MIMO

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

Each option on its own has its failings. Creating a bond with multiple communications options delivers the connectivity reliability you need!

Direct RF Link	Satellite Links	A Single Cellular Link	Failover Solutions (RF/Cellular)	<b>ELSIGHT HALO:</b> For Connection Confidence
Easily jammed, no redundancy	Usually expensive, no redundancy	Can be jammed, no redundancy	Offer some redundancy, but with communication drops	Field-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 a secure bonded pipeline, unmanned systems (ground and aerial) are ensured operational continuity for mission-critical outcomes.

When BVLOS missions are easily enabled, the entire industry benefits. Elsight is dedicated to serving these sectors:



MILITARY & HLS





FIRST RESPONDER









DRONE DELIVERY



**MEDICAL** 







### **Specifications**

RID Network & Broadcast	FAA accepted
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)
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 bonding technology VPN: OpenVPN L2/3
<b>Environmental Conditions</b>	Operating: -10°C to 75 °C
Power Input	DC 9V – 30V
Power Consumption	6.5W (Avg.), 10W (Max)

**Certified by** 

AGRICULTURE

























