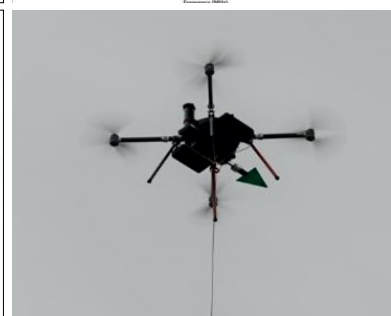
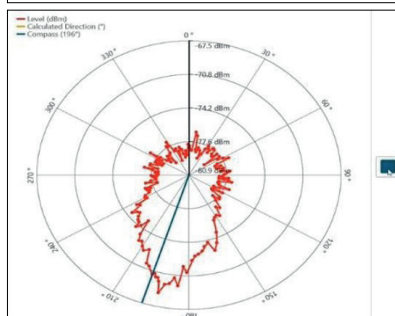
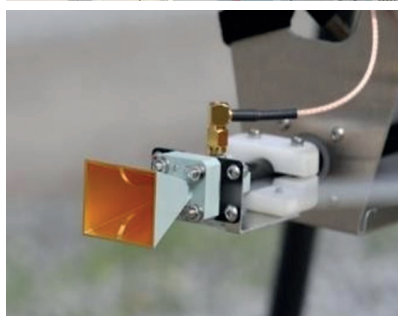
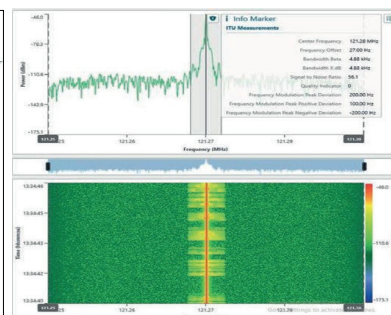
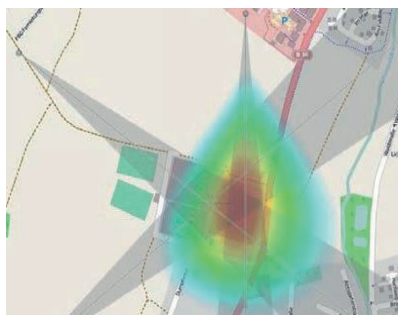




Airborne Frequency Monitoring

Airborne Monitoring Unit LS OBSERVER AMU-evo with enhanced drone capabilities

With the AMU-evo, LS telcom and Colibrex (a 100% subsidiary of LS telcom, expert in RF measurements by drone), further enhance the performances of the well-proven LS OBSERVER AMU. While still benefiting from the multitude of functionalities and userfriendliness of the CMS software (Central Monitoring Software) as well as the variable frequency ranges available, the AMU-evo offers longer flight times and the ability to fly in more critical weather conditions. With many other types of payload options provided by Hexadrone for its Tundra 2 drone, it is also the ideal tool for defense applications. The AMU-evo brings a level of flexibility never reached in the frequency monitoring world.

Deploy a new network without the need of heavy and fixed infrastructure or simply extend your existing LS Observer network!

Main Applications:

- **Interference hunting incl. direction finding** via triangulation of multiple line of bearings (Angle of Arrival method): Observe the entire RF-Spectrum from the air to detect suspicious or illegal activities & potential threats such as:
 - Illegal emitter (or extinction of an emitter)
 - Emitter with faulty transmission parameters
 - VSAT transmitting on unauthorized or wrong frequencies
 - Unwanted Emissions (Jamming)
 - Radio activity from neighboring countries
- **"Airborne RF drive testing"** as a new and useful measurement approach
- **Inspection of microwave links**
- **Antenna measurement** (option)

Benefit from the LS OBSERVER AMU-evo:

Performances of the new Tundra 2 from Hexadrone as AMU drone platform:

- Flight time min. 30mn with AMU-Payload
- Robust, IP54, easy transport
- Dual multi-band GPS/RTK
- UAF label awarded by the French Ministry of the Armed Forces

Fully integrated measurement payload:

- Interchangeable payloads available for 30 MHz up to 6 GHz, 14,5 GHz, 32 GHz, 44 GHz or 50 GHz; the receivers are not simply attached on the drone!
- Measuring antennas mounting on a 2-way gimble to maintain the chosen polarization
- Communication to the autopilot via an integrated MavLink router

Measurement capabilities of Central Monitoring Software CMS:

- Modern and intuitive graphical user-interface with interactive measurement charts and maps
- Multitude of measurement configurations (scan and fixed frequency mode, demodulation channel power measurements, ...)
- ITU compliant signal parameter measurement
- Recording possibilities (spectrum, IQ, occupancy, statistical data)
- Direction finding and triangulation techniques
- Airborne drive testing for coverage mapping

Versatile solution with multitude possibilities of options and upgrades:

- Tethered kit for long-time monitoring
- Various accessories available (FPV camera, backpack, winch, release mechanism, ...)
- Further payload options such as gimbal cameras, IR cameras and lidar

Measurement Characteristics:

Model	AMU-106w	AMU-114w	AMU-132s / AMU-144s / AMU-150s
RF Characteristics			
Frequency range (antenna capabilities start at 30MHz)	20 MHz to 6 GHz	100 kHz to 14,5 GHz	30 MHz to 32 / 44 / 50 GHz, or 6 GHz to 32 / 44 / 50 GHz with better sensitivity
Max. input level	-152 dBm/+20 dBm, 0 VCC		-140 dBm @ 1 GHz/ +20 dBm, 0 VCC
Instantaneous bandwidth	up to 27 MHz	up to 40 MHz	scan mode only
Measurement Functionalities			
RF scanning	Yes		
Direction Finding (DF)	Yes (AoA calculation from 360° turn)		
Geolocation	Yes (triangulation of sequential DF measurements)		
Demodulation	Yes (FM, AM, DSB, USB, LSB, CW)		No
IQ recording	Yes		No