



# PELERIN

MADE IN  
FRANCE

## CHARACTERIZATION OF RF ANTENNA PERFORMANCE IN THEIR ENVIRONMENT

**RX Payload :** RF Measurement Equipment - Reception Mode – 2 to 3Kg

**Missions :** RF Measurement Equipment - Reception Mode – 2 to 3Kg

**Application :** Land and Naval / Civilian and Military

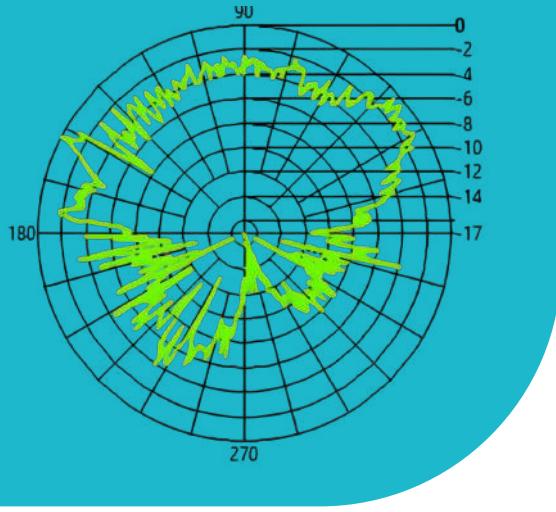
### RF Functions :

Spectral Measurement and Recording from 20 MHz to 20 GHz (1 to 2 HF and V/UHF antennas)

Post-processing of various data around calculation and formatting

**Type of drone VS Mission :** Drone copter for spiral trajectories around the system under test, Elongation radius <3km / Mission duration 2-4h

**Applications:** V&V phases, V&V, commissioning, technical stops (AT & ATM), mission departure



## INNOVATION

- > **Drone Independence** : A simple and unique mounting. The choice of drone is guided by the mission and customer constraints
- > **Autonomous** : Clean power supply, operational self-check, self-health monitoring, self-positioning, integrated ground/air communication means
- > **Reconfigurable - SDR Approach** enabling multi-mission service in given frequency bands (HF, VHF, UHF, or SHF...)
- > **Optimised** : System Architecture oriented towards compactness/lightweight and low power consumption (Digital System)
- > **Versatile and modular** : Rx and/or Tx, Multi-frequency range (HF, V-UHF, SHF); multi-mission. 80% of the SDR architecture is common to the range; only the antennas will be specific (increased reliability and maintainability).
- > **Easily programmable and reconfigurable** before and during operation
- > **Fully automated** allowing data acquisition without operator action (only monitoring)

## TECHNICAL SPECIFICATIONS

POWER SUPPLY	Autonomy and Independence
POSITIONING AND REFERENCE	Hybrid GNSS / IMU / Camera
DEDICATED RF ANTENNAS	HF, V/UHF, SHF
CONTROL SENSORS	Voltage, Accelerometer, Temperature, Shock
PAYLOAD/GROUND LINKS	Control Data Link / Measured Data Link according to mission
RF & APPLICATION MODULE	Mission-related Application / RF Reception and/or Generation / Raw Data Post-processing and/or Storage

contact-spi@spherea.com

spherea-pi.com

 SPHEREA  
POWER  
& INSTRUMENTATION