



# Sparv sensors

## *Meteorological sensors for fixed and rotary wing aircrafts*

Easily equip your unmanned aircraft or balloon with a range of sensors for logging and/or real-time telemetry and review the data on tablets and computers.

### Sensor Hub

- Compact: 2x6 cm
- Light-weight: ca 5 grams
- Large built-in storage for logging
- Built-in telemetry ability
- Support for 4 sensors on lead

### System features

- Plugs into a computer like a USB memory to read out the full log as a text file.
- Optional Windsond telemetry using RR1 or RR2 with real-time Windows and Android software support. Multiple telemetry streams are supported. The on-board telemetry antenna can be moved for optimal antenna placement.
- Support for external GPS for best GPS coverage
- Support for connecting more sensors using extension boards
- Plugs into common autopilots to piggy-back on their data stream
- Plugs into RC receiver to control data recording with servo signal
- Power directly from RC receiver or other 3.4-16V battery (depending on sensor suite)
- Users can easily upgrade firmware
- Compatible with Windsond radiosondes, receivers and software
- Open-source Python library for data processing

### Sensor features

- Plug-and-play autodetect of sensors
- The sensors also work with S2 radiosondes
- Connect the sensors directly to a computer for test and firmware upgrading
- Traceable sensor individuals and calibrations

### Rationale

A number of customers use the Windsond S1 radiosonde as a sensor onboard UAVs. Although this works, the electronics isn't ideal for the purpose and the radiosonde doesn't easily support external sensors.

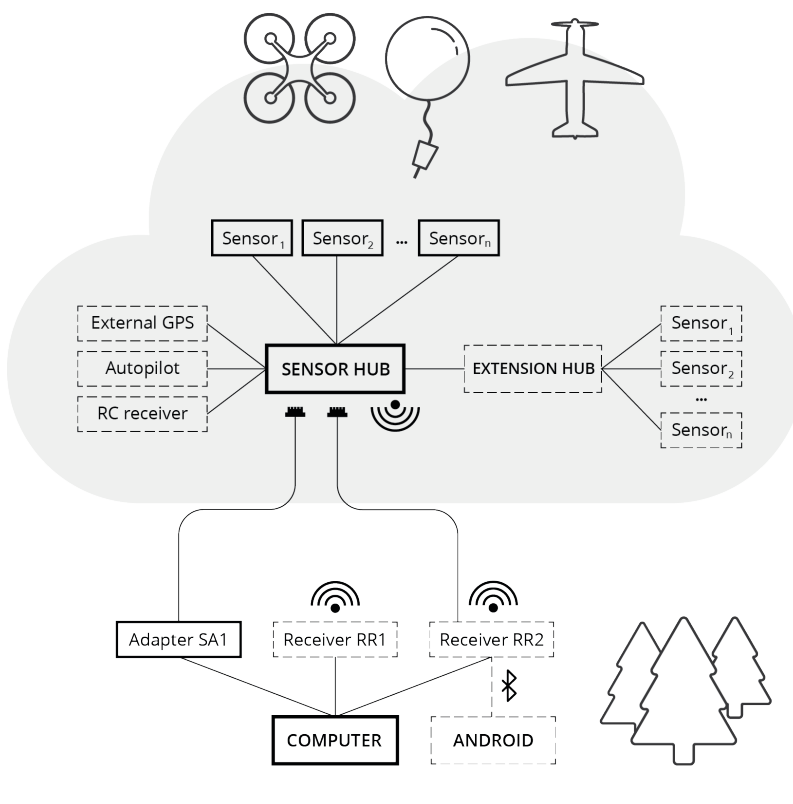


## Examples of sensors

Built in: barometer and GPS (position, ground speed, time)

- Temperature and humidity
- Fast-response temperature and humidity
- IR temperature
- Gases (CO, CO<sub>2</sub>, CH<sub>4</sub>, O<sub>3</sub>, ...)
- Particle counter
- IMU with 9 degrees of freedom

The system can accommodate a wide range of sensors which can be quickly integrated in cooperation with customers. Sensors connected to an existing autopilot can also be used.



***Please contact us to let us know your preferred sensors and features!***