

# Dropsonde

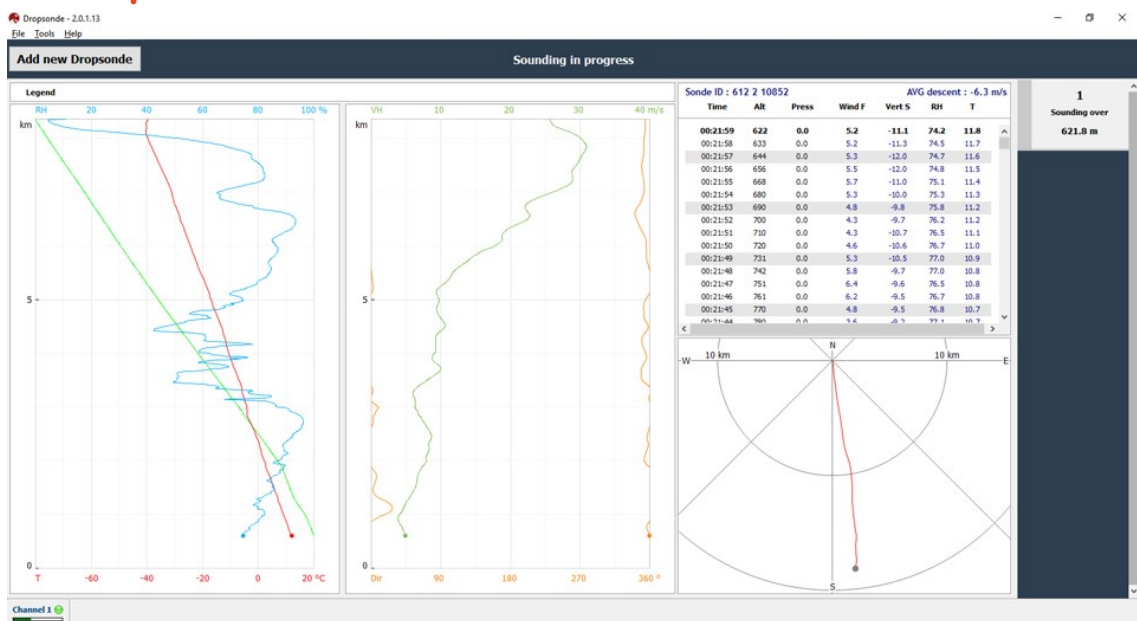


The **Dropsonde** allows atmospheric profiling from the level of the plane where it is dropped until the ground, measuring Wind + PTU on the descent. The design of the instrument ensures a high quality of measurements.

- Low weight (230 g.)
- Frequency setting through infrared communication (link)
- External on/off power switch
- Authorization to launch directly indicated on the sonde
- Largable up to 20 km altitude
- Real-time data transmission
- Receiver adapted to aeronautical constraints
- The receiver also allows the tracking of several Dropsonde
- BUFR DROP 030953



## Dropsonde software :



# Dropsonde

## Technical specifications

### GENERAL

Dimensions	: 35.9 cm in length : 6.8 cm in diameter
Weight	: 230 g (including batteries)

### TEMPERATURE

Sensor type	: Thermistor
Measurement range	: -100°C to +60°C
Resolution	: 0.01°C
Absolute accuracy	: 0.3°C
Repeatability	: 0.1°C
Reproducibility	: 0.2°C
Response time	: <1 s (1000 hPa, 20°C)
Measurement rate	: 1 Hz

### HUMIDITY

Sensor type	: Capacitive
Measurement range	: 0% to 100%
Resolution	: 0.1%
Absolute accuracy	: 3%
Repeatability	: 2%
Reproducibility	: 2%
Response time	: <2 s (1000 hPa, 20°C)
Measurement rate	: 1 Hz

### PRESSURE

Calculated from GPS altitude	
Range	: 1100 to 3 hPa
Accuracy	: 0.5 hPa at 500 hPa
Reproducibility	: 0.2 hPa at 100 hPa
Resolution	: 0.1 hPa

### BATTERIES

Technology	: 9 V alkaline
Autonomy	: 2 h
Package	: 1-battery

### WIND MEASUREMENT

General	: Differential correction
Altitude range	: 45 km
Position accuracy	: 10 m
Horizontal wind accuracy	: 0.15 m/s
Wind direction accuracy	: 1 °
Position resolution	: 0.01 m
Horizontal wind resolution	: 0.01 m/s
Wind direction resolution	: 0.1°
Measurement rate	: 1 Hz

### TRANSMITTER

Compliant with European standard ETSI EN 302054	
Frequency range	: 400 to 406 MHz
Frequency step	: 200 kHz
Frequency setting	: By infrared link
Maximum drift	: 1 kHz
Output Power	: 200 mW
Modulation type	: PSK

### CALIBRATION

Factory calibration	: Stored on Flash memory
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### OPTION

Barometer	
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