



DropSonde



Main Features

**FULLY-CODED NEW GENERATION
GPS
BETTER ACCURACY AND
INITIALISATION TIME**

**PRESSURE DERIVED FROM GPS
ALTITUDE OR/AND OPTIONAL
PRESSURE SENSOR**

**SENSORS CALIBRATION STORED
ON EEPROM**

BATTERIES LIFE > 3 HOURS

GROUND CHECK FACILITY

**NEW HIGH PERFORMANCE RE-
PROGRAMMABLE
MICROPROCESSOR**

**400 TO 406 MHZ DIGITAL
SYNTHESISER
NARROW BANDWIDTH**

**BETTER TEMPERATURE ACCURACY
THANKS TO NEW
MICROPROCESSOR (12 BIT)**

**200 KHZ STEP FREQUENCY
SETTING**

**DIGITAL TRANSMISSION IN 1 SEC
CYCLES**

**SENSOR BOOM NEW DESIGN
ALLOWS A BETTER RESPONSE
TIME AND DUCTILITY OF
HUMIDITY SENSOR**

**LOW ENERGY CONSUMPTION
POWER SUPPLY WITH ONLY 4 DRY
CELL BATTERIES**



SUMMARY OF TECHNICAL SPECIFICATIONS

GPSonde M2K2 RADIOSONDE:

GENERAL

Dimensions : L:260 mm – Ø 30mm
Weight : 350 g (including batteries)

TEMPERATURE

Sensor type : Thermistor
Measurement range : +60° to -90°
Resolution : 0.1°C
Absolute accuracy : +/- 0.5°C
Response time : <2s
Measurement rate : 1 Hz
Calibration adjustment : Calibration prior launch
Factory calibration : Stored in EPROM

PRESSURE

Range : 1050 to 3 hPa
Accuracy : ±1 hPa at Surface; ±0.1 hPa at 60 hPa
Resolution : 0.1 hPa

WIND MEASUREMENT

General : DGPS with C/A code altitude
Altitude Range : Unlimited with authorisation
Position accuracy : 10 m
Horizontal Wind accuracy : 0.15 m/s
Wind direction accuracy : 2 °
Position resolution : 0.01 m
Horizontal wind resolution : 0.01 m/s
Wind direction resolution : 0.1 °
Measurement rate : 1 Hz

BATTERIES

Technology : 1.5V Alkaline
Autonomy : >3 h
Package : 4-battery pack

HUMIDITY

Sensor type : Capacitor
Measurement range : 0% to 100%
Resolution : 1%
Absolute accuracy : +/-5%
Response time : <2s
Measurement rate : 1 Hz
Calibration adjustment : Calibration prior launch
Factory calibration : Stored in EPROM

TRANSMITTER

Frequency range : 400 to 406 MHz
Frequency step : 200 KHz
Frequency setting : Programming interface
Maximum drift : +/- 2 KHz
Output Power : 300 mW
Modulation type : Digital PSK 4800 bauds

CALIBRATION

Factory calibration : Stored on EPROM
Ground Check : Prior launch

SR2K2 GROUND STATION

GENERAL

Dimensions : Half 19'' unit - Width: 235 mm – Depth: 310 mm – Height: 132 mm
Weight : 3.5 kg
Consumption : 15 W
Output : 2 serial links (connection to PC)
Programming interface : Front panel connector with cable
GPS : 12-channel receiver
Workstation : SR2K2 can be operated from a laptop or desktop computer

TELEMETRY

Built-in receiver : 400 – 406 MHz digital Synthesizer
Tracking range : 250 Km
Modulation : PSK

