



iMet-1-RS

403 MHz GPS Research Radiosonde

Features

Flexible design with serial cable for integration with auxiliary sensors.

Open source encoding allows for use with any compatible receiver/decoder.

User programmable software with 2-way data flow.

Solid-state data storage option. Suitable for UAV integration.

Compatible with:

- En-Sci/DMT ECC type Ozone
- DMT Cryogenic Frostpoint Hygrometer
- MicroAethlometer (Black Carbon)
- Any sensor with serial communications

Product Overview

Operating Principle	GPS
Nominal Frequency	403 MHz
Slant Range	> 150 km *
Altitude	> 30 km *
Battery	Lithium Ion
Operating Time	> 3 Hours
Weight	260 Grams
Sampling Rate	1 / Second
Case	Expanded Polystyrene
Data Encoding	Bell-202

Transmitter

Tuning Options	402, 403, 404, 405 MHz
Output Power	300 mW
Transmission	2400 baud, FM
Bandwidth	20 kHz (403 MHz)
Stability	Crystal Controlled

GPS Receiver

Type	C/A code, 12 Channel
Tracking	Continuous
Update Rate	1 Hz
Initial Acquisition Time	30 sec (cold start)
Position Accuracy	10 m
Wind Velocity Accuracy	1.0 m/s
Altitude Accuracy	15 m

Meteorological Sensors

Pressure (Model RSB)

Type	Piezoresistive
Range	2 to 1070 hPa
Accuracy	0.5 hPa < 400 hPa
Resolution	< 0.01 hPa
Response Time	< 1.0 Sec

Temperature

Type	Bead Thermistor
Range	- 95 to + 50 Deg
Accuracy	0.2 Deg C
Resolution	< 0.01 Deg
Response Time	2.0 Sec (1000 hPa)

Humidity

Type	Capacitive
Range	0 to 100% RH
Accuracy	5% RH
Resolution	< 0.1% RH
Response Time	2 Sec @ 25 Deg C 60 Sec @ - 35 Deg

Specifications subject to change without notice

** Actual results depend on conditions and receiver/antenna used*



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