



iMet-miniGAS

High Performance Gas Sensor for UAV Integration

High performance sensors combined with controlled air-flow and state of the art electronics yield the most advanced system yet for gas detection and flux measurement using small UAVs

Includes one high resolution optical sensor and up to three electro-chemical sensors with in-line, pump-controlled air flow.

Standard system gas species include CO₂, H₂S, SO₂, CH₄, O₃. Gas measurement ranges and species can be customized to customer requirements



System Overview

The iMet-miniGAS is a self-contained atmospheric gas sensor package for fixed or rotary-wing UAVs. The miniGAS includes a GPS receiver, pressure, temperature and humidity sensors, 403 MHz transmitter, air pump and up to five gas sensors (4 standard), all powered by a rechargeable battery.

Telemetry and physical atmospheric parameters are based on InterMet's field-proven electronics used in thousand of radiosondes flown each year for synoptic and research profiles.

64 Gb of data can be recorded to an internal flash drive for USB download post-flight. Real-time data can be transmitted by telemetry over 403 MHz radio link

Operating Parameters

Power	Rechargeable Battery
Battery life	> 6 hours
Data Storage	64 GB Flash Memory
Real-Time Data Transfer	403 MHz
Sampling Rate	1Hz
Dimensions	28 x 13 x 12 cm
Weight	1.2 Kg
Case Composition	Fiberglass (Carbon fiber also possible)

CO₂ Sensor

Type	Infra-Red Optical
Range	0 - 2,000 PPM
Response Time	T90 (s) < 10s
Resolution	20ppm

SO₂

Type	Electro-Chemical
Range	0-200 ppm
Response Time	T90 (s) < 20s
Resolution	0.5 ppm

H₂S

Type	Electro-Chemical
Range	0-200 ppm
Response Time	T90 (s) < 35s
Resolution	0.25 ppm

CH₄

Type	TBA
Range	TBA
Response Time	TBA
Resolution	TBA

O₃

Type	TBA
Range	TBA
Response Time	TBA
Resolution	TBA

InterMet is one of the world's leading suppliers of Atmospheric Sensor & Systems for synoptic, military and research applications

InterMet offers a complete line of sounding systems and sensors to meet customer requirements and budgets. We offer flexible, cost-effective solutions - and the highest level of customer service.

*Specifications Subject to Change without Notice
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