iMet-X4

In-Situ Atmospheric Measurements for UAS Deployment

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A fully-integrated sensor solution for atmospheric boundary layer studies

- **Radiosonde-quality GPS receiver and pressure sensor mounted internally**

- **Met Configuration includes dual temperature and humidity sensors to reduce placement effects**

- **Two additional sensor ports offer flexibility for measurements beyond PTU**

- **Onboard data storage plus real-time radio transmission and data viewing**

- **High-capacity internal battery supports prolonged operations and compatibility with high power sensors**

- **PC compatible iMet-XS Software manages hardware configuration and data outputs**

Overview

The iMet-X4 is the next generation of InterMet's X family of UAS-deployed sensors. The X4 Hub handles power and data management for the internal GPS and pressure sensors, plus up to 6 external sensors.

Features

Dimensions	140 x 55 x 28 mm
Weight	160 g
Power	2,000 mAh Internal Battery
Battery Life	13 Hours (Met Configuration)
Charging	USB
Onboard Memory	Removable microSD card (16 GB)
Pressure Range	1200 hPa – 10 hPa
Temperature Range	0 to 40°C
Humidity Range	0 – 95%
Data Rate	1 – 5 Hz

Available Sensor Ports:

I2C	2 (Humidity)
UART TTL	2
InterMet Analog	2 (Air Temperature)

See the iMet-X4 manual for complete device specifications

GPS Receiver

Manufacturer / Type	U-Blox CAM-M8
Vertical Accuracy	12 m
Acquisition Time	< 60 seconds (typical)

Pressure Sensor

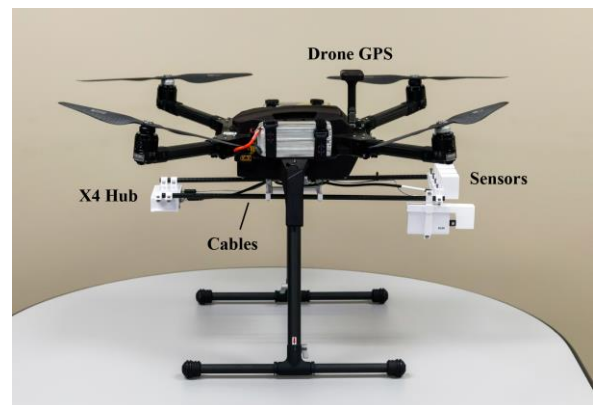|	
Manufacturer	Measurement Specialties
Type	Piezoresistive
Measurement Range	1200 hPa – 10 hPa
Resolution	0.02 hPa
Response Time	8.22 milliseconds
Accuracy	+/- 1.5 hPa

Temperature Sensor

Manufacturer / Type	Shibaura Glass Thermistor
Measurement Range	- 90 to + 50°C
Resolution	0.01°C
Response Time	1 sec @ 5 m/s flow
Accuracy	+/- 0.3°C

Humidity Sensor

Manufacturer / Type	IST Capacitive Polymer
Measurement Range	0 to 100% RH
Resolution	0.1% RH
Response Time	@ 25°C, 0.6s
	@ 5°C, 5.2s
	@ -10°C, 10.9s
Accuracy	+/- 5% RH

International Met Systems is one of the world's leading suppliers of Atmospheric Sensors for synoptic, military and research applications. InterMet has been providing atmospheric sensors for UAS/UAV deployment since 2015.

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 in the industry.

Deployment Example on Inspired Flight IF750

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