Aventech Research Inc.

AIMMS-30
Aircraft Integrated Meteorological Measurement System

▷ Accurate measurement of temperature, humidity, three-dimensional winds and turbulence on-board the aircraft at spray release height.

Optimize Spray Deposition

Minimize Off-Target Drift

Document Meteorological Conditions to Prove Due Diligence during Application

▷ Third generation wind measurement technology.

▷ Smaller, lighter and lower cost than previous second generation AIMMS-20 system.

▷ AIMMS-30 system components include:

Air Data Probe (ADP)
Integrated Inertial / GPS Carrier Phase / Central Processing Module

▷ Data available in real-time via serial broadcast, which can be utilized by GPS navigation systems for use in real-time spray drift models, or stored to an integrated USB FLASH memory drive for post-flight analysis.

▷ Compatible with most major GPS navigation systems including:

ADAPCO Wingman GX
AGNAV Guia
TracMap
AgJunction SATLOC G4

▷ Stand-alone operation capability with optional display module running Aventech MetTrack firmware.

▷ Future MetTrack firmware versions to include spray drift modelling.

Aventech Research Inc.

110 Anne Street South, Unit 23
Barrie, Ontario, Canada L4N 2E3
Tel: **(705) 722-4288**
Toll: **(705) 235-7766**
Fax: **(705) 722-9077**
Web: **www.aventech.com**
E-mail: **info@aventech.com**

TECHNICAL SPECIFICATIONS

WIND SPEED ACCURACY:

Wind Components: (North, East, Vertical)	0.50 m/s (1.0 knot) @ 150 knots TAS

TEMPERATURE:

Accuracy / Resolution:	0.30 Celsius / 0.01 Celsius

RELATIVE HUMIDITY:

Accuracy / Resolution:	2.0 %RH / 0.05 %RH

ELECTRICAL:

Operating Voltage:	9.0 to 36.0 VDC Input
Power:	4.2 Watts
Maximum Operating Current:	350 mA @ 12 VDC
	150 mA @ 28 VDC
Digital Interfaces:	Controller Area Network (CAN2A), 500 kps
	RS-232 Serial Ports (default 19.2 / 38.4 kbps)

ENVIRONMENTAL:

Operating Temperature:	-40 Celsius to 50 Celsius
Storage Temperature:	-40 Celsius to 90 Celsius

PHYSICAL:

Dimensions:

Air Data Probe (ADP):	12.5" L X 0.75" dia. boom, 5.0" pylon
	(31.8cm L X 1.9cm dia. boom, 12.7cm pylon)
Central Processing Module (CPM):	5.000" X 4.000" X 2.125"
	(12.7cm X 10.2cm X 5.40cm)

Weights:

Air Data Probe (ADP):	1.39 lb	630 g
Central Processing Module (CPM):	1.00 lb	455 g

Optional 3.5" Sunlight Readable, Colour, Touch Screen Display Module

Display:	3.5" Transreflective Colour TFT LCD Display
	320 X 240 resolution
	64 K Colours
	80 Nit LED Backlight for Night Viewing
Operating System:	MetTrack Firmware v1.0
Dimensions (WxHxD):	5.125" X 4.000" X 1.125" (13.0cm X 10.2cm X 2.86cm)
Weight:	0.75 lb. 340 g