

World's Smallest Remote Air Flow Sensor!
UAS2000 – Micro Profile Sensor

**UAS2000
Series**

PRELIMINARY DATASHEET

Features

- *The UAS2000 measures air velocity and airflow temperature simultaneously*
- *Measure flow in tight locations previously not feasible.*
- *Sensors connect to the ATM2400 data hub*
- *Easy to use – just plug in and start measuring*
- *Validate thermal and airflow models quickly and accurately*
- *Small sensors to reach distant and compact locations*
- *Accuracy to $\pm 10\%$ of reading at 25°C, 20% of reading full velocity range at 15-60°C*



About the UAS1000 μ Series

DegreeC 's Cambridge AccuSense UAS2000 Series is an air velocity and air temperature sensor used with the ATM2400 Measurement System. Developed to meet the thermal profiling needs of ever shrinking electronics systems, accurate measurements can now be made in areas previously considered too small.

With a range from 0.50 m/s to 10 m/s (99-1960 fpm), the UAS2000 offers such features as unimpaired access to tight locations, improved measurement accuracy with $\pm 10\%$ of reading within the range of 200 to 1960 fpm at 25°C, or 20% over the full velocity and temperature range, and full probe interchangeability.

The unique omni directional micro sensor head, remotely located on a 3 meter cable, allows access in distant and compact locations such as between semiconductor devices, heat sinks, and inside ducts and plenums. This extremely small head causes minimal distortion of the true airflow picture, and air velocity and airflow temperature measurements are obtained at the same time.

The UAS2000 Series sensors are also fully interchangeable with one another, as each sensor has its own on-line circuitry normalizing the performance of each sensor.

Simultaneous use of up to 36 UAS sensors with the ATM2400 data hub allows the user to have a snapshot of the airflow environment at any given time. For surface temperature measurement, please refer to the UTS1000 Thermocouple Sensors datasheet. For humidity measurements please refer to the UHS1000 datasheet. The UAS1000 series, UAS2000, UTS1000 and UHS1000 can be used simultaneously with the ATM2400 data hub to obtain airflow, air temperature, humidity and surface temperature in one instrument. Choose the size of the UAS sensor that best fits your requirements.

UAS Series Airflow & Temperature Measurement

Standard medium is air at standard pressure (101.3 kPa, 29.95" Hg). For use with other gases, please contact Degree Controls. Altitude compensation is available in AccuTrac software

UAS2000 0.50–10.0 m/s (99-1960 fpm)

Air Velocity Accuracies

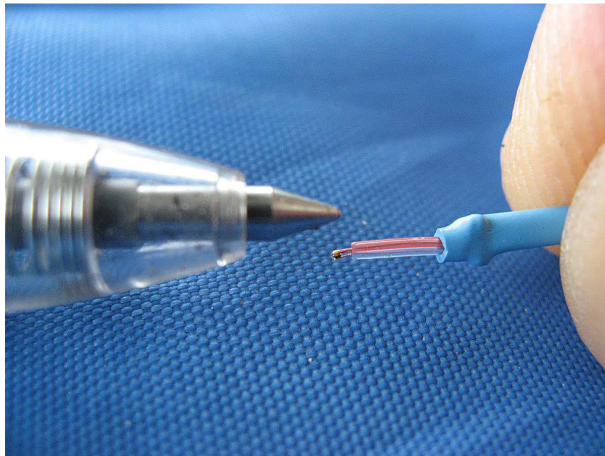
±10% of reading from 200–1960 fpm at 25 °C
±20% of reading over full velocity and temperature range
Repeatability: ±5% under same conditions

Airflow Temperature Accuracies

0-60°C ±3°C
Repeatability is ±5% under same conditions

UAS2000 Series General Specifications

| | |
|------------------------------------|------------------------------|
| Operating temperature | 15°C to 60°C |
| Storage temperature | -40°C to 80°C |
| Relative humidity (non-condensing) | 5-95% |
| Warm-up time after power up | Less than 5 seconds |
| Supply voltage | Supplied by ATM2400 data hub |



Standard cable length is 3 meters from connector to sensor head

Sensor USB Connector
100 mm long X 17 mm wide X 8 mm thick

Part Number Format

UASXXXX

2000 0.50 – 10.0 m/s

ATM2400, UAS1000, UHS1000 & UTS1000 sold separately.

Specifications subject to change without notice