degreeC™

DEGREE CONTROLS,INC.

Your Partner for Airflow Sensing & Controls

UAS1000

Features

- UAS1000 measures air velocity & airflow temperature simultaneously
- Sensors connect to the °C Port data acquisition instruments
- Easy to use – just plug in & start measuring
- Validate thermal and airflow models quickly & accurately
- Small sensors to reach distant & compact locations
- Fully interchangeable with one another
- 7 sensor head options

Overview

The UAS1000 Series is an air velocity and air temperature sensor used with the °C Port3600/ °C Port1200 Measurement Systems.

With a variety of sensor ranges from 0.15 m/s to 20 m/s (30-4000 fpm), the UAS1000 Series offers such features as unimpaired access to tight locations, improved measurement accuracy, ease of installation, multipoint measurement, rugged construction, and probe interchangeability.

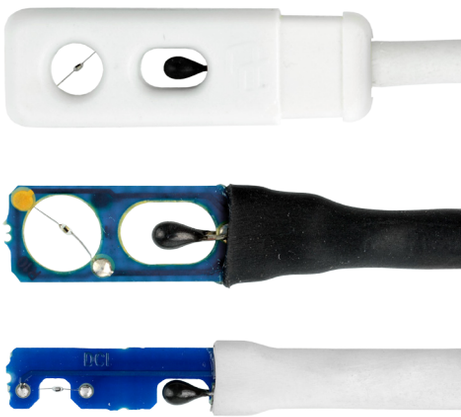
The UAS1000 offers three unique sensor head styles, remotely located on a 5 meter shielded cable, to provide access in distant and compact locations such as between semiconductor devices, heat sinks, and inside ducts and plenums. These small heads cause minimal distortion of the true airflow profile, and air velocity and airflow temperature measurements are obtained at the same time. The UAS1000 Series sensors are also fully interchangeable with one another, since each sensor has its own on-line circuitry normalizing the performance of each sensor.

Simultaneous use of up to 36 UAS sensors with the °C Port3600/ °C Port1200 data acquisition systems allows the user to have a snapshot of the airflow environment at any given time. Multiple °C Port3600's/°C Port1200's can be connected together to obtain up to 100 data points.

For surface temperature measurement, please refer to the UTS1000 Thermocouple Sensor datasheet.

Humidity sensing is available with the UHS1000. UAS1000, UTS1000, and the UHS1000, can be used simultaneously with the °C Port3600/°C Port1200 to obtain airflow, air & surface temperature, and humidity in one instrument.

°C Port3600 Data Acquisition Instrument for USB Sensors



Additional Sensor Head options for UAS1000.
Order from top to bottom: *Plastic Cap (PC), Low Profile (LP), & Extra Small (XS)*

Degree Controls, Inc.

is an ISO-9001 certified, world-class designer and manufacturer of airflow sensing, monitoring, and control solutions. With over 20 years of proven experience, we pride ourselves on delivering solutions which provide the value, differentiation, and service required by our customers, to meet the rapidly changing competitive landscape that they face.

Degree Controls, Inc.
18 Meadowbrook Dr.
Milford, NH 03055

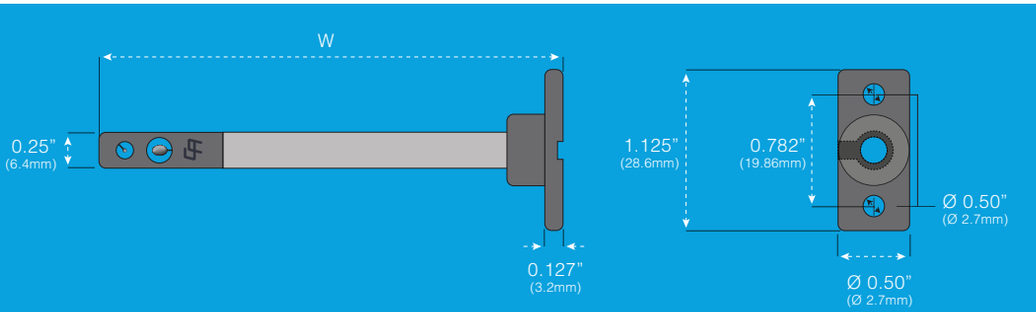
603.672.8900 or 1.877.334.7332
sales@degreeC.com
www.degreeC.com

NOVA INSTRUMENTS

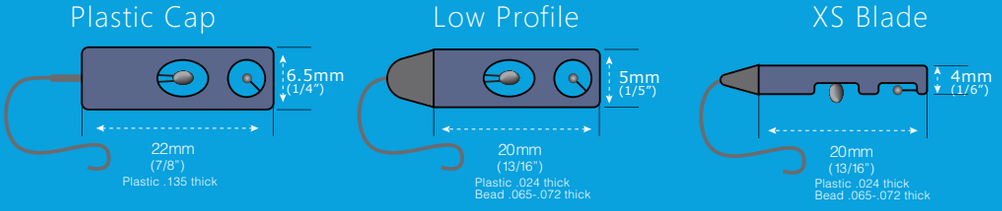
Specifications

Operating Temperature	0°C to 70°C
Storage Temperature	-40°C to 85°C
Relative Humidity (non-condensing)	5-95%
Warm Up Time After Power Up	Less than 5 seconds
Supply Voltage	Supplied by USB or °C Port Instrument

Sensor Wand Specifications



Sensor Head Options



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

Standard cable length is 5 meters shielded from connector to sensor.

Airflow & Temperature Measurement

Air Velocity

Temperature Compensation Range: 0-70°C (32-158°F)
Accuracy (the greater of): ±1% of FS or ±0.025m/s (5fpm) or ±5% of reading
Repeatability (the greater of): 1% or ±0.01m/s (2fpm)

Temperature

Measurement Range: 0-70°C (32-158°F)
Measurement Accuracy[1]: ±1°C (1.8°F)
Resolution: ±0.1°C

Temperature Compensation Range: The UAS-1000 is a thermal airflow sensor; it is sensitive to changes in air density and indicates velocity with reference to a set of standard conditions 25°C (77°F), 760mmHg (101.325kPa), and 0%RH. The UAS-1000 has been designed so that when used over the stated temperature compensation range, the sensor indicates very close to actual air velocity and minimal compensation is only required to account for changes in barometric pressure or altitude.

Accuracy: Valid between 15-35°C (60-95°F), increasing by ±0.25% per degree and ±0.005m/s (1fpm) over remaining temperature compensation range.

[1]Above 0.5m/s (100fpm), ±1.5°C (2.7°F) below 0.5m/s (100fpm).

Part Number Format

UASXXXXXX

1100	0.15 – 1.00 m/s (30 – 200 fpm)	Plastic Cap (PC)		W1	1.25" Wand Head
1200	0.50 – 5.0 m/s (100 – 1000 fpm)	Low Profile (LP)		W3	3" Wand Head
1300	4.50 – 20.0 m/s (900 - 4000 fpm)	Extra Small Blade (XS)		W5	5" Wand Head
1500	0.15 – 20.0 m/s (30 - 4000 fpm)			W7	7" Wand Head