

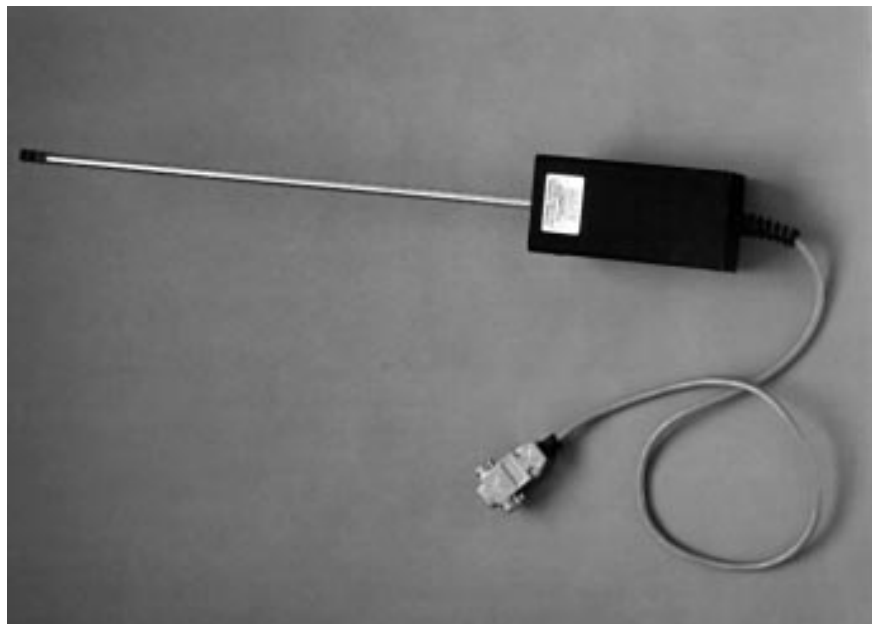
AVS Series

Air Velocity Sensors

Universal Series

Features

- Measures airflow directly
- Linear output
- Ultra-sensitive to low velocity
- Rugged
- Cost-effective
- Bi-directional option available
- Easy to use
- Choice of outputs, including
 - 0-10V, 4-20mA
- CE approved



The new AVS Universal Series by Cambridge AccuSense, Inc. are thermistor-based transducers specially designed to obtain direct measurements of ultra-low air velocities, covering a range that starts as low as 0-100 fpm full scale (0-.5m/s), and reaching up to 0-1000 fpm (0-5 m/s); the output is linear with velocity.

With a standard response time of approximately 100 milliseconds, these new transducers feature accuracy of $\pm 3\%$ of full scale at room temperature, and eliminate the need to convert differential pressure readings in order to obtain an equivalent airflow measurement.

Individually calibrated in Cambridge AccuSense's NIST traceable wind tunnels, the rugged AVS Universal

Series is also offered in a bi-directional version that provides a positive or negative reading, depending on the direction of the airflow. The large thermistor signal ensures little drift, improved stability and better sensitivity at low velocities than traditional measurement methods. The unit is powered by 12-24VDC; output choices include 0-10V or 4-20 mA.

Applications for this new technology include monitoring airflow at HEPA filters to control fans and blowers, and to monitor critical processes in cleanrooms such as mini-environments. Additional uses include measuring airflow in fumehoods, biosafety cabinets, wind tunnels, and HVAC duct work. The AVS Universal Series provides a cost-effective and efficient alternative to traditional methods.

Specifications

Model	Minimum	Nominal	Maximum
12D	10		16 VDC
24D	12		24 VDC
Supply Current		50 mA	
Operating Temperature		-10° to 70°C	
Storage Temperature		-40° to 100°C	
Accuracy from 15° to 35°C above 30 fpm		$\pm 5\%$ of full scale	
		$\pm 3\%$ of full scale at 21°C	
Accuracy below 30 fpm		± 10 fpm	
Repeatability at 21°C		$\pm 1\%$ full scale	
Response Time		100 ms standard	
Output Resolution		256 steps	
Warm-Up Time		3 minutes maximum	
Current Loop Load		0-200 ohms	
Humidity (non-condensing)		10% to 90% RH	
Cable		Shielded cable; 24 inches long	
DB9 Connector Configuration		1=Supply 2=Output 6=Return (grd)	
Case		Black Anodized Aluminum	
Weight		1 lb. maximum	