

# **APPLICATIONS ABSTRACT**

### Unique challenges. Quality solutions.

Our high-temperature probes operate exactly like our standard probes, with the same accuracy, range of incidence angles, and frequency response, but are made to operate in extremely hightemperature environments.

To suit the needs and budgets of different customers, we offer three different types of these probes. The most cost-effective model we offer is a steel probe which can withstand up to 600°C. We also offer a probe constructed of a nickel-based superalloy, which is capable of sustaining up to 900°C. None of these probes require cooling of any sort. Our high-temperature probes can be manufactured in the same geometries and sizes as our standard probes.

**Engineering Flow-Measurement Solutions** 

sales@aeroprobe.com 200 Technology Drive

+1 (540) 443 - 9215 Aeroprobe Corporation www.aeroprobe.com Christiansburg, VA 24073 **United States** 

#### **INNOVATIVE TECHNOLOGY**

Our high-temperature probes are currently used to map the flow in the hot exhaust of a jet engine. The probes can also be used in the exhaust manifolds of automobiles or to study the turbine side of a turbocharger.







#### CAPABILITIES

Tip diameters as small as 1.6mm

Temperature Ratings to 900°C

Average Measured Angular Deviation of  $<1^{\circ}$ 

Probe Calibrations from 5 m/s to Mach 2.0

Average Measured Velocity Deviation of  $\pm 1\%$  or  $\pm 1$  m/s (whichever is larger) \*\*

\*\* Reported probe calibration accuracies are based on the measured error values for a comprehensive set of test points collected in Aeroprobe's wind tunnel facilities. Flow environments exist where expected errors could be larger. Contact Aeroprobe for more information.



## **ABOUT AEROPROBE**



#### **CONTACT AEROPROBE**

+1 540 - 443 - 9215 x4223 sales@aeroprobe.com www.aeroprobe.com Aeroprobe provides air data measurement systems to aerospace, automotive, turbomachinery, wind turbine, and wind tunnel testing industries around the world. Aeroprobe's air data systems for unmanned aircraft provide real time air speed, angle of attack and angle of sideslip for improved flight performance. Turnkey systems include instrumentation for measurement, hardware for data collection, and software for data reduction, analysis and visualization. High temperature probes operate in flows up to 1200°C. Omniprobes, featuring a 300° flow angle range, are capable of measuring reversed flow. Fast response probes provide a frequency response exceeding 4 KHz. Rake configurations allow for simultaneous multi-point, unsteady measurements. The company conducts international business through a network of over 20 distributors.