Air Data Systems
Customized Solutions
and Proven Capability.


www.harcolabs.com
IT’S ABOUT OUR COMMITMENT... TO YOU.
MORE THAN A VENDOR: A PARTNER

HARCO’s total commitment to our customers starts with defining and tailoring the initial requirement and continues on throughout the design, fabrication and post production phases. Working with customers in a team environment enables HARCO to provide products that continually set the standard for innovation, reliability and quality.

HARCO customer support extends well beyond final delivery, encompassing an array of services, including:

- Technical assistance and consultations
- Spare parts provisioning
- Warranty support

Pitot Probes

HARCO offers fully integrated, state of the art, customized solutions through Pitot, Intelligent probes and AOA probes, to help you design and develop the air data system that meets your configuration and performance needs. HARCO has tested its Pitot probes in an icing wind tunnel to prove compliance with the TSO-C16a and BS2G. Applications include UAV’s, general aviation, space vehicles and helicopters.

- Patented SIMx™ heaters extend operational lifetime
- Fully Integrated, eliminating the need for pneumatic connections and additional computers
- Overheat protection function designed for use on composite vehicles
- Hydrophobic coatings enhance performance in icing conditions
- Use of lightweight materials
- Aerodynamically compensated for high accuracy
- TAT/OAT Interface
- Configured as RS485 or ARINC 429
Air Data Computers

HARCO’s air data computers compute a variety of key functions, outputs and specifications include:

- Pressure Altitude
- Baro-corrected Altitude
- Static Pressure
- Calibrated Airspeed
- Impact Pressure
- Accuracy AS8002
  (RVSM option is available)

- Mach Number
- OAT (if connected)
- Total Air Temperature
- Static Air Temperature
- Maintenance Word
- Communication Protocol
  RS485 or ARINC 429
  (two independent channels)

Our design and engineering capability means any air data function can be added to meet your requirements. In some unique applications, equivalent airspeed is calculated instead of calibrated airspeed. HARCO will work with you and your team to determine the exact computer specifications for your application. Applications include UAV’s, military and general aviation, space vehicles and helicopters.

Static Ports

Use of our Dual-Heated Static Ports reduces the number of components required on the aircraft to meet RVSM requirements. They provide a Dual Cross-Connected Static Source which provides a cost effective, lightweight solution with built in redundancy. The Dual Static Ports utilize an innovative application of solid state electronics to deliver heat for de-icing surfaces and extend the reliability and operational lifetime of the unit. Applications include UAV’s, military and general aviation, and space vehicles.

Outside Air Temperature Sensors

Ideally suited for general aviation, business jets and helicopters HARCO’s, OAT Sensors are designed and fabricated to stringent standards utilizing integrated 3D modeling, comprehensive in-house aerodynamic test and evaluation facilities, and specialized manufacturing processes that include customized fine wire winding of sensing elements. OAT sensors are a cost effective replacement for Total Air Temperature (TAT) sensors.

Features & Benefits

- High Accuracy
- Excellent Stability
- Low Maintenance
- High Reliability
- Rugged Construction

Total Air Temperature Sensors

HARCO is one of few proven manufacturers of Total Air Temperature (TAT) technology sensors, which enable the computation of static air temperature and true airspeed. Our sensors are currently being used on U.S. military aircraft, flight test booms, as well as numerous derivative models. We can customize features such as the mounting flange and connector, depending on your specific application.
HARCO: An international award-winning designer and manufacturer.

We are committed to working with your team as a trusted partner, whether your needs are for an entire air data system or air data sensors to complement your system. Our superior construction ensures excellent performance and quality in applications around the world.

About Us
Since 1951, HARCO has been combining practical experience with technical ability and advanced manufacturing techniques in the design and fabrication of temperature sensors, thermocouple systems, interconnect cable-harness assemblies, air data computers, probes and sensors for the aerospace industry.

We recognize the ongoing need to be vigilant about cost control, while continuing to adhere to the highest standards of quality, reliability and customer service.

Going Above and Beyond
Our design and development strategy always focuses on a combination of performance, quality and cost. For example, the same sensors can be utilized in pressurized and non-pressurized cabin areas using mounting hardware that eliminates the OEM’s need to supply additional hardware. 3D designs are matched to the OEM’s aircraft skin to achieve aerodynamic performance and accuracy, essential to RVSM certification. HARCO’s air data sensors are designed specifically to meet the performance, weight and cost requirements of the aviation market. Proprietary and patented technologies, materials and designs are employed to meet those requirements.

Our Vision and Our Mission
Our Vision is to consistently exceed the expectations of our customers, employees and shareholders through our commitment to excellence. Our Mission is to provide our customers with innovative solutions and quality products, delivered on time.

HARCO’s In-House Capabilities Include:

- Nadcap Accredited Brazing
- Wind Tunnel Testing and Calibration
- Automated Heater Calibration
- Electronic Assembly and Testing
- Fabrication
- J-Std Soldering
- Temperature Stress Screening
- Vibration Stress Screening
- Nadcap Accredited Welding
- Full Range of Temperature Calibration Chambers
- Automated Fine Winding for Heaters and RTD Elements
- Proprietary Forming Techniques for Joining Dissimilar Metallic Components

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