

# High Performance Pressure Sensors for Air Data Systems



- High accuracy performance
- Superior repeatability and stability
- Fast millisecond response
- Insensitive to density or ionic media
- Monocrystalline hysteresis-free measuring structure
- Core products are packaged to unique applications

Pressure sensors for air data systems require high performance and exceptional accuracy to meet reduced vertical separation minimum (RSVM) requirements. Crane meets the need with a pressure sensor technology that can be configured as primary grade pressure sensors ideal for sensing altitude and airspeed.

Crane pressure sensors utilize Silicon-On-Sapphire sensing technology for superior accuracy, reliability and stability. An integral temperature sensor located directly on the pressure diaphragm provides for optimum temperature compensation. Smaller in size than traditional mechanical resonance-type sensors, Crane pressure sensors require less power while providing better thermal transient response. Superior repeatability and stability provide exceptional accuracy to within 0.01% of full scale using digital compensation.

## The Crane Advantage

With over 50 years of experience in providing rugged and reliable aircraft sensors and electronic systems, you can trust Crane for your high-performance pressure requirements. Crane understands the demands of the severe environment in which this equipment is installed. Reflecting a commitment to quality management, Crane is ISO 9001, AS9000 and TickIT certified.

## Your Needs

Crane high performance pressure sensors feature a modular design which can be packaged to meet your individual interface and connection requirements. Crane is experienced at combining high-reliability electronics with the pressure sensor to provide flexible outputs. Let us help you design a pressure sensor solution for your air data system application.



# High Performance Pressure Sensors for Air Data Systems

## Applications

- Air Data Computers
- Altimeters
- Air Speed Indicators
- Altitude Compensating Systems
- Multifunction Probes
- Rotocraft or fixed wing

## General Characteristics

**Range:** Absolute

**Operating Pressure:** 15 psia; 1 Bar; 110 in Hg  
or as specified

**Media:** Air

**Safety:** Proof = 1.5 X full scale psi  
Burst = 2 X full scale psi

**Accuracy:** to 0.01% full scale or as specified

**Response time:** to 5 msec for digital sensor

## Environmental Characteristics

**Standard Temperature:** -45° C to +71° C

**Extended Temperature:** up to -55° C to +85° C

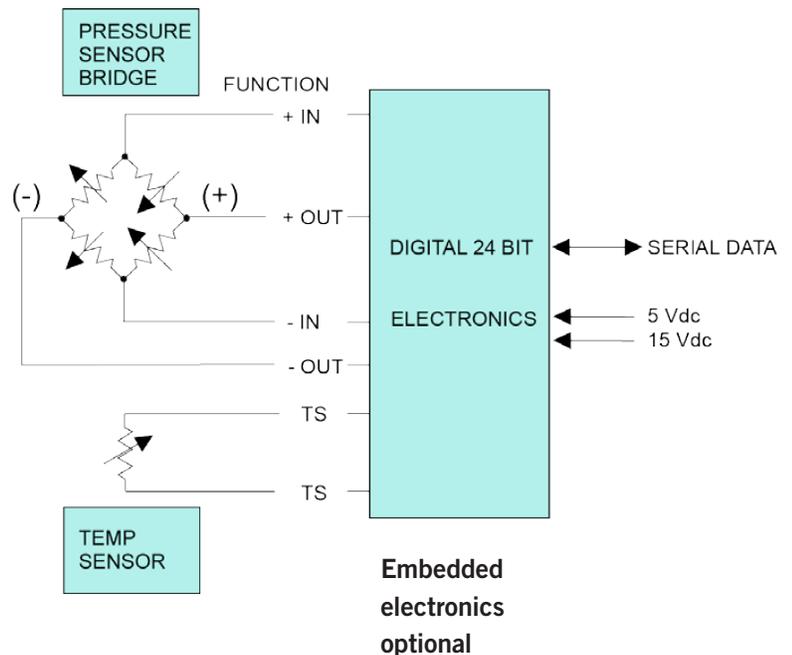
**Vibration:** Typical 20g;10-2000 Hz

**Shock:** 20 g peak, 11 msec

**Storage:** No limited life materials used

## Physical characteristics

- Rugged packaging
- Pressure fittings as required
- Digital data output
- Lightweight
- Industry standard pinout (9-759 family)



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