AIR DATA
COMPUTER (ADC)

Air Data's line of ADC are designed to measure and compute navigation parameters in transport aircraft, high speed military trainers, helicopters and unmanned vehicles (UAV). Parameters such as pressure altitude, baro-corrected altitude, altitude rate of change, computed and true airspeeds, Mach number and static air temperature are computed. A comprehensive built-in test (BIT) function that provides high-reliability fault detection and isolation capability is also one of their features. The unit packaging is extremely robust and provides standard pitot and static tubing interface.

Features

- Easily tailored to any flight application
- Very high accuracy, ± 5 feet typical at sea level
- Long term stability
- Interface to most OAT or TAT probes
- Powerful CPU with expansion capability
- Severe indirect lightning protection and 150 V/m HIRF
- Optional auxiliary DC output and discrete I/O's
- Many models already TSO certified

Air Data Computer

Communication Protocol and Data

Using two high quality pressure transducers, our line of ADC provide high precision flight data for any aircraft.

The pressure transducers are of the vibrating cylinder type and are extremely accurate and stable.

The ADC calculations are computed by software running on a powerful embedded CPU, which can easily be tailored to suit specific needs.

All the navigation parameters and data are output at a high rate on an ARINC-429 high-speed bus or optional MIL-STD-1553 interface.

Air Data's ADC meets or exceeds the requirements of the FAA TSO C106 for RVSM applications.

GENERAL SPECIFICATIONS*

Operating Voltage	28 VDC (16 to 32 VDC per MIL-STD-704A), < 10 Watts
Nominal Weight	1.4 kg
Finish	Black paint, FED-STD-595B #37038 over chemical-film MIL-C-5541, class 3
Mating Connector	J1 connector to mate with D38999/26WD35SN
Ports	Pitot port as PER AS4395-4 (MS33656-4) Static port as PER AS4395-6 (MS33656-6)
Input/Output	ARINC 429 high-speed (100 kb/s); MIL-STD-1553 optional
Hardware Qualifications	RTCA/DO-160D, MIL-461, MIL-810
Software Qualifications	RTCA/DO-178B level B. Firmware compliant to RTCA/DO-254
Operating Temperature	−40ºC to +70ºC
Storage Temperature	−55ºC to +85ºC
Reliability	MTBF 40,000 hours at 30ºC ambient, airborne inhabited cargo

*Specifications subject to change without notice. Some details may vary with model number.

Outline Drawing

AIR DATA