



GENESYS NanoADC

AIR DATA COMPUTER

FOR MANNED AND UNMANNED PLATFORMS

The Genesys Aerosystems' NanoADC Air Data Computer is a highly compact, lightweight, DAL-A device for use in demanding environments where cost, size, weight, robustness, and reliability are critical. NanoADC is ideal for manned and unmanned aircraft including fixed-wing and helicopter platforms.

The NanoADC senses pitot and static pressures to provide air data (Pressure Altitude, Airspeed, Vertical Speed, and Outside Air Temperature) to other avionics.

Features of the NanoADC include:

- Reliable. DO-178B, Level A software
- Exportable. Non-ITAR controlled (7A994)
- Lightweight. <1lb including OAT probe
- Rugged. Meets RTCA/DO-160F and MIL-STD environmental standards
- Compact. 3.25" x 3.75" x 2.049" (NanoADC)

ULTRA COMPACT ADC MEETING HIGH-PERFORMANCE REQUIREMENTS

NanoADC SPECIFICATION

MTBF: >23,000 hrs. (MIL-HDBK 217 Electrical Stress, AUC, 100% Duty Cycle, 35 deg C)

COM Ports:

RS232

RS422

ARINC-429 (high speed, labels 203, 206, 210, 211, & 212)

ARINC-429 (low speed, labels 203, 206, 210, 211, 212 & 377)

Input Voltage: Nominal 14 to 28V, dual bus

Maximum Input Voltage: Spikes to 80V

Minimum Input Voltage: Down to 10V for 30 seconds

Power Consumption: 20W at 28VDC

Temperature Range: -55°C to +70°C

Pressure Altitude Range: -1,000 MSL to FL550

Altitude Resolution: <1 ft

Altitude Accuracy: Meets or exceeds TSO-C106

Airspeed Range: 20 to 550 KIAS

Airspeed Resolution: 0.01 KIAS

Airspeed Accuracy: +- 10KIAS below 50 KIAS, Meets or exceeds TSO-C106 from 50 - 450 KIAS, +- 5 KIAS above 450 KIAS

Vertical Speed Range: +-32,768 ft/min

Vertical Speed Resolution: 1 ft/min

Vertical Speed Accuracy: 5% or 30 ft/min whichever is greater

OAT Calibration Range: -70°C to +100°C

OAT Resolution: 0.1°C

OAT Accuracy: ±1.5°C from -70°C to +70°C (per TSO-C106) ±2.5°C from +70°C to +100°C

DO-160F Qualification: [(F2)A2]B,B,B[H+R+S+U]XRXSFSZBAZ[ZC][WK]H[A3J33, A4J44]XXAC

Certification: RTCA/DO-178B, Level A

OAT PROBE SPECIFICATIONS

1,000 Ohm RTD (cabling: 20/24 gauge wire to 40/22 gauge wire)

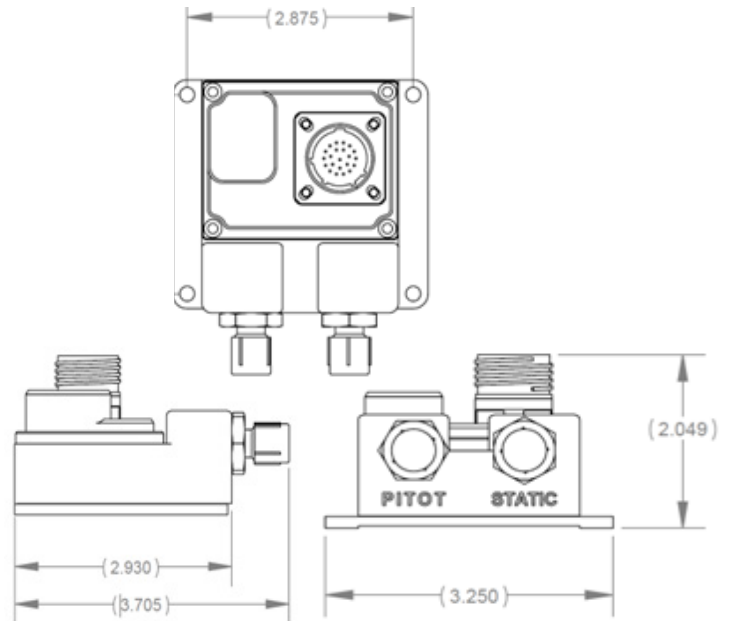
Size: 2.0"H x 2.5"W x 3.9"D (ADAHRS, excluding connectors and mounting flange)

Weight: ADC: 304g (0.67 lbs)
OAT Probe: 59g (0.13 lbs)

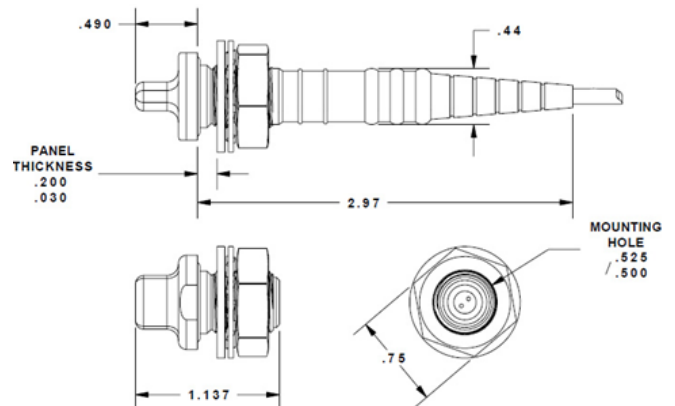
Enclosure: Machined 6061-T6 aluminum

Finish: Black anodized

NanoADC



OAT Probe



+1.817.215.7600
Genesys-Aerosystems.com

