AIR DATA DISPLAY

AD32 RVSM

OVERVIEW

✔ INTEGRATED DESIGN

Digital air data computer incorporated into electronic encoding CDP altimeter with altitude alerter.

✔ COMPLIANCE WITH HIGHEST CERTIFICATION STANDARDS

TSO-C106 (air data computer) / TSO-C10b (altimeter) / TSO-C88a (altitude encoder) / DO-160D / DO-178B Level A.

✔ EASY INSTALLATION

Several case design options (ARINC408, 3 ATI), rugged design, variety of pneumatic adapters and installation kits.

✔ PERFECT AVIONICS SYSTEM INTEGRATION

Extensive computation of flight relevant data provided per configurable ARINC429 and analogue in-/outputs.

✔ INTEGRATION INTO COCKPIT LIGHTING SCHEME:

5V or 28V, white/red/NVIS green, customizable dimming curve.

✔ HIGHEST ACCURACY

Optionally RVSM compliant, max scale error below FL200: 10ft (3m).

✔ SUPPORTING SPECIAL OPERATIONS

Baro setting 700 – 1050mbar, Baro push-to-reset, configurable altitude alerter, optionally NVIS compliant.

✔ MINIMUM TOTAL COST OF OWNERSHIP

No re-calibration required, 21'000 hrs MTBF.

ARINC 429 PARAMETERS

* ☐/○ ☐ Output
○ ARINC429 accuracy met

Label 203	Pressure Altitude (1013.25 mbar)	- 1,000	to	+53,000	feet
Label 204/220	Baro Corrected Altitude #1 / #2	- 1,000	to	+53,000	feet
Label 212	Vertical Speed	0	to	20,000	ft/min.
Label 353	Indicated Airspeed IAS	0/40*	to	450	knots
Label 206	Computed Airspeed CAS	0/40*	to	450	knots
Label 210	True Airspeed TAS	0/100*	to	599	knots
Label 207	Max. Allowable Airspeed VMO	150	to	450	knots
Label 205	MACH Number	0/0.200*	to	0.999	MACH
Label 211	Total Air Temperature	-60	to	+99	°C
Label 213	Static Air Temperature SAT	-99	to	+60	°C
Label 235/237	Baro Setting #1 / #2	20.67	to	31.00	inHg
Label 234/236	Baro Setting #1 / #2	700	to	1,050	mbar

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AIR DATA DISPLAY
AD32 RVSM

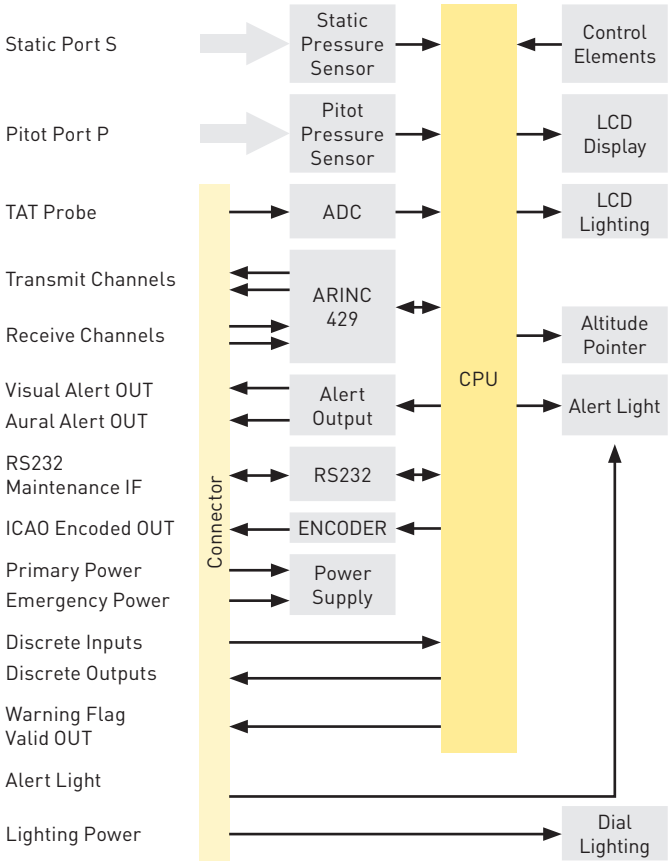
CHARACTERISTICS

FEATURES:	Solid State Pressure Sensors
	RVSM Compliant
	Static Source Error Correction, 2 x 16 Curves
	Integrated Altitude Alerter (Optional)
	Standby/Normal Operation (Optional)
	English/metric scale setting
	Baro Push-to-Reset function
	Push-to-Test and continuous Built-In-Test
	BIT Failure memory
	Display with LCD/stepper motor driven pointer
	ARINC 408, 3ATI, with IMI ring pointers
	RS232 Maintenance Interface
SIGNAL INPUTS:	Primary Power 28 VDC
	Emergency Power 28 VDC
	Lighting Power 28 VDC (Optional 5 VDC)
	Alert Light Control 28 VDC (Optional 5 VDC)
	ARINC 429 Serial Data Bus 2 Receive Channels
	TAT Probe 500 Ohm (Optional 50 Ohm) @ 0 °C

SIGNAL OUTPUTS:	Encoded Altitude ICAO Per TSO C-88a
	Visual/Aural Alert Relais Outputs
	Warning Flag Valid GND/28 VDC
	Optional Baro Potentiometer Output
	ARINC 429 Serial Data Bus 2 Transmit Channels
OPERATING SPECIFICATIONS:	Altitude Scale Error - 1,000 to 20,000 feet ± 10 feet 20,000 to 29,000 feet ± 20 feet 29,000 to 41,000 feet ± 30 feet 41,000 to 53,000 feet ± 50 feet
	FAA TSO-C10b/TSO-C88a/TSO-C106
	RTCA/DO-178B Level A
	RTCA/DO-160D – Operating Temperature -20 (-30 optional) ... 70 °C – Storage Temperature -55 ... 85 °C
	Reliability: MTBF 21,700 Hours (Acc. MIL-HDBK-217F)

INTERNAL BLOCK DIAGRAM

AD32 RVSM Air Data Display with Alerter and Encoding Output



MECHANICAL DRAWING