



DMA-Aero

PAMB10H/11H

Precision Pressure Indicators

- Single and dual channel versions
- High accuracy transfer standards
 - Accuracy to ± 2 feet at sea level
 - Air data or pressure units
 - Color LCD touch screen
 - Simultaneous Ps & Qc or Ps & Pt display

LOW DRIFT PRECISION PRESSURE INDICATORS

The PAMB10H & PAMB11H Pressure Ambient measuring instruments are near primary standard laboratory pressure indicators capable of accurate, continuous reading of atmospheric pressure ranges. The PAMB11H is an ideal Transfer Standard for calibrating RVSM air data test sets. The PAMB10H is a single channel Ps or Pt ranged instrument and the PAMB11H is a dual channel Ps and Pt ranged instrument with resolutions of 0.0001 inHg for Ps and Pt.

HIGH ACCURACY

Special characterization of selected transducers provides high accuracy to ± 2 feet at sea level and low drift. Temperature and pressure are used to mathematically compensate “smart” high precision silicon bridge transducers for maximum accuracy.

CONTROLS

The PAMB instruments are easy to use and rapidly understood by both experts and first time users. All operations, including calibration, can be performed via the integrated touch screen which provides an intelligent and user friendly interface.

Pressure readings are also transmitted via RS232, USB, Ethernet or GPIB to enable the use in ATE equipment.

CALIBRATION

Calibration can be performed quickly and easily by software change of four coefficients. No mechanical adjustments are required. Calibration factors are password protected.

Suggested calibration interval: one year.





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PAMB10H/11H Standard Specifications

Parameter	Units	Resolution
Static pressure (Ps)	inHg, hPa, Pa, kPa, mmHg, psi, inH ₂ O at 4°C	0.0001 inHg (0.2 Pa)
Dynamic pressure (Qc) ^[1]		0.0001 inHg (0.5 Pa)
Altitude	feet, meters, hectometers	1 foot, 0.1 meters
Airspeed ^[1]	knots, mph, km/h	0.1 knots, 0.1 mph, 0.1 km/h
Mach No. ^[1]	Mach	0.001
Static pressure rate Dynamic pressure rate ^[1]	inHg/min, hPa/min, kPa/min, mmHg/min, inH ₂ O/min, psi/min	0.01 inHg/min 1 hPa/min
Altitude rate		1 foot/min, 0.1 meters/min
Airspeed rate ^[1]	knots/min, mph/min, km/h/min	1 knot/min, 1 mph/min, 1 km/h/min

Notes: ^[1] PAMB11H only.

STATIC CHANNEL PERFORMANCE (PAMB10H/11H)

Range: 0 to 38.4 inHg (0 to 1,300 hPa)
Option J7: 0 to 103.4 inHg (0 to 3,500 hPa)

Altitude accuracy*: ± 2 feet @ sea level
± 4 feet @ 30000 feet
± 15 feet @ 60000 feet

Static accuracy*: ± 0.002 inHg (± 0.06 hPa)

PT CHANNEL PERFORMANCE (PAMB11H)

Range: 0 to 103 inHg (0 to 3,500 hPa)

Pt accuracy*: ± 0.0025 inHg @ 3 inHg (± 0.09 hPa @ 100 hPa)
± 0.004 inHg @ 51 inHg (± 0.14 hPa @ 1700 hPa)
± 0.005 inHg @ 66 inHg (± 0.17 hPa @ 2200 hPa)
± 0.006 inHg @ 80 inHg (± 0.20 hPa @ 2700 hPa)
± 0.008 inHg @ 103 inHg (± 0.27 hPa @ 3500 hPa)

Qc and airspeed values: Derived from Ps and Pt values above.

(* Accuracy includes drift (up to 1 year), linearity, hysteresis and repeatability.

CALIBRATION

One year interval, performed using software, password protected.

Note: For use as RVSM transfer standard a reduced calibration interval is recommended depending on calibration requirements.

DISPLAY

LCD multi-colored backlit touch screen, 3.5" (114 mm) diagonal, displays all test parameters and allows user input and configuration.

WARRANTY

2 Years

COMMUNICATION

RS232 as standard. USB or Ethernet alternative option (GPIB available on the rack version).

PHYSICAL SPECIFICATIONS

Weight: 1.8 lbs. (0.8 kg.) approx.
Dimensions: W 5.1" x L 7.9" x H 3.3" (13 cm x 20 cm x 8.5 cm)
Rack mounted versions of the PAMB10H and PAMB11H are also available, consult DMA.

TEMPERATURE

Storage: -20° to 70°C
Operating: -5 to 50°C
Calibration: 22° ± 5°C

PRESSURE CONNECTIONS

Ps - AN4
Pt - AN3
O-ring for finger tight seal.

POWER SUPPLY

12 VDC 500 mA – adaptor supplied for AC use.

OPTIONS

- B1 USB instead of RS232 [§]
 - B3 Ethernet instead of RS232 [§]
 - B4 Additional GPIB interface (rack mount units only)
 - J7 Ps extended range
- [§] Only one interface from RS232, USB or ethernet can be fitted

Ongoing development results in specifications being subject to change without notice



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