



PAMB10/11

Precision Pressure Indicators

D. Marchiori

- Single and dual channel versions
- Accuracy to ± 2 feet at sea level
- Air data or pressure units
- Colour LCD touch screen
- Simultaneous Ps and Qc display
- Low drift

LOW DRIFT PRECISION PRESSURE INDICATORS

The PAMB10 & PAMB11 Pressure AMBIent measuring instruments are near primary standard laboratory pressure indicators capable of accurate, continuous reading of atmospheric pressure ranges.

The PAMB10 is a single channel Ps ranged instrument and the PAMB11 is a dual channel Ps and Qc ranged instrument.

HIGH ACCURACY

Selection of transducers, combined with special characterization, provides high accuracy to ± 2 feet at sea level and low drift.

The PAMB10 & 11 use temperature and pressure to mathematically compensate "smart" high precision silicon bridge transducers for maximum accuracy at all altitude and airspeed values.

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 integral touch screen which provides an intelligent and user friendly interface.

Pressure readings are also transmitted via RS232 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.





PAMB10/11 Standard Specifications

Parameter	Units	Resolution
Static pressure (Ps) Dynamic pressure (Qc) ^[1]	hPa, inHg, Pa, kPa, mmHg, psi, inH2O at 4°C	0.5 Pa 0.0001 inHg
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]	hPa/min, inHg/min, kPa/min, mmHg/min, inH2O/min, psi/min	1 hPa/min 0.01 inHg/min
Altitude rate	feet/min, meters/min, hectometers/min	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] PAMB11 only

STATIC CHANNEL PERFORMANCE (PAMB10 & PAMB11)

Range: 0 to 1,300 hPa (0 to 38.4 inHg)
or (PAMB10 option): 0 to 3,500 hPa (0 to 103.4 inHg)

Altitude accuracy*:
± 3 feet (± 2 feet**) @ sea level
± 7 feet (± 4 feet**) @ 30000 feet
± 20 feet (± 15 feet**) @ 60000 feet

Static accuracy*:
± 0.1 hPa (± 0.06 hPa**) (± 0.003 inHg) (± 0.002 inHg**)

QC CHANNEL PERFORMANCE (PAMB11)

Range: 0 to 2,500 hPa (0 to 73.8 inHg)

Airspeed accuracy*:
± 0.4 kts @ 50 kts
± 0.1 kts @ 350 kts
± 0.1 kts @ 600 kts
< ± 0.1 kts @ 1000 kts

Qc accuracy*:
± 0.06 hPa @ 4 hPa (± 0.002 inHg @ 0.12 inHg)
± 0.08 hPa @ 230 hPa (± 0.002 inHg @ 7 inHg)
± 0.13 hPa @ 715 hPa (± 0.004 inHg @ 21 inHg)
± 0.3 hPa @ 2500 hPa (± 0.009 inHg @ 74 inHg)

Ptotal values: Derived from Ps and Qc values above.

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

(**) Figures for enhanced accuracy version.

DISPLAY

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

CALIBRATION

One year interval, performed using software, with password protection.

WARRANTY

2 Years

COMMUNICATION

RS232 port – Ethernet or USB port option.

PHYSICAL SPECIFICATIONS

Weight: 0.8 kg (1.8 lbs) approx.
Dimensions: W 13 cm x L 20 cm x H 8.5 cm (W 5.1" x L 7.9" x H 3.3")

TEMPERATURE

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

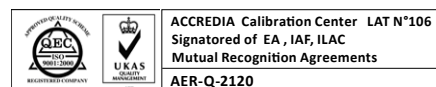
PRESSURE CONNECTIONS

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

POWER SUPPLY

12 VDC 500 mA – adaptor supplied for AC use.

Ongoing development results in specifications being subject to change without notice



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Representative