



Druck

ADTS 500

Portable Pitot Static Tester

- Dual channel pitot static/leak testing
- Altitude, airspeed and rate of climb
- Integral pressure/vacuum pump
- Accuracy to 10ft and 0.2kts
- Simultaneous dual displays
- Programmable aircraft limits



ADTS 500

Portable Pitot Static Tester

The ADTS 500 is a compact and versatile aircraft ground test instrument which is ideal for pitot static leak testing, functional checks and system fault finding directly on the flightline.

Housed in a rugged polyethylene case, the rechargeable battery powered ADTS 500 provides dual channel altitude and airspeed simulation capability. An integral handpump sources vacuum or pressure values equivalent to 50,000ft altitude or 500 knots airspeed and a volume adjuster enables fine control/setting to specific test values.

Solenoid protection prevents the generation of excessive altitude, airspeed or rate of climb values. Independent readout of each parameter is via twin 6 digit LCD displays in a range of scale units including ft, knots, inHg and psi amongst others.

STANDARD SPECIFICATIONS

Operating Range

Altitude -2,000 to 50,000ft
 Airspeed 0 to 500 knots
 Rate of Climb 0 to $\pm 6,000$ ft/min
Other ranges can be supplied, please refer to Druck.

Direct Scale Reading

Airspeed (Pt, Qc) knots and km/hr
 Altitude (Ps) feet and metres
 Pressure (Ps, Qc) inHg, psi, mbar

Overpressure

4 x range value will not affect instrument performance. Excessive values prevented by solenoid protection.

Pressure Source

Both pressure and vacuum are generated internally by the handpump. Monitoring of externally generated dry gas pressure is also possible. A vent valve restores ambient ground conditions after test.

Readout

± 999999 with bar graph for rates (altitude and airspeed) in 5% increments.

Displays

Twin LCD displays for simultaneous viewing of altitude and airspeed.

Resolution

Variable with applied scaling factor:

Altitude 1 foot, 0.5 metres
 Airspeed 0.1 knot, 0.2 km/hr
 Leak Rate 1 ft/min, 1 kt/min

Accuracy

Altitude ± 15 ft at sea level
 ± 40 ft at 30,000ft
 Airspeed ± 0.5 knots at 100 knots
 ± 0.2 knots at 500 knots

With OFE pressure of the day setting, altitude can be improved to typically ± 10 ft at sea level, ± 30 ft at 30,000ft or equivalent.

Temperature Range

Operating: -10° to 50°C
 Calibrated: 5° to 35°C

Temperature Effects

Over the calibrated temperature range:

Altitude ± 5 ft at sea level
 ± 70 ft at 30,000ft
 Airspeed ± 0.3 knots at 100 knots
 ± 0.5 knots at 500 knots

Response

Nominal display update 3 readings per second.

Position Effect

Negligible.

Weight

12Kg nominal (26 lbs).

Pressure Connections

Hansen quick release. Can be removed if required and standard AN flare exposed.

Dimensions

350mm x 450mm x 250mm nominal (13.7" x 17.7" x 9.8").

Power Supplies

Rechargeable batteries, 12 hour nominal continuous operation. Continuous charging built in when connected to AC supply 96V to 260V, 48Hz to 440Hz at 20VA maximum, auto switching.

Limit Programming

Entry of operating limits for altitude min/max, airspeed max, rate of climb max, rate of speed max. At switch on, the default values in use can be checked and modified as required.

Leak Testing

Timer period activated by key press. Leak rates displays as ft/min or other current units/min value. Preset timer variable between 1 second and 99 minutes.

Recalibration Facilities

Available via key press instruction. Integrity protected by front panel label. Recommended recalibration period is 6 months.

SUPPLIED AS STANDARD

Mains lead, mating hoses, calibration certificate and instruction manual are supplied as standard.

CALIBRATION STANDARDS

Instruments manufactured by Druck are calibrated against precision calibration equipment traceable to International Standards.

RELATED PRODUCTS

Druck manufacture a wide range of flight approved pressure sensors and ground test instrumentation for the aeronautical industry. Shown below are some of the products currently available.



ORDERING INFORMATION

Please state the following:

1. Type number.
2. Power supplies.

Specify any non-standard requirements in detail.

Continuing development sometimes necessitates specification changes without notice.

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