


VDAS[®] AFA5

DIFFERENTIAL PRESSURE TRANSDUCER

Digital differential pressure measurement and display unit for use with the AF1300 Subsonic Wind Tunnel.



- Optional ancillary to TecEquipment's modular Subsonic Wind Tunnel (AF1300)
- Measures and displays differential pressures from models, Pitot static tubes and other devices
- Quicker, easier and more versatile than using liquid manometers
- Integral LCD allows direct pressure measurement
- Measures differential pressures or pressure with respect to atmosphere
- Fully compatible with TecEquipment's Versatile Data Acquisition System (VDAS[®]) to enable accurate real-time data capture, monitoring and display on a computer

DIFFERENTIAL PRESSURE TRANSDUCER

DESCRIPTION

The Differential Pressure Transducer and readout measures and displays pressures in Pitot static tubes and other pressure-sensing devices fitted to the AF1300 Subsonic Wind Tunnel, with respect to the atmosphere or differential pressures.

The control and instrumentation panel of the AF1300 wind tunnel includes a location for mounting up to two Differential Pressure Transducer modules. It is microprocessor-controlled and contains a calibrated pressure transducer. The unit has an integral liquid crystal display that allows the user to read pressure directly.

The signals of the pressure sensors may be output to TecQuipment's optional Versatile Data Acquisition System (VDAS®, available separately). Using VDAS® enables accurate real-time data capture, monitoring, display, calculation and charting of all relevant parameters on a suitable computer (computer not included).

When the Differential Pressure Transducer is used with the automatic data acquisition unit it provides a significant advantage over conventional instruments such as manometers. Many readings can be taken and the user may use a suitable spreadsheet software package to obtain a more accurate overview of pressure distributions.

STANDARD FEATURES

- Supplied with comprehensive user guide
- Five-year warranty
- Made in accordance with the latest European Union directives
- An ISO 9001 certified company

ANCILLARY FOR

- Subsonic Wind Tunnel (AF1300)
- Cylinder Model (AF1300a)
- NACA 0012 Aerofoil With Tappings (AF1300b)
- NACA 2412 Aerofoil With Flap (AF1300c)
- Set of 2 NACA 0012 Aerofoils (AF1300d)
- Flat Plate Drag Model (AF1300e)
- Boundary Layer Model (AF1300f)
- Aircraft Model-Low Wing (AF1300g)
- Aircraft Model-High Wing (AF1300h)
- Three Dimensional Drag Models (AF1300j)
- S1210 Aerofoil (AF1300l)

SPECIFICATIONS

TecQuipment is committed to a programme of continuous improvement; hence we reserve the right to alter the design and product specification without prior notice.

NETT DIMENSIONS:

182 mm long x 100 mm high x 105 mm deep; 1 kg

APPROXIMATE PACKED DIMENSIONS:

0.01 m³; 2.5 kg

PRESSURE SENSOR:

Pressure transducer calibrated at a maximum of ± 7 kPa

OPERATING CONDITIONS

OPERATING ENVIRONMENT:

Well ventilated laboratory

STORAGE TEMPERATURE RANGE:

-25°C to +55°C (when packed for transport)

OPERATING TEMPERATURE RANGE:

+5°C to +40°C

OPERATING RELATIVE HUMIDITY RANGE:

80% at temperatures < 31°C decreasing linearly to 50% at 40°C