

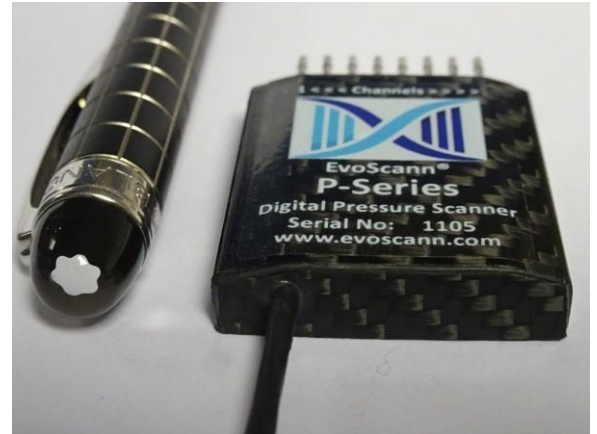
## EvoScann®

### P8-A ABSOLUTE MODE PRESSURE SCANNERS

EvoScann® P-Series provide high accuracy pressure scanning in a compact, rugged package to excel in the most demanding requirements.

#### KEY FEATURES:

- ✓ Smallest, lightest pressure scanners available
- ✓ Multi-channel measurement
- ✓ Absolute or calculated Differential measurement
- ✓ Lightweight carbon fibre external construction
- ✓ Integral microprocessor
- ✓ High accuracy output directly in engineering units
- ✓ CANbus output
- ✓ Comprehensive range of industry-standard installation accessories
- ✓ Wide range of aerodynamic applications



EvoScann® P-Series are highly-miniaturised pressure scanners designed specifically to meet the stringent demands of the aerodynamic testing industry where development is rapid and continuous. Utilising the latest in miniature scanner technology, P-Series is at the forefront of pressure measurement in challenging aerodynamic locations. The P-Series has been designed, from the start, with physical size, weight, accuracy and functionality in-mind and is available in a variety of configurations.

#### SMALL and LIGHT

In many aerodynamic testing applications, weight and size limits the ability to measure in difficult locations. Weighing-in at <14g and with compact dimensions, EvoScann® P-Series can be located within the tightest of spaces where rapid pressure mapping is needed, enabling aerodynamicists and engineers to quickly gather valuable data that has never been easy to access before. Measurement without compromise.

#### PLUG and PLAY

Using the latest high-speed data communications technology, EvoScann® P8-A is a pressure measurement and engineering unit converter in one package. With no requirement for external signal conditioning, EvoScann® P8-A transmits accurate, fast data, in engineering units, directly to the test article's central processing unit. Using a single cable to provide the power and transmit the data and with a choice of industry-standard connectors, EvoScann® P8-A scanner is ready to plug-and-play, producing high-speed synchronous data within seconds of connection.

#### ROBUST

EvoScann® P8-A is insignificantly light, has integral impact and splash-protection and can be fitted into the smallest of aerofoil or aerodynamic profiles with minimal external influences. A high maximum operating temperature means that even use in proximity to hot vehicle parts is possible, extending measurement to the most critical areas.

#### ACCURATE

High-performance piezo-resistive pressure sensors ensure the highest accuracy and measurement of a complete aero section in one compact device. EvoScann® P8-A scanners can be supplied in Absolute or calculated Differential modes across a wide selection of pressure ranges, including custom ranges. Integrated temperature sensors provide useful data, but also apply temperature correction to every pressure sensor, at source, to ensure optimal performance and minimal ambient temperature effects.

Complementing the sensor is the widest range of pressure scanner accessories. Tubulations, tubing and tools help the user integrate EvoScann® P-Series quickly and effectively into the test article, enabling measurement and data acquisition to start quickly, making efficient use of expensive testing time and resources.

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### P8-A ABSOLUTE MODE PRESSURE SCANNERS

#### SPECIFICATION

|                          |  |                           |   |
|--------------------------|--|---------------------------|---|
| Inputs (Px):             | 0.040"   | Environmental Conditions: |   |
| Full Scale Range:        | 200-1200 mbar A<br>600-1200 mbar A                                   | Op. Temperature:          | -20°C to +115°C   |
|                          |  | Vibration:                | 9 G / 1000Hz (24 hr)                                    |
| Accuracy*:               | Absolute: 1. %FS*<br>Calculated Differential: 2. %FS*<br>(20-85°C)** | Communication Interface:  | Direct CANbus, optional<br>CAN / USB Adapter            |
| Overpressure Capability: | 5x calibrated range (6 bar)  | Scan Rate:                | Variable up to 1000Hz/Channel                           |
| Resolution:              | 0.01 mbar (0.03 mbar at<br>1000Hz)                                   | Power:                    | 9-24v DC  |
| Drift:                   | <1mbar / year  | Current Consumption:      | <30mA   |
| Construction materials:  |  | Electrical Connector:     | Deutsch, Harwin, Lemo or<br>Flying lead (no connectors) |
| Wetted parts:            | Stainless Steel / Aluminium /<br>Viton®                              | Weight:                   | <14g  |
| Outer case:              | Carbon Fibre   | Dimensions:               | 36 x 33 x 8mm   |
| Tubulations:             | Stainless Steel  |                           |   |

Media: Air - Avoid liquid contaminants

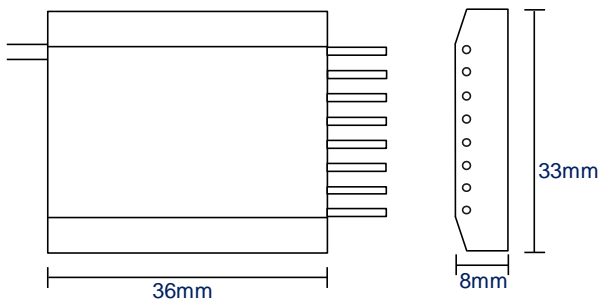
\*includes the effects of non-linearity, repeatability and hysteresis

\*\* Expands to 0.25% (abs) & 0.5% (diff) to outer temperature limits

#### Model Coding:

|           |                              |                 |  |                 |                                   |                                |   |   |   |
|-----------|------------------------------|-----------------|--|-----------------|-----------------------------------|--------------------------------|---|---|---|
| EvoScann® | -                            | -               | -  | -               | -                                 | -                              | -   | -   | -   |
|           | Measurement:<br>P - Pressure | Channels:<br>8A | Mode:<br>A - Absolute<br>B - Differential<br>X - Other | Range:<br>X - X | Comms: A<br>- CANbus<br>X - Other | Cable:<br>1000mm<br>X - Custom | Connector:<br>A - None B<br>- Deutsch C<br>- Lemo D -<br>Harwin | Calibration:<br>A - Standard<br>X - Other | Special Instructions:<br>A - None<br>X - CheckNotes |

#### Dimensions



#### Options and Accessories:

- CANbus to USB adapter c/w software interface
- Full range of tubes, connectors and extension cables
- Special ranges / calibrations
- FIA Homologated