

## EvoScann®

### P16X-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 16-channel absolute pressure scanner
- ✓ Lightweight construction
- ✓ Integral microcontroller
- ✓ High accuracy
- ✓ CAN / CAN-FD communications output
- ✓ Comprehensive range of industry-standard installation accessories
- ✓ Wide range of aerodynamic applications

The EvoScann® P16X-A is a highly miniaturised multi-channel pressure scanner designed for the demanding requirements of aerodynamic testing and development. Engineered for reliable operation in harsh test environments, it combines rugged construction with advanced sensing technology to deliver high accuracy, excellent signal-to-noise performance, and fast dynamic response. Designed from the outset to minimise size, weight, and installation complexity, the P16X-A provides reliable, high-performance pressure measurement directly at the test location.

#### SMALL and LIGHT

In many aerodynamic testing applications, weight and size limits the ability to measure in difficult locations. Weighing-in at <17g (without cable) 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® P16X-A is a pressure measurement device in one package which transmits accurate, fast CANbus data, directly to the test article's computer/logging system. Using a single cable to provide the power and transmit the data and with a choice of industry-standard connectors, EvoScann® P16X-A scanner is ready to plug-and-play, producing high-speed simultaneous data within seconds of connection.



#### ROBUST

The EvoScann® P16X-A is engineered for reliable operation in demanding test environments. Its lightweight composite construction provides integral impact and splash protection, while its compact form allows installation within small aerofoil or aerodynamic structures with minimal disturbance. The scanner's high operating temperature capability enables measurements close to hot vehicle components and other harsh environment locations.

#### ACCURATE

Sixteen high-performance piezo-resistive pressure sensors provide precise multi-point pressure measurement within a single compact unit. The scanner is available in absolute pressure configuration, across a wide range of ranges, including custom options. Integrated temperature sensors provide real-time temperature compensation at the sensor level, along with individual 24-bit A/D converter per channel, assuring high measurement accuracy, stability, and improved signal-to-noise performance across varying environmental conditions.

Complementing the sensor is the widest range of pressure scanner accessories. Tubulations, tubing and tools help the user integrate EvoScann® P16X-A 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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#### SPECIFICATION

**Inputs (Px):** 16 x 0.040" O.D. SS Bulged Tubulations

**Full Scale Range:** 600-1200 mbarA

**Accuracy\*:** 0.2% Span  
**Overpressure**

**Capability:** 5x calibrated range

**Resolution:** 0.01mbar

**Drift:** <1mbar/year

#### Construction materials:

**Wetted parts:** Stainless Steel / Aluminium / Silicone

**Outer case:** Carbon fibre

**Mounting frame:** Composite / Silicone grommets

**Tubulations:** Stainless Steel

**Media:** Air - Avoid liquid contaminants

\*includes effects of linearity, repeatability & hysteresis

#### Environmental Conditions:

**Op. Temperature:** -20°C to +135°C

**Vibration:** 9G / 1000Hz (24 hr)

**FIA-Homologated**

#### Communication Interface:

User-selectable CAN /CAN-FD  
 (Optional CAN >USB Adapter)

**Scan Rate:** Variable up to 1000Hz/Channel

**Power:** 9-36v DC

**Current Consumption:** <20mA

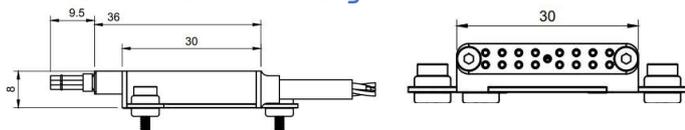
**Electrical Connector:** 500mm "Flying lead" (no connectors) Connectors on request

**Weight:** <17g excluding manifold

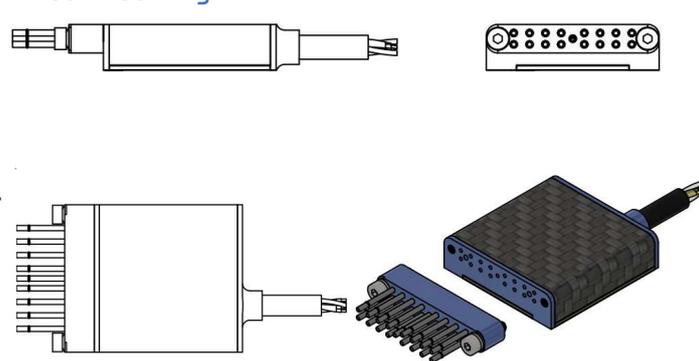
**Dimensions:** 30mm x 30mm x 8mm

#### Dimensions

##### with anti-vibration mounting



##### without mounting



#### Options and Accessories:

- Comprehensive catalogue upon request
- Wide range of tubes, connectors, pneumatic cables and fittings
- Optional spare manifolds