

## EvoScann®

### P64-D TRUE DIFFERENTIAL PRESSURE SCANNER

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
- ✓ 64 channel measurement
- ✓ True Differential measurement, shared static reference
- ✓ Lightweight 3D Printed Enclosure Windform™ SP
- ✓ Integral microprocessor
- ✓ High accuracy output directly in engineering units
- ✓ CANbus output
- ✓ Comprehensive range of industry-standard installation accessories



EvoScann® P64-D is a miniaturised pressure scanner 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, P64-D is at the forefront of pressure measurement in challenging aerodynamic locations. The P64-D has been designed, from the start, with physical size, weight, accuracy and functionality in-mind.

#### SMALL and LIGHT

Weighing-in at 110g and with compact dimensions, the EvoScann® P64-D can be located within the tightest of spaces where any detailed pressure mapping is needed, enabling aerodynamicists and engineers to quickly gather valuable data.

#### PLUG and PLAY

Using the latest high-speed data communications technologies, EvoScann® P64-D is a pressure measurement and engineering unit converter in one package. With no requirement for external signal conditioning, the EvoScann® P64-D transmits accurate, fast data, in engineering units, directly to the test articles central processing unit over CANbus. Using industry-standard connectors, the EvoScann® P64-D scanner is ready to plug-and-play, producing high-speed synchronous data within seconds of connection.

#### ROBUST

EvoScann® P-Series is designed to be light, has integral impact and splash-protection and can be fitted into the smallest of installations with minimal external influences.

#### ACCURATE

Sixty-four high-performance MEMS pressure sensors ensure the highest accuracy and measurement of complete aero sections in one compact device. EvoScann® P64-D scanners are supplied in True Differential mode across a selection of pressure ranges, including custom ranges. Eight integrated board mounted temperature sensors provide useful data, but also apply temperature correction to each bank of pressure sensors to ensure optimal performance and minimal ambient temperature effects. For optimal accuracy ensure that the reference tubulation is connected to a stable static source.

Complementing the EvoScann® P64-D is the widest range of pressure scanner accessories. Tubulations, tubing and tools help the user integrate EvoScann® P64-D 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

<b>Inputs (Px / Ref):</b>	64 x 0.040" O.D.
<b>Full Scale Ranges:</b>	+/- 100 mbar upto +/-200 mbar
<b>Accuracy*:</b>	0.5% FS*
<b>Overpressure Capability:</b>	5x calibrated range
<b>Resolution:</b>	0.003 mbar @ 100 mbar range 0.006 mbar @ 200 mbar range
<b>Drift:</b>	<1 mbar / year
<b>Construction materials:</b>	
<b>Wetted parts:</b>	Stainless Steel / Aluminium / Viton®
<b>Outer case:</b>	Windform™ SP
<b>Tubulations:</b>	Stainless Steel
<b>Media:</b>	Air - Avoid liquid contaminants

#### Environmental Conditions:

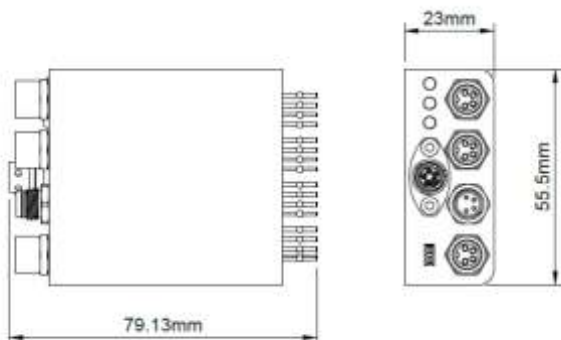
<b>Op. Temperature:</b>	-10°C to +90°C
<b>Vibration:</b>	9 G / 1000Hz (24 hr)
<b>Communication Interface:</b>	Direct CANbus, optional CAN / USB Adapter
<b>Scan Rate:</b>	Variable up to 500Hz/Channel
<b>Power:</b>	9-24 v DC
<b>Current Consumption:</b>	<70 mA
<b>Electrical Connector:</b>	Deutsch
<b>Weight:</b>	110 g
<b>Dimensions:</b>	70 (80*) x 55 x 22 mm *incl tubulations

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

#### Model Coding:

EvoScann®									
	Measurement: P - Pressure	Channels: 64	Mode: D - Differential	Range: A - +/- 100mb B - +/-200mb X - Specials	Comms: A - CANbus	Cable: None	Connector: A - Deutsch X - Other	Calibration: A - Standard X - Other	Special Instructions: A - None X - Check Notes

#### Dimensions



#### Options and Accessories:

- CANbus to USB adapter & software
- Full range of tubes, connectors and extension cables
- Special ranges / calibrations
- FIA Homologation pending