

EVO SCANN® P-SERIES 16 CHANNEL PRESSURE SCANNER

PRODUCT OVERVIEW

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

The P-Series is a highly miniaturized pressure scanner designed specifically to meet the stringent demands of the aerodynamic testing industry where development is rapid and continuous. Utilizing the latest in miniature scanner technology, the P-Series is at the forefront of pressure measurement in challenging aerodynamic locations. The P-Series has been designed with physical size, weight, accuracy and functionality in mind and is available in a variety of configurations for sixteen pressure channels.

Small and Light - In many aerodynamic testing applications, weight and size limits the ability to measure in difficult locations. Weighing in at <0.6oz compact dimensions, the 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, the P-Series is a pressure measurement and engineering unit converter in one package. With no requirement for a remote converter or other hardware, the EvoScann® P-Series 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, the EvoScann® P-Series scanner is ready to plug-and-play, producing high-speed synchronous data within seconds of connection.

Rugged - EvoScann® P-Series is designed to be extremely light, has integral impact and splash-protection and can be fitted into the smallest of aerofoil 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 - Sixteen high performance Piezoresistive pressure sensors ensure the highest accuracy and measurement of a complete aero section in one compact device. EvoScann® P-Series scanners can be supplied in Absolute or 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 a wide 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.

Process Measure Control

Features

- Lightweight <0.6oz
- CANbus output
- 0.1% Accuracy
- 9-24 VDC
- -40 to +240°F

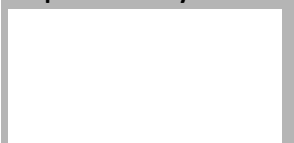
Applications

- Wide range of Aerodynamic Applications
- Wind Tunnel
- Motorsport
- Wind Turbines

Contact

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Represented by:



Specification

Specification (P16 Version)

Inputs (Px)
16 x 0.040"

Full Scale Ranges:
Any range can be specified between 3 psi and 17 psi Absolute or Differential*
For example: 5 to 15 psi Absolute

Accuracy:
For Absolute: 0.1% FS
For Differential: 0.2% FS
Includes non-linearity, hysteresis and repeatability

Proof pressure:
85 psi

Resolution:
0.00015 psi (0.00045 psi at 1000Hz)

Long Term Stability:
<0.015 psi/year

Construction

Wetted parts:
Stainless steel/Aluminum/Polyetherimide (PEI)

Outer case:
Carbon Fiber

Tubulations:
Stainless Steel 304

Media:
Clean Dry Air- avoid liquid contaminants

Specification Continued

Environmental Conditions

Operating Temperature:
-40 to 240°F

Vibration:
9G/1000Hz (24 hr)

Communication Interface

CANbus standard
CAN/USB Adapter, optional

Data Output Rate:
Variable up to 1000Hz/Channel

Power:
9-24 VDC

Current Consumption:
<30mA

Electrical Connector:
Deutsch, Harwin, Lemo or Flying lead (no connectors)

Weight:
<0.6oz

Dimensions:
1.4 x 1.3 x 0.36"

Options

- CANbus to USB adapter complete with software interface
- Full range of tubes, connectors and extension cables
- Special ranges/calibrations

* Please consult factory for Differential ranges

Ordering Information

EvoScann ^o	Measurement	Channels	Mode:	Range:	Comms:	Cable:	Connector:	Calibration:	Special Instructions:
	P-Pressure	16A	A-Absolute B-Differential* X-Other	X - X	A-CANbus X-Other	12" 20" 40" X - Custom	A-None B-Deutsch C-Lemo D-Harwin X-Other	A-Standard X-Other	A-None X - Check Notes

PMC Engineering adopts a continuous development program which sometimes necessitates specification changes without notice

MECHANICAL DETAILS

Dimensions in inches

