

SSI Technologies, Inc

Pressure Transducer Overview

P51 MediaSensor™ Product Description



The MediaSensor™ (P51) family of bulk micro-machined, absolute, gage and sealed pressure transducers and transmitters are for both harsh and benign media with the superior typical accuracy of $\pm 0.5\%$ overall full scale at room temperature and $\pm 1\%$ overall full scale over -40°C to 105°C for 75 PSI to 3000 PSI. These compact, robust sensors measure pressures from 15 PSI to 3,000 PSI and are well suited for a variety of automotive, industrial and commercial applications.

P51 MediaSensor™ Product Features

Superb Accuracy: $\pm 0.5\%$ Full Scale for 75 PSI to 3000 PSI and $\pm 1\%$ Full Scale for 15 PSI to 60 PSI (22°C)

Pressure Ranges: 15 PSI to 3,000 PSI

Temperature Range: -40°C to 105°C

Compact, Robust Package: All laser-welded stainless steel design for optimal media isolation in compact size

Chemical Compatibilities: Any gas or liquid compatible with 304L & 316L Stainless Steel. For example, Motor Oil, Diesel, Hydraulic fluid, brake fluid, water, waste water, Hydrogen, Nitrogen, and Air.

Typical Applications: Refrigeration; Fuel Cells; Pumps; Hydraulics; Process Control; Spraying Systems; Pneumatics; Compressors; Flow; Robotics; Agriculture; Hydrogen Storage

Maximum Flexibility: Custom ASIC provides signal conditioning for calibration and temperature compensation.

MediaSensor™ with integrated signal conditioning

Transducers: 5 Volt input with 0.5 – 4.5 Volt ratiometric output (optional overvoltage protection available) or a 8-30 Volt input with 1-5 Volt non ratiometric output

Transmitter: 8 - 30 Volt input with 4 – 20 mA output

Excellent price/performance ratio

Standard and custom options available for OEM quantities

For additional information contact our inside sales associates at (608) 758-1500 or refer to our website www.ssitechnologies.com.

P51 MediaSensor™ Options

Pressure Ranges: 15 PSI to 3,000 PSI & various Bar ratings

Pressure Type: Absolute, Gage & Sealed Gage

Ports: in a wide range of standard options

Connectors: Integral Harness, Packard, Deutsch, M12 & Mini-Din 43650 Connector

Output Options: 4.5 V – 0.5 to 4.5V (5V input only), 5V – 1 to 5V (8 to 30V input only), 20mA – 4 to 20mA (8 to 30V input only)

P51 MediaSensor™ Typical Performance Specifications

(all values at 22°C unless noted otherwise)

Superb Accuracy: $\pm 0.5\%$ Full Scale for 75 PSI to 3000 PSI and $\pm 1\%$ Full Scale for 15 PSI to 60 PSI

Zero & Span Error: 0.25% FS

Thermal Error: (-40°C to 105°C) 0.50% FS

Total Error: 1.0% FS

Operating Temperature: -40° to 105°C

Storage temperature: -40° to 105°C

Proof Pressure: 3X FS

Burst Pressure: (Absolute Pressure) 10X FS or 15,000 PSIA (whichever is less)

Burst Pressure: (Gage Pressure) 3X FS

Reverse Polarity Protection: ($\pm 16\text{V}$ over 5 minute) on 4-20mA & 5V Output

Overvolt Protection Option: ($\pm 16\text{V}$ over 5 minute) on 4.5V Output

P31 MediaNugget™ Product Description

The MediaNugget™ (P31) absolute & gage pressure sensors are piezoresistive sensors without signal conditioning for low-cost OEM applications.

The MediaNugget™ family of micro-machined, absolute pressure sensors has optimum media isolation for use with both harsh and benign media. These compact, robust sensors measure pressures from 15 PSI to 5,000 PSI and are well suited for a variety of low-cost OEM applications especially instrumentation and test & measurement.



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