

About Team Paragon Sensors



Team Paragon Corp. was founded in 1995 as a high-tech company with a focus on innovation, development, manufacturing, and sales of industrial pressure sensors. The company has invested millions of dollars and spent seven years in the development of innovative series of excellent MEMS pressure sensors and transmitters, including the pressure sensors(cores), pressure transmitters, digital display temperature and pressure transmitters, and the pressure transmitter with RTU, which are now available in the market. These products exhibit very high TEB accuracy and can operate within a wide temperature range while providing IP68 protection.

Team Paragon Corp. is committed to delivering cutting-edge solutions to its clients and will continue to strive for excellence with the philosophy of "Sensors Today, Sensing Tomorrow."

High Performance

Cutting-edge Products

Patented Design

Competitive Cost

Global Operations

Product Portfolios

Uncompensated Oil-filled Pressure Sensor



Pressure range: 0-35Kpa...35Mpa

Precision oil filled MEMS Pressure Sensors

Pressure Transmitter (Analog)



Pressure range: -0.1...0 - 0.01...40Mpa
Output: 4-20mA, 0.5-4.5V, 0-5V, 0-10V,

High Performance Pressure Transmitter with Diagnostics

Pressure & Temperature Transmitter with Monitor



Protection: IP67/68
Output: 4-20mA, 0.5-4.5V, Modbus 485

Pressure & Temperature Sensors Designed for Outdoor Applications

Liquid Level Pressure Sensor



Level range: 0- 1...150 mH2O
Output: 4-20mA, 0.5-4.5V,0-10V

Liquid Level Pressure Sensor

Pressure Transmitter (Digital)



Pressure range: -0.1...0 – 0.035...35Mpa
Output: I²C, SPI

Pressure and Temperature Digital Output Sensors

Wireless Pressure & Temp. Sensors



Protection: IP67/68
Networks: 4G, NB-iiT
Battery Inside

Pressure & Temperature Sensors with RTU

Data Speaking

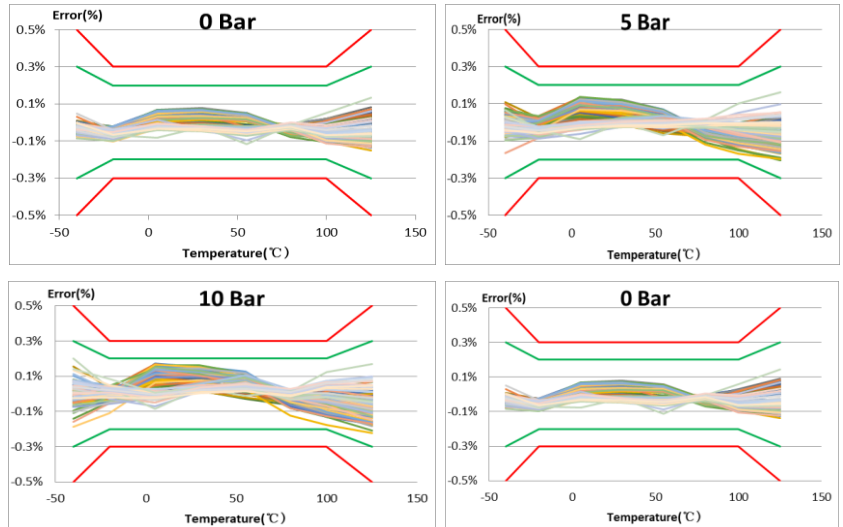
Excellent TEB

Pressure Transmitter
(High Performance)



Pressure Transmitter, High Performance with Diagnostics

Excellent TEB (-40°C~125°C) of pressure transmitters
-Achieved by using proprietary algorithm



RS PC160 pressure sensor inside.

World-class Pressure Sensors

Uncompensated Pressure Sensor



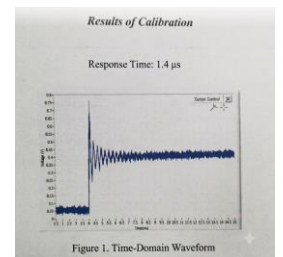
PC160 Precision Oil-filled MEMS Pressure Sensors

Excellent Static Characterizations

Pressure range: 3 Mpa, gauge

Static characterizations calculation:

| Sample # | Offset | Span | N.Linearity | Hysteresis | Repeat | Accuracy |
|----------|----------|---------|----------------------|-----------------------|------------------|--------------------|
| | (V) | (V) | (% of FS) +/-0.2% | (% of FS) +/-0.05% | typical +/-0.05% | (% of FS) 0.20% |
| 1 | -0.00322 | 0.10921 | 0.009% | 0.003% | 0.008% | 0.017% |
| 2 | -0.00252 | 0.10756 | 0.008% | 0.002% | 0.008% | 0.017% |
| 3 | -0.00494 | 0.10808 | 0.010% | 0.003% | 0.008% | 0.019% |
| 4 | -0.00372 | 0.10962 | 0.011% | 0.002% | 0.008% | 0.019% |
| 5 | -0.00032 | 0.10886 | 0.010% | 0.003% | 0.008% | 0.018% |
| 6 | -0.00039 | 0.10796 | 0.007% | 0.002% | 0.007% | 0.015% |
| 7 | -0.00314 | 0.10965 | 0.011% | 0.002% | 0.007% | 0.019% |
| 8 | -0.00446 | 0.10967 | 0.011% | 0.002% | 0.008% | 0.018% |
| 9 | -0.00391 | 0.10947 | 0.009% | 0.002% | 0.006% | 0.016% |
| 10 | -0.00460 | 0.10933 | 0.010% | 0.002% | 0.006% | 0.018% |
| 11 | -0.00027 | 0.10892 | 0.010% | 0.003% | 0.007% | 0.018% |
| 12 | -0.00125 | 0.10848 | 0.009% | 0.002% | 0.006% | 0.015% |
| 13 | -0.00465 | 0.10901 | 0.010% | 0.002% | 0.007% | 0.017% |
| 14 | -0.00461 | 0.10841 | 0.009% | 0.002% | 0.006% | 0.016% |
| 15 | -0.00462 | 0.10815 | 0.009% | 0.001% | 0.007% | 0.016% |
| 16 | -0.00124 | 0.10807 | 0.009% | 0.002% | 0.006% | 0.015% |
| 17 | -0.00124 | 0.10797 | 0.009% | 0.001% | 0.006% | 0.015% |
| 18 | -0.00172 | 0.10750 | 0.009% | 0.002% | 0.006% | 0.015% |
| 19 | -0.00282 | 0.10877 | 0.011% | 0.003% | 0.012% | 0.023% |
| 20 | -0.00377 | 0.11029 | 0.011% | 0.002% | 0.006% | 0.017% |
| Max | -0.00027 | 0.11029 | 0.011% | 0.003% | 0.012% | 0.023% |
| Min | -0.00681 | 0.10750 | 0.007% | 0.001% | 0.006% | 0.015% |
| Mean | -0.00298 | 0.10870 | 0.010% | 0.002% | 0.007% | 0.017% |
| Stdev | 0.00182 | 0.00077 | 0.001% | 0.001% | 0.001% | 0.002% |



Response time: 1.4us

RS PM160-E Pressure Transmitter with Diagnostics for General Purpose Use



RS PM160-E

Pressure transmitter with diagnostics and compact designed, use silicon piezoresistive technology, products designed for industry general purpose use.

Pressure Range, 0-0.1bar ... 160 bar, Gauge (relative), Gauge (sealed) and Absolute available.

Features & Applications

PM160-E pressure transmitter is digital compensated:
TEB $\leq \pm 0.25\%$ between -20°C ~ 85°C (Typ.).

Output: 0.5-4.5V Ratio Voltage; 1-5V, 0-10V, 1-10V Abs. voltage, 4-20mA

Products are with diagnostics and Zero Offset Programable¹⁾, also with the long-term stabilities.

Material contacts with Media are SUS316L S. steel, and welded together. Pressure Snubber is available for enhancing the product reliability and durability; IP67 or IP68 and high degree of EMI protection, products can be used in most applications.

Product Highlights

- ✓ Typical TEB $\leq \pm 0.25\%$ FS within temperature range -20°C ~ 85°C
- ✓ IP67/IP68 Enclosure;
- ✓ Compact designed, outer size down to 19 A/F
- ✓ Diagnostics Functions;
- ✓ $\geq 3x$ FS Pressure Overload;
- ✓ Response time: < 1.5 ms
- ✓ CE certified & RoHS complied

Pressure Range

| Gauge(Relative or Sealed)/Absolute | | Gauge(Sealed)/Absolute |
|------------------------------------|------------|------------------------|
| 0 – 10 Kpa | 0 – 35 Kpa | 0 – 60 bar |
| 0 – 1 bar | 0 – 5 bar | 0 – 100 bar |
| 0 – 10 bar | 0 – 20 bar | 0 – 160 bar |
| 0 – 30 bar | 0 – 40 bar | |

Negative Pressure Ranges are available upon request.

RS PM160-DV Dual Digital Output Pressure and Temperature Sensor



RS PM160-DV

It's a dual digital (I²C, SPI) output pressure and temperature Sensor with diagnostics, use silicon piezoresistive technology with compact designed.

Pressure Range:

0 – 10Kpa … 160 bar, Gauge (relative), Gauge (sealed) and Absolute available.

Sensor Outputs with cable, I²C and Voltage dual output are available upon request.

Features & Applications

PM160-DV pressure transmitter is digital compensated and with I²C, SPI digital output for pressure and temperature;

TEB $\leq \pm 0.25\%$ (Typical) between -20°C ~85 °C.

I²C, SPI Interfaces for pressure and temperature;.

Products are designed for lower power consumption applications, sensor are with diagnostics and Zero Programmable¹⁾, also with long-term stabilities.

Material contacts with Media are SUS316L S. steel, and welded together. Pressure Snubber is available for enhancing the product reliability and durability; and with EMI protection.

Product Highlights

- ✓ Digital Interface (I²C, SPI), dual output for pressure and temperature;
- ✓ Temperature output Measured on Media
- ✓ Digital (I²C) and Voltage Dual outputs;
- ✓ TEB $\leq \pm 0.25\%$ FS(Typical) within compensated temperature range
- ✓ Compact designed, down to 18 A/F
- ✓ Diagnostics Functions;
- ✓ $\geq 3x$ FS Pressure Overload;

Pressure Range

Gauge(Relative or Sealed)/Absolute

| | | |
|------------|-------------|-------------|
| 0 – 10 Kpa | 0 – 35 Kpa | 0 – 100 Kpa |
| 0 – 2 bar | 0 – 5 bar | 0 – 10 bar |
| 0 – 16 bar | 0 – 25 bar | 0 – 40 bar |
| 0 – 60 bar | 0 – 100 bar | 0 – 160 bar |

Negative Pressure Ranges are available upon request.

RS PMLG150 Precision Liquid Level Pressure Sensor



RS PMLG150 series is a high-precision liquid level transmitter with intelligent diagnosis. The product adopts a modular and compact design, utilizes imported MEMS pressure chips, and employs internationally leading packaging technology and proprietary structural design for packaging and manufacturing.

The product adopts digital compensation calibration, incorporates a built-in fault diagnosis function, and boasts strong EMI protection, specifically designed for anti-interference scenarios.

Output 0.5-4.5V, 0-10V, 4-20mA are available, Level ranges: 0- 1...150 mH2O.

- Applications**
- ✓ Pharmaceuticals Industry Chemical Industry
 - ✓ Power and Energy Systems
 - ✓ Mining Equipment
 - ✓ Water Supply & Treatment
 - ✓ Environmental and Hydrological Monitoring

- Product Highlights**
- ✓ Precision with Digital Compensated
 - ✓ Dual Sealing Design makes Sensor Reliable
 - ✓ Compact and Anti-clogging Design
 - ✓ Fault Diagnosis Function
 - ✓ Enhanced EMI/EMC Design
 - ✓ CE Compliant & Rohs Compliant

Pressure Range 0-1...150 mH2O

Singal Output 4-20mA, 0.5-4.5V, 0-10V, 1-10V

RS PM350-RTU Pressure & Temperature Sensors with Remote Transmission Unit Designed for IoT Applications



RS PM350 Series

Pressure Sensors with monitor special designed for Outdoor Applications, i.e., Fire Fighting, Water Supply, Oil Pipes, etc. Where needs the sensors to be well protected from water and humidity. Products are CE certified.

Applications

Pipes Pressure Monitor
Smart City Management
Water Supply

Water Treatment Industry
Fire Hydrant

Product Highlights

- ✓ Pressure TEB $\leq \pm 0.5\%$ ¹⁾ within $-20^{\circ}\text{C} \sim 85^{\circ}\text{C}$
- ✓ 5 x FS Overload Pressure
- ✓ Diagnostics Fault Signal Programable
- ✓ Compact designed with smart size
- ✓ Display Accuracy $\pm 0.2\%$ covering -20°C to 85°C (Excluding transducer output)
- ✓ Integrated Magnetic switch, IP67/IP68 protected
- ✓ Energy Saving Designed.

Pressure Range

Gauge(Relative or Sealed)/Absolute
0 – 10 bar
0 – 20 bar
0 – 30 bar

Other pressure ranges are available upon request.

Singal Output

4-20mA;
0.5-4.5V,
RS 485;



RS PM350-RTU

IoT pressure and temperature transmitter is a device that integrates data acquisition and wireless data transmission. The product is small in size, fully functional, uses ultra-low power MCU, high-resolution OLED display, wireless module adopts NB IoT/4G network, built-in large capacity lithium battery, supports priority use of external power supply, and can work continuously for more than five years. It is a professional monitoring terminal designed for outdoor environment use in multiple fields such as fire protection, water supply network, water conservancy, smart city, energy and chemical industry.

Applications

| | |
|------------------------|----------------------------|
| Pipes Pressure Monitor | Petrochemical industry |
| Smart City Management | Fire Hydrant |
| Water Supply | Remote Monitor and Control |

Product Highlights

- ✓ Precision and High-Pressure Overload
- ✓ IP67/IP68 Enclosure Protection
- ✓ High Accuracy Output Media Temperature
- ✓ Remote Device Configuration, Mobile APP available upon request
- ✓ Multiband Communication
- ✓ Real time Alarm Transmission, Smaller and Smarter
- ✓ Support External Power Supply and Data Transmission

Pressure Range

Gauge(Relative or Sealed)/Absolute
 0-10 bar 0-20 bar 0-30 bar
 Other pressure ranges are available upon request.

Team Paragon Sensors, A Precision and Reliable Pressure Sensors Provider



Customization and ODM are available upon Request.

Contact Us

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