

Integrated Pressure and Temperature sensor, 100 bar, 4-20mA, G1/4



## PRT800-217-505

### Integrated Pressure and Temperature sensor

#### Features

- Advanced micro fused silicon strain gauge
- leak free elastomer structure
- Integrated temperature compensation
- Independent temperature and pressure outputs
- Excellent shock, overload, & vibration resistance
- Highly corrosion resistant SS housing
- ESD and EMI protection
- G1/4 fitting

#### Applications

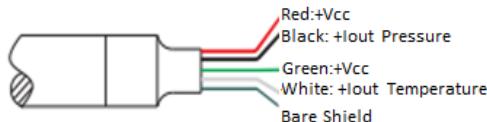
- Industrial process and control
- Automated detection
- Hydraulic and full-motion control
- Pumping stations
- Water treatment systems

#### Description

The L-com PRT800 series of integrated pressure and temperature sensors feature a micro fused silicon strain gauge. The integrated design of the elastomer and pressure interface eliminates the potential for leaks seen in other designs. Sensitive PT100/1000 temperature sensing elements, together with intelligent temperature compensation result in accurate temperature measurements over a wide range of -20 to +85C. Pressure and temperature outputs are independent and accurate to within 0.5% of full scale value. The 22mm diameter, highly durable and corrosion resistant stainless steel housing means years of trouble free operation.

#### General Specifications

Application: Pressure	Pressure Sensor
Type:	Gauge
Process Connection:	G1/4
Output Signal:	4-20mA
Cable Length:	1 m
Electrical Connection:	flying leads



Description	Minimum	Typical	Maximum	Unit
Pressure Range	0		250	bar
Accuracy		±0.5		
Compensated Temp Range	-30		125	%FS
Burst Pressure		500		%FS
Overpressure		300		%FS
Thermal Drift (Zero):		±0.02		%FS/°C
Thermal Sensitivity Shift:		±0.02		%FS/°C
Temperature Range	-30		125	deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[Integrated Pressure and Temperature sensor, 100 bar, 4-20mA, G1/4 PRT800-217-505](#)

Integrated Pressure and Temperature sensor, 100 bar, 4-20mA, G1/4



**PRT800-217-503**  
**Integrated Pressure and Temperature sensor**

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Unit
Power Supply/Excitation Level	9	24	30	VDC
Power Supply Current	10		50	mA

**Material Specifications**

Description	Material
Casing	Stainless Steel 17-4PH
Cable Material	PVC

**Environmental Specifications**

Temperature (Operating)	-10deg C to 80deg C
Temperature (Storage)	-40deg C to 125deg C
Impact (11ms)	100g
Vibration	± 20g
Ingress Protection	IP65

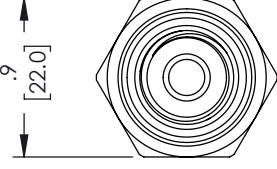
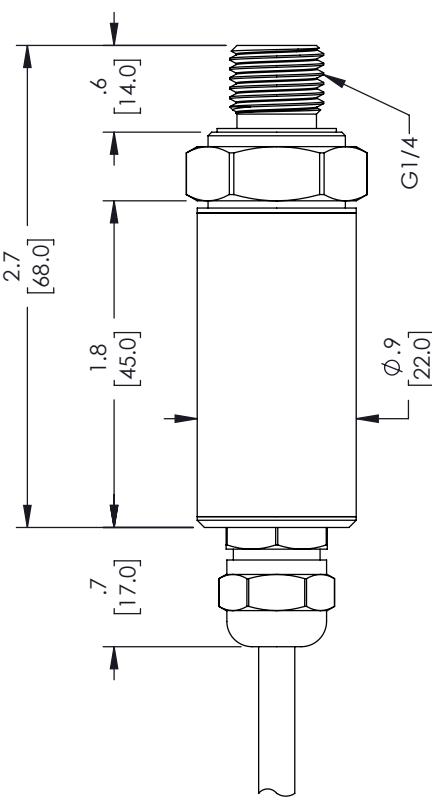
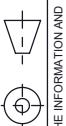
Notes: EMC according to EN61000-10

**Certifications**

CE Compliant

The Infinite Electronics portfolio includes coaxial cable assemblies, connectors, adapters and custom products, as well as our wireless product line which includes antennas, RF amplifiers, lightning and surge protectors, and NEMA rated enclosures.

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume any liability arising out of the use of any part or documentation.

REV. A		DESCRIPTION INITIAL RELEASE	DATE 3/29/22	APPROVED THOUGHTON
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TOLERANCES: $X = \pm .2$ [5.08]    FRACTIONS: $\pm 1/32$ $XXX = \pm .005$ [1.31]    ANGLES: $\pm 1^\circ$ $.XX = \pm .02$ [5.1]    CABLE LENGTH (L) TOLERANCES: $L \leq 12$ [305] = $\pm 1$ [25] -0				
$12$ [305] -0 < $L \leq 60$ [1524] = $\pm 2$ [51] -0 $60$ [1524] < $L \leq 120$ [3048] = $\pm 4$ [102] -0 $120$ [3048] < $L \leq 300$ [7620] = $\pm 6$ [152] -0 $300$ [7620] < $L = \pm 5\%$ $L$ -0				
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