

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

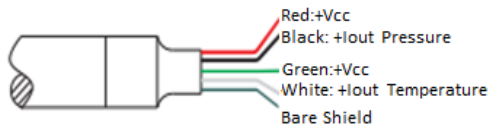
- Industrial process and control
- Automated detection
- Hydraulic and full-motion control
- Pumping stations
- Water treatment systems

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

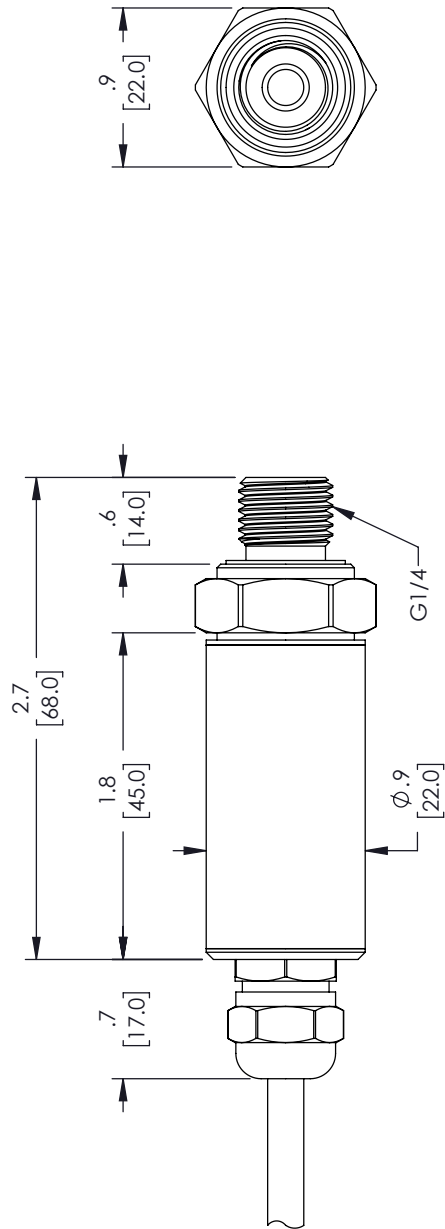
CE Compliant

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.

PRT800-217-505 CAD Drawing
Integrated Pressure and Temperature sensor, 100 bar, 4-20mA, G1/4

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	3/29/22	THOUGHTON



NOTES:
1. COMPONENT SHALL BE INDIVIDUALLY PACKAGED IN ACCORDANCE WITH L-COM SPECIFICATION PS-0031.

REGULATORY COMPLIANCE:
EU RoHS DIRECTIVE (MOST RECENT RELEASED VERSION)

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS		L-com TM an INFINITE [®] brand 50 High Street, West Mill, 3rd Floor, Suite #30 North Andover, MA 01845 USA. Phone: 1.800.341.5266 1.978.682.6936 Fax: 1.978.689.9484 Website: www.L-com.com E-mail: CustomerService@L-com.com		THIRD-ANGLE PROJECTION  THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF L-COM GLOBAL CONNECTIVITY. ALL RIGHTS RESERVED. SHEET 1 OF 1	
TOLERANCES: X = ±.2 [5.08] FRACTIONS .XX = ±.02 [51] +.102 XXX = ±.005 [13] ANGLES ±1° CABLE LENGTH (L) TOLERANCES: L ≤ 12 [305] = +1 [25] / -0 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 300 [7620] < L = +5% / -0		SCALE N/A		REV A	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		ITEM NO. PRT800-217-505			
SIZE A		CAGE CODE 43321		DRAWN BY DMAY	