

A E R O S P A C E

GP:50 Aerospace Heritage products can be designed to meet various MIL Specifications. Consult factory.



MODEL 7201 FLIGHT / SPACEFLIGHT HERITAGE HIGH-ACCURACY PRESSURE TRANSDUCER

STANDARD WIRING



> Standard configurations shown. Please consult factory for other options.

PRODUCT OVERVIEW:

The Model 7201 from GP:50 is a high-accuracy, low-noise, flight-heritage pressure transducer, designed to provide high-reliability within demanding aerospace environments. Its flight heritage, spanning 25 years, makes it ideal for use within demanding aerospace and defense applications, including those in which higher shock and vibration levels may be present.

FEATURES:

- Space flight qualified per MSFC-HDBK-527
- Class "S" qualified electronics
- Radiation hardened to 40 KRAD
- Measurement accuracy to $<\pm 0.3\%$ FSO (RSS)
- 0-5 Vdc output
- Designed to meet 7-year LEO requirements
- Compact, lightweight design weighs just 5 oz (0.1 kg)
- Packaging qualified to FED-STD-101 Method 005/5007

APPLICATIONS:

- Commercial and defense satellites
- Unmanned aerial vehicles
- Onboard aircraft systems
- Avionics
- Spacecraft and launch vehicles
- Ground and engine testing

OPTIONS:

- "B+ and S Class" electronics
- AS5202-04, AS4395E04 process connections
- D38999/27YB98PN, D38999/27YA35PN electrical connectors
- 0 to 5 Vdc 3-wire hookup, or non-isolated 4-wire hookup



GP:50 MODEL 7201

REFERENCE SPECIFICATIONS

Standard configurations shown, consult factory for other options

ELECTRICAL	
Output Signal:	0-5 Vdc
Excitation Voltage:	15 Vdc + 50 mV regulated
Input Current:	25 mA nominal
Output Current:	2 mA max for <0.1% FSO attentuation
Response Time:	<4 ms

MATERIALS OF CONSTRUCTION		
Wetted Parts:	Inconel 7189 sensor, Inconel 625 port	
Housing:	316L Stainless Steel	

ACCURACY (Hysteresis, Non-Linearity & Repeatability @ +70 °F)		
Static Accuracy (RSS):	≤±0.3% FSO	
Non-Linearity:	≤±0.2% FSO (Typ)	
Hysteresis:	≤±0.1% FSO (Typ)	
Repeatability:	≤±0.1% FSO (Typ)	
Zero Balance:	±1.0% FSO	
Span Balance:	±1.0% FSO	

(BFSL method used. Improved options available.)

Calibration:	NIST Traceable Cert
Workmanship:	IPC-A-610 Soldering
Quality System:	ISO 9001

Options may affect specifications. Please consult factory for your specific needs.

MECHANICAL	
Process Connection:	AS4395E04 standard, AS5202-04, ¼″ NPT (M) optional
Electrical Connection:	Tefzel cabel with 4-conductor 32 AWG wire
Proof Pressure:	1.5X FSO
Burst Pressure:	2.5X FSO
Secondary Containment:	Rated at 4,500 PSI (310 BAR)
Random Vibration:	>70 G RMS (20 Hz to 2,000 Hz) (options available)
Sinusoidal Vibration:	7.0 G's from 5 Hz to 100 Hz
Pyroshock:	>4,000 G's / 12 g
Constant Acceleration:	5 G's for 30 minutes
Approximate Weight:	5 oz (0.1 kg) some options may affect weight

PRESSURE RANGES

0-50 thru 0 to 15K PSIA (3.4 BAR thru 1,034 BAR)

THERMAL SPECIFICATIONS		
Operating Range:	-65 °F to +250 °F (-54 °C to +121 °C)	
Compensated Range:	0 °F to +180 °F (-17.8 °C to +82 °C)	
Compensated Ranges from -65 °F to +250 °F (-54 °C to +121 °C) available		
Effect on Zero & Span:	±1.0% FSO/100 °F (Improved specifications available)	



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