

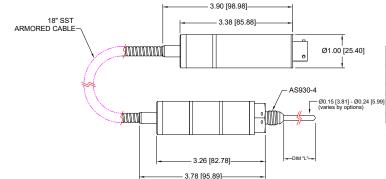


# **AEROSPACE**



# **MODEL 7730**

# DUAL CRYOGENIC PRESSURE & TEMPERATURE TRANSDUCER



Standard configurations shown. Please consult factory for other options.

STANDARD WIRING

+EXC/SIG

N/C

-EXC/SIG N/C

N/C

+EXC

-SIG

-EXC

L = 0.50 TO 7.00 INCH PROBE LENGTH

C/3

D/4

## PRODUCT OVERVIEW:

GP:50's 7730 cryogenic series provides pressure and temperature measurement in one device down to -320 °F (-196 °C). The remote mounted electronics offers a high level output of 4-20 mA, 0 to 5 Vdc or various digital protocols at high accuracies. 100 or 1,000  $\Omega$  platinum RTD is available as well as dual analog outputs.

#### **FEATURES:**

- Cryogenic service down to -320 °F (-196 °C)
- Isolated electronics provide 4-20 mA, 0-5 Vdc or digital outputs
- Remote electronics via stainless steel armored cable
- High accuracy, 0.3% RSS standard
- Lightweight, <10 oz. (0.2 kg)</li>
- Hydrogen and LOX compatibility options available
- Platinum RTD

## **APPLICATIONS:**

- Liquefied fuel pressures
- Manifolds, propulsion systems
- Military and defense programs
- Liquid gas custody transfer

#### **OPTIONS:**

- 0 to 5 Vdc, 0 to 10 Vdc or 4-20 mA output
- RS232, RS485 and Can outputs
- Custom probe lengths
- Zero and span adjustments
- Optional electrical connections
- High-temp version to +350 °F (+177 °C) (see Model 7780)
- Various MIL-SPECS available. Consult factory.

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## **GP:50 MODEL 7730**

#### REFERENCE SPECIFICATIONS

## (Standard configurations shown, consult factory for other options)

ELECTRICAL	
Output Signal:	0 to 5 Vdc, 0 to 10 Vdc (3- and 4-wire isolated or non-isolated) and 4-20 mA
Temperature Output:	100 $\Omega$ wire platinum RTD standard, 1,000 $\Omega$ 2 wire platinum RTD optional
Excitation Voltage:	9 to 32 Vdc, 14-32 Vdc for 0-10V, and isolated output
Circuit Protection:	EMI/RFI, some options will affect EMR/RFI rating
Response Time:	Pressure: <4 ms Temperature: <2 seconds

MATERIALS OF CONSTRUCTION	
Wetted Parts:	17-4-PH SST (Inconel, Nitronic 50 or Monel available)
Housing:	316 Stainless Steel
Armored Cable:	Braided 316L

ACCURACY (BFSL): Hysteresis, Non-Linearity & Repeatability @ +70 °F)	
Pressure: $<\pm0.2\%$ FSO, $\pm0.10\%$ FSO available	
Temperature: 3% FSO, 1% FSO optional	
±1.0% FSO	

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:	AS930-4 pressure port
Electrical Connection:	MIL PTIH-10-6P standard, options available
Probe Length (Temp):	0.75" to 7" available
Proof Pressure:	1.5X pressure range
Burst Pressure:	2X pressure range
Approximate Weight:	<10 oz. (0.2 kg)

PRESSURE RANGES	
Standard Ranges:	0 to 300 thru 0 to 6K PSIA, PSIS (21 thru 413 BAR)
Consult factory for ranges <300 or >6,000 PSIA, PSIS	

TEMPERATURE RANGES	
-320°F to +70 °F (-200 °C to +20 °C)	

THERMAL SPECIFICATIONS	
Operating Range:	(Ambient) -40 °F to +250 °F (-40 °C to +121 °C) (Process) -320 °F to +265 °F (-196 °C to +129 °C)
Compensated Range:	-320 °F to +70 °F (-196 °C to +21.1 °C)
Thermal Error:	Zero: ±1.0% FSO/100 °F Span: ±2.0% FSO/100 °F



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All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without notice. Please contact GP:50 for assistance with your application.