



# Model 1500 Pressure and Temperature Transducer

- Standard Pressure Outputs: 4-20 mADC, 0-10 VDC, 0-5 VDC, mV/V
- 0.5% & 0.2% BFSL (Standard) 0.1% BFSL includes 16 Point Calibration with Certificate
- ¼" NPT, SAE-4, F-250C process connections standard – contact factory for other options
- $\circ$  Temperature Outputs: 100 Ω RTD, J or K type thermocouple – contact factory for dual output options
- Standard ranges from 0-2.5 psi to 0-40000 psi
- Duplicate any customer's process and electrical connection for transparent replacement

The enhanced Model 1500 Pressure and Temperature

Transducer now has dual 4-20 mADC and 1-5 Vdc

temperature output capabilities.



## FEATURES:

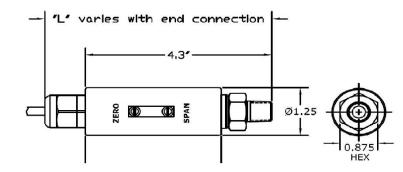
**Proprietary Fused Bond Sensor** 

Sensor Wetted Material Machined from Stainless Steel Bar Stock (No Welds)

**RFI/EMI Protection on every unit** 

**Unparalleled long-term stability** 

External Zero & Span Controls available



Spectre Corp 7912 Root Road Suite C/D North Ridgeville, Ohio 44039



**REFERENCE DIMENSIONS:** 

www.SpectreCorp.com Phone: (440) 250-0616 Fax: (440) 353-0269 E-Mail: info@spectresensors.com



## Model 1500 Pressure and Temperature Transducer

#### Ordering Guide: 1500-A-(0-300PSI)-2-D-3J-5-EC1-OP5

Α	(0-300)	2	D	3J	5	EC1
PRESSURE PORT	RANGE <sup>1</sup>	TYPE	PRESSURE OUTPUT	TEMP OUTPUT	ACCURACY (BFSL)	CONNECTOR <sup>2</sup>
A = ¼" MNPT	PSI	1 = ABSOLUTE	D = 4-20 mA	3 = J OR K TC	5 = 0.5%	EC1 = 36" PIGTAIL <sup>3</sup>
B = SAE-4 MALE	BAR	2 = GAUGE	E = 0-5 VDC	$4 = 100 \Omega \text{ RTD}^{4}$	25 = 0.25%	EC2 = LARGE DIN 43650, FORM A
C = OTHER	kPA	3 = VACUUM	F = 0-10 VDC	5 = OTHER	1 = 0.1%	EC3 = MINI DIN 4365, FORM C
D = 1/8" MNPT	INCHES WC	4 = SEALED	M = mV/V			EC4 = BENDIX PTIH-10-6P
E = F-250C	TORR	5 = COMPOUND				ECT = TURCK M12
		6 = OTHER				ECX = OTHER

<sup>1</sup> OTHER RANGES AVAILABLE, CONSULT FACTORY

<sup>2</sup> CUSTOM PINOUTS/WIRING AVAILABLE

<sup>3</sup> PVC STANDARD CABLE JACKET – OTHERS AVAILABLE ON REQUEST

<sup>4</sup> PLATINUM 2-WIRE

OP5
OPTIONS
OP1 = NIST CALIBRATION WITH CERTIFICATE
OP5 = ZERO & SPAN CONTROLS
OP8 = INTERNAL SHUNT CAL RESISTOR (80% FS)
OPX = OTHER (SPECIFY)

Performance @ 25 °C
Accuracy: $< \pm 0.5\%$ BFSL to 0.1% BFSL <sup>4</sup>
Stability: (2 year): <± 0.10% FSO, Typical
Overpressure Protection: 2X Rated Pressure
Burst Pressure: 5X or 20000 PSI (lesser)
Pressure Cycles: > 50 Million
Temperature Range: -40°C to +85°C
Response: ≤ 5 ms to 90%
Physical Data
Sensor
Wetted Material: 316 SS
Housing: 316 SS
Connections
Pressure: 1/4" MNPT, SAE-4, F-250C

<sup>4</sup> Accuracy includes non-linearity, hysteresis and non-repeatability

TYPICAL APPLICATIONS				
Engine Test Stand	Test Stands			
Leak Detection	Rocket/Jet Engine Testing			
<b>Diesel-Internal Combustion</b>	Emission Testing			
Bake Testing	Off-road Vehicles			
Laboratory/Research	Military			

### **Environmental Data**

#### Temperature

Operating: -40°C to 85°C Storage: -50°C to 125°C

#### **Thermal Limits**

Compensated Range: 0°C to 85°C Thermal Effect Zero:  $\leq \pm 1.5\%$  FS Thermal Effect Span:  $\leq \pm 1.5\%$  FS

#### **Electrical Data**

Excitation: 9-36 VDC (4-20 mA), 13-36 VDC (0-5V, 0-10V)			
Current Consumption: < 5 mADC			
Zero Offset: ≤± 0.25% of FS			
Span Tolerance: ≤±1.0% of FS			
Output Load: >10K Ω			
Range Cal Signal: Internal Resistor 100%			

Spectre Corp 7912 Root Road Suite C/D North Ridgeville, Ohio 44039



www.SpectreCorp.com Phone: (440) 250-0616 Fax: (440) 353-0269 E-Mail: info@spectresensors.com