

## **DOWNHOLE PRESSURE TRANSDUCER**

## **IPT-4N-750HT**

- Internally Compensated
- Excellent Long Term Stability .1% Typical
- All Wetted Materials Inconel
- **Built In Temperature Sensor**
- Silicon on Silicon Integrated Sensor VIS®
- High Unamplified Output
- Intrinsically Safe Applications Available (i.e. IS-IPT-4N-750HT)

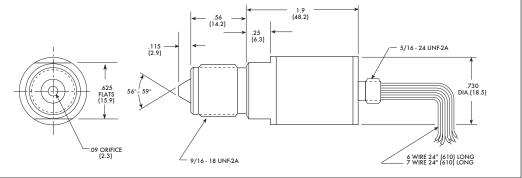
The IPT-4N-750HT Downhole Transducer utilizes Kulite's State of the Art, Silicon on Silicon Isolated Diaphragm sensing technology, to provide excellent long term stability and high accuracy at temperatures to 350°F. All wetted materials are Inconel

This transducer is equipped with internal circuitry to compensate for the inherent thermal sensitivity of the silicon sensor. With no further compensation, it will offer an overall accuracy improvement across the entire range of typical well environments.



W	WIRING DIAGRAM		
COLOR	7 WIRE FUNCTION	6 WIRE FUNCTION	
RED	+ INPUT	+ INPUT	
YELLOW	+ OUTPUT	+ OUTPUT	
BLUE	- OUTPUT	- OUTPUT	
GREEN	- INTPUT	- INPUT	
ORANGE	CASE GROUND	CASE GROUND	
BLACK	RTD	BRIDGE TEMP*	
WHITE	RTD		
*BE	RIDGE TEMPERATI	IRF	

IS MEASURED BETWEEN GREEN (-IN) AND BLACK



	Pressure Range	70 170 350 700 1050 BAR 1000 2500 5000 10000 15000 PSI		
INPUT	Operational Mode	Absolute		
	Over Pressure	2 Times Rated Pressure Range or 22500 PSI Whichever is Less		
	Burst Pressure	3 Times Rated Pressure Range or 22500 PSI Whichever is Less		
	Pressure Media	Any Liquid or Gas Compatible With Inconel		
	Rated Electrical Excitation	10 VDC/AC (RMS)		
	Maximum Electrical Excitation	12 VDC/AC (RMS)		
	RTD Excitation	1mA (2 mA Max.)		
	Input Impedance	2500 Ohm (Min.)		
	Output Impedance	2500 Ohms (Nom.)		
	Full Scale Output (FSO)	100 mV (Nom.)		
	Temperature Sensor	1000 Ohm Platinum RTD Per DIN EN 60751 (IEC 751) (BS 43760) Class A		
5	Residual Unbalance	+ 3 mV - 0mV		
DUTPUT	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)		
	Resolution	Infinitesimal		
	Natural Frequency of Sensor (KHz) (Typ.)	720 910 1120 1350 1500		
	Insulation Resistance	100 Megohm Min. @ 50 VDC		
	Operating Temperature Range	-40°F to +350°F (-40°C to +175°C)		
با	Compensated Temperature Range	0°F to +350°F (-18°C to +175°C)		
N.	Thermal Zero Shift	± .5% FS/100°F (55°C) (Typ.)		
ENVIRONMENTAL	Thermal Sensitivity Shift	± 1% /100°F (55°C) (Typ.)		
S S	Linear Vibration	20g Peak, Sine 10 to 2000 Hz		
Ž	Acceleration	100 g		
ш	Acceleration Sensitivity	Not Greater Than .00003% FS/g		
	Mechanical Shock 20g Half Sine Wave 11 msec. Duration			
۲	Pressure Port	9/16-18 UNF-24, Mates with Autoclave F250C		
PHYSICAL	Electrical Connection	7 Wire 24" (610) Long (Internal RTD) 6 Wire 24" (610) Long (Internal Bridge Temp.)		
HX	Weight	110 Grams (Max.) Excluding Cable		
_	Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon		

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (N) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.