## 5 VDC OUTPUT HIGH ACCURACY MICROPROCESSOR CORRECTED AIRCRAFT IS® PRESSURE TRANSDUCER APTE-DC-1100 SERIES

- 5 VDC Microprocessor Corrected Output
- Rugged All Welded Construction
- Certified For TSO C-47 or Equivalent
- Excellent Long Term Stability
- Analog Output

- High Overload Capabilities
- Intrinsically Safe
   Applications Available
   (i.e. IS-APTE-DC-1100)





The ingenious application of modern solid state technology to pressure sensing makes the APTE-DC-1100 Series the most advanced pressure transducer available of its class. Designed to measure liquid or gas pressure, the transducer is of all-welded stainless steel construction, with integral pressure port and isolation diaphragm. The APTE-DC-1100 provides an extremely rugged, accurate and inexpensive means for pressure-to-voltage conversion. The output, and the ability to withstand high voltages between leads and case make the APTE-DC-1100 Series Transducers ideally suited for aerospace and a large number of industrial applications.

The APTE-DC-1100 is a 5 volt unit containing a hybrid microelectronic microprocessor correction amplifier and regulator within the all welded case.



## PRESSURE INIET ORIFICE .031 DIA. (.79)    WIRING	PTIH-8-4P CONNECTOR OR EQUIVALENT  CONSULT FACTORY FOR SPECS. ON SEALED GAGE
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INPUT Pressure Range	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	170 2500	350 BAR 5000 PSI	
Operational Mode	Absolute, Sealed Gage								
Over Pressure	2 Times Rated Pressure								
Burst Pressure	5 Times Rated Pressure Range to a Maximum of 20000 PSI (1400 BAR)								
Pressure Media	Any Liquid or Gas Compatible With 15-5 PH or 316 SS								
Rated Electrical Excitation	12 ± 4 VDC or 28 ± 4 VDC (Reverse Polarity Protection Available Upon Request)								
Maximum Electrical Current	25 mA (Max.)								
OUTPUT Output Impedance	50 Ohms (Typ.)								
Full Scale Output (FSO)	5 VDC								
Residual Unbalance	0.5V								
Total Error Band	± 0.2% (Typ.) (±0.4% Typ. for 25 PSI (1.7 BAR) (End Point Settings, Combined Non-Linearity, Hysteresis, Repeatability and All Thermal Effects Included)								
Bandwidth (-3dB)	DC to 2500 Hz								
Resolution	Infinitesimal								
Insulation Resistance	100 Megohm Min. @ 50 VDC								
ENVIRONMENTAL Operating Temperature Range	-40°F to +280°F (-40°C to +140°C)								
Compensated Temperature Range	-40°F to +250°F (-40°C to +120°C)								
Linear Vibration	50g Peak, Sine 10 to 2000 Hz								
Altitude	-150 ft. to +70,000 ft. Will Not Damage Sensor								
Humidity	100% Relative Humidity								
Mechanical Shock	100g half Sine Wave 1 msec. Duation								
PHYSICAL Pressure Port		A. 33656/E	E4 7/16-20 UNJF-3	BA B. 1/4"	-18 NPT Male	C. Other Po	orts Available		
Electrical Connection	PTIH-8-4P or Equivalent								
Weight	120 Grams Approx.								
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon								
Mounting Torque	80-100 Inch-Pounds (Max.)								

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters.