

# Vibration Monitor

## 960TX (NSN 6680-01-380-9450)

The Columbia 960-TX is designed specifically to monitor vibration generated by Military and Commercial helicopter engines, transmissions and airframes. The 960-TX has three miniature mutually perpendicular vibration sensors mounted into a rugged machined housing which incorporates a single central mounting screw.

The 960-TX features integrated thick film electronic signal conditioning circuitry which provides high sensitivity, temperature compensation and low impedance output drive capability. The sensor configuration is ideally suited to other vibration monitoring applications such as aircraft modal and structural analysis, shipboard engine vibration monitoring, commercial machinery vibration monitoring and as the primary vibration sensor for all predictive maintenance vibration diagnostic systems.

- ENGINE, TRANSMISSION AND AIRFRAME VIBRATION MEASUREMENT



### SPECIFICATIONS

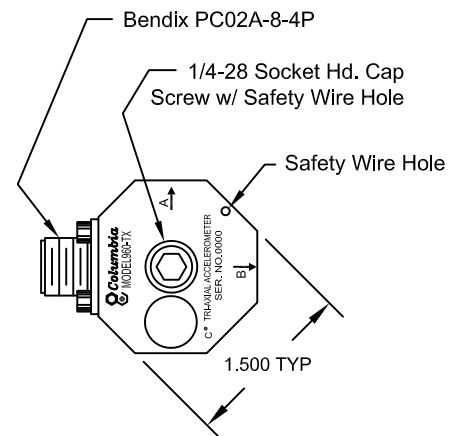
	960TX
<b>Electrical</b>	
Sensitivity	10mV/g Nominal
Output Impedance	<600Ω
Frequency Range @±1dB	1 to 10,000Hz (Single Axis) 2 to 2,000 Hz (Mounted A,B,C Axis)
Bias Voltage	8±1.5VDC
Transverse Sensitivity	5% Maximum
Amplitude Linearity	±1% to 100g
Power Requirements	2mA±5% @ a Reference of 18-30VDC
Spectral Noise @2.5Hz	-116dB/√Hz Maximum
Broadband	<0.002RMS Equivalent (2-25kHz)
Absolute Phase Shift	<6°@2.5Hz Maximum
Relative Phase Shift	±2°@2.5Hz Maximum
Electrical Isolation	Case Isolated

### Environmental

Temperature Range	-35 to +120°F (-37 to +48°C)
Vibration Limit	500 g Max (Sine)
Shock Limit	10,000 g Max

### Physical

Finish	Black Anodize per MIL-A-8625
Size	1.50" Hex x 0.900" H (38.1mm Hex x 22.86mm H)
Weight	3.17oz (90gm)
Case Material	6061 Aluminum
Electrical Interface	PC02A-8-4P
Case Mounting	#1/4-28 Cap Screw



### Accessories Supplied

- (1) Hardwood Storage Case
- (1) Standard Calibration Data
- (1) Certificate of Calibration Traceable to N.I.S.T.