

Vibration Monitor

961 (NSN 6680-01-383-9369)

The Columbia 961 is designed specifically to monitor vibration generated by Military and Commercial helicopter engines, transmissions and airframes. The Columbia 961 incorporates an integral two conductor shielded cable and is available with an optional top mount 10-32 connector.

The Columbia Model 961 features integrated thick film electronic signal conditioning circuitry which provides high sensitivity, temperature compensation and low impedance output drive capability. This 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

	961
Electrical	
Sensitivity	10mV/g Nominal
Output Impedance	<600Ω
Frequency Range @±1dB	2 to 15,000Hz
Bias Voltage	8±1.5VDC
Transverse Sensitivity	5% Maximum
Amplitude Linearity	±1g to 100%
Power Requirements	2mA±5% @ a Reference of 18-30VDC
Spectral Noise @2.5Hz	160µg/√Hz Nominal
Broadband	<0.002RMS Equivalent (2-25kHz)
Absolute Phase Shift	<5°@2.5Hz Maximum
Relative Phase Shift	±2°@2.5Hz Maximum
Electrical Isolation	Case Isolated

Environmental

Temperature Range	-30 to +225°F (-34 to +107°C)
Vibration Limit	500 g Max (Sine)
Shock Limit	10,000 g Max

Physical

Size	0.500" Hex x 13" H (12.7mm Hex x 330.2mm H)
Weight	0.705oz (20gm)
Case Material	Stainless Steel
Electrical Interface	13" Minimum, Two Conductor Cable with PC01A-8-4P Connector
Case Mounting	1/4-28 Tapped Base

Accessories Supplied
(1) 1/4-28UNF-2B (1) Hardwood Storage Case (1) Standard Calibration Data (1) Certificate of Calibration Traceable to N.I.S.T.

