

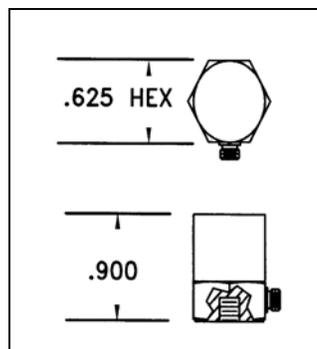
Columbia Research Laboratories, Inc. **General Purpose Accelerometers**

Models 3030 & 3030-HT 3031 & 3031-HT 3032 & 3032-HT

- *Vibration & Shock
- *Choice of Sensitivities
- *Side Connector
- *Hermetically Sealed
- *10-32 Mounting Stud

The Models 3030, 3031 and 3032 Piezoelectric Accelerometers are offered in a choice of sensitivities for general vibration and shock work. The internal construction of the piezoelectric seismic system ensures that the units have no discernible spurious response to mounting torque, body strains, cable vibration, cable whip, pressure variations and most heat transients.

The sensors' stainless steel housing provides an environmentally rugged unit, and the hermetically sealed welded construction offers protection against high humidity environments. Signal ground is connected to the outer case of the unit. These accelerometers feature a 10-32 side connector and are provided with a 10' low-noise coaxial cable. High temperature units will operate in environments up to +500 Deg. F. *Consult the factory for customized versions of these sensors.*



Specifications

Transfer / Electrical	3030 & 3030-HT	3031 & 3031-HT	3032 & 3032-HT
Charge Sensitivity ¹	65 +/-10 pC/g	35 +/-5 pC/g	15 +/-3 pC/g
Capacitance	700 +/-60 pF	650 +/-60 pF	650 +/-60 pF
Frequency Linearity ²	+/-5% Max 2 Hz To 6,000 Hz	+/-5% Max 2 Hz To 7,000 Hz	+/-5% Max 2 Hz To 9,000 Hz
Mounted Resonant Frequency	30 KHz, Nom.	35 KHz, Nom.	45 KHz, Nom.
Transverse Sensitivity	5% Max		
Amplitude Linearity	+/-1.0% (BFSL) / 300g		+/-1.0% (BFSL) / 1,000g
Insulation Resistance	20,000 M Ohm Min, 50 VDC Test		
Isolation Resistance	0 (Case Grounded)		

Environmental

Vibration Limit	1,000 g Max (Sine)	1,500 g Max (Sine)	
Shock Limit	2,000 g Max	5,000 g Max	10,000 g Max
Temperature Range	Models 3030, 3031, 3032 -100 To +350 Deg F (-73 To +175 Deg C)		
	Models 3030HT 3031HT 3032HT -100 To +500 Deg F (-73 To +260 Deg C)		
Humidity ³	0 To 100% R.H.		
Base Strain Sensitivity	0.008 g/uE Equiv, Typical		
Electromagnetic Sensitivity	0.02 g (Equiv / 100 Gauss)		

Physical

Configuration	Single Ended Compression		
Size	0.625 In. Hex. x 0.900 In. H (15.9 mm Hex x 22.9 mm H)		
Weight	1.1 Oz (31 Gm)	1.0 Oz (28 Gm)	0.9 Oz (25 Gm)
Case Material	18-8 Stainless Steel		
Electrical Interface	Coaxial 10-32 Thread		
Mounting	10-32 Tapped Base		

NOTES:

¹ At +75 Deg F, 10g Peak, 100Hz; Lower Frequency Limit is Determined by Associated Electronics

² Referenced to Sensitivity @ 100 Hz.

³ With Connector Protected or Sealed, Unit is Hermetically Sealed

Accessories Supplied:

- (1) Miniature Cable Assy, LNHT-10'
- (1) 10-32 x 0.375"L Mounting Stud, St Stl
- (1) Hardwood Storage Case
- (1) Standard Calibration Data
- (1) Certificate of Calibration Traceable to N.I.S.T.

R111604

Columbia Research Laboratories, Inc. 1925 Mac Dade Blvd. Woodlyn, PA 19094
Phone: 1.800.813.8471 / Fax: 610.872.3882 / email: sales@columbiaresearchlab.com