

## High Frequency Shear Type Accelerometer with Integrated Electronics (ICP-type) Performance Requirements

1. The accelerometer in question should meet the following specifications:
  - a. **Sensitivity (+/- 10%):** 100 mV/g
  - b. **Measurement Range:** -50g to +50g or better
  - c. **Frequency Range (linear within +/- 3dB):** 6Hz to 20 KHz or better is acceptable. 1Hz-20KHz is preferable.
  - d. **Broadband Resolution:** 0.0005 g (rms) or better
  - e. **Transverse Sensitivity:** 5% or less
  - f. **Usable temperature range:** -10°F to +200°F or better
  - g. **Base Strain Sensitivity:** 0.003g/ $\mu\epsilon$  or better
  - h. **Excitation Voltage:** 18-30 VDC
  - i. **Constant Current Excitation:** 2 to 20mA
  - j. **Sealing:** Hermetically sealed case
  - k. **Mounting Thread:** 10-32 Female
  - l. **Electrical Connector:** 10-32 coax jack, top mount, is preferable. 6-40 NF-2A or m3 coax jacks are also acceptable.
  - m. **Size:** 0.625 in (hex) x 1 in (height) or smaller
  - n. **Weight:** .5 oz or smaller
  - o. **TEDS Compatibility:** Compatibility with Transducer Electronic Data Sheet (TEDS) is required. IEEE 1451.4 [1] standard or LMS/PCB TEDS versions are acceptable.
  - p. **Calibration:** A calibration laboratory that is certified to be in compliance with ANSI/NCSL Z540-1-1994 will perform the initial calibration

**50KHz Shear Type Accelerometer with Integrated Electronics (ICP-type)  
Performance Requirements**

1. The accelerometer in question should meet the following specifications:
  - a. **Sensitivity (+/- 10%):** 100 mV/g
  - b. **Measurement Range:** +/-50g or better
  - c. **Frequency Range (linear within +/- 3dB):** 6Hz to 50 KHz or better
  - d. **Residual Noise:** 0.0005 g (rms) or better
  - e. **Transverse Sensitivity:** 5% or less
  - f. **Usable temperature range (+/- 10%):** -10°F to +200°F or better
  - g. **Base Strain Sensitivity:** 0.005g/ $\mu\epsilon$  or better
  - h. **Excitation Voltage:** 18-30 VDC
  - i. **Constant Current Excitation:** 2 to 20mA
  - j. **Sealing:** Hermetically sealed case
  - k. **Mounting Thread:** 10-32 Female
  - l. **Electrical Connector:** 10-32 coax jack preferable. 6-40 NF-2A or m3 coax jacks are also acceptable.
  - m. **Size:** 0.625 in (hex) x 1 in (height) or smaller
  - n. **Weight:** .5 oz or smaller
  - o. **TEDS Compatibility:** Compatibility with Transducer Electronic Data Sheet (TEDS). IEEE 1451.4 [1] standard or LMS/PCB TEDS versions are both acceptable.
  - p. **Calibration:** A calibration laboratory that is certified to be in compliance with ANSI/NCSL Z540-1-1994 will perform the initial calibration.