

Model 4807A High Resolution Accelerometer



Measurement Specialties, Inc. (NASDAQ: MEAS) has just released to production its ultra low noise [Model 4807A Accelerometer](#). This DC response accelerometer features micro-g resolution and offers an industry-first, remote auto zero function. The 4807A provides an amplified, signal conditioned output in ranges from $\pm 2g$ to $\pm 200g$ with a dynamic range of 98dB. This sensor incorporates a gas damped silicon MEMS sensing element with integral mechanical overload stops for shock protection up to 5,000g as well as a wide bandwidth from DC to 1500Hz.

Specifically designed for low level vibration monitoring, the 4807A can be used in diverse applications such as transportation testing, flight testing, machine control and structural monitoring. Its stainless steel, hermetically sealed housing ensures reliable operation in rugged environments while its $\pm 2Vdc$ bias output is compatible with industry-standard instrumentation. The Model 4807A features a Total Error Band of $<2\%$ with an excitation voltage range from 8 to 18Vdc. The <2 second turn on time of the 4807A plus a broad compensated temperature range ($-40^{\circ}C$ to $+121^{\circ}C$) makes this accelerometer an “all-weather” sensor that can jump to life quickly in power-starved installations.

The IP67 rating of this accelerometer provides significant protection in high humidity environments and against liquid incursion. The optional detachable cable (340A), triaxial mounting block (AC-D02652) and convenient three channel DC signal condition/amplifier (101) facilitates ease of installation. Those wishing the remote auto-zero function would choose the 341A cable assembly. Each unit is packaged with an NIST traceable calibration certificate. These devices are EAR99 export compliant and warranted for a period of one year from date of shipment to original purchaser to be free from defects in material and workmanship.

Measurement Specialties, Inc. designs and manufactures sensors and sensor-based systems. The company produces a wide variety of sensors and transducers to measure precise ranges of physical characteristics such as pressure, force, vibration, torque, position, temperature, humidity, fluid properties, mass air flow and photo optics. Measurement Specialties uses multiple advanced technologies – including piezo-resistive, electro-optic, electro-magnetic, variable reluctance, magneto resistive, digital encoders, thermistors, thermocouples, RTDs, capacitive, resonant beam, application specific integrated circuits (ASICs), micro-electromechanical systems (MEMS), piezoelectric polymers and strain gauges to engineer sensors that operate accurately and cost-effectively in customers' applications.

For more information about Measurement Specialties and our products, email t&m@meas-spec.com or visit us at www.meas-spec.com.