

# Model EGAS Accelerometer

Miniature Design  
DC Response  
10,000 g Overrange STops  
Broad Temperature Range

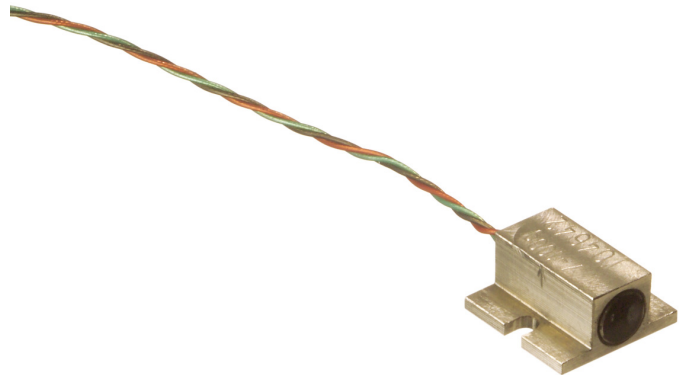
The Model EGAS is a miniature, uniaxial accelerometer featuring ranges from +/- 5 g's through 2500 g's. This rugged unit weighs less than 1 gram (without leads) and has an over range limit of +/- 10,000 g's. The 1/2 active bridge is suitable for shunt calibration. With an operating temperature range of -40°C to 120°C, the EGAS is the unit of choice for measurement professionals in the automotive, military, aerospace and transportation industries. Its combined nonlinearity and hysteresis of +/- 1% makes the EGAS well-suited for on-site testing as well as laboratory use.

## FEATURES

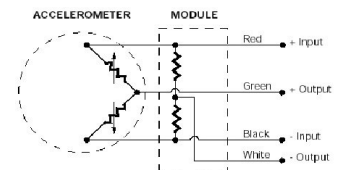
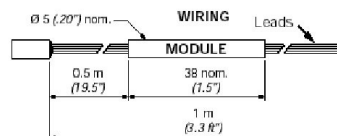
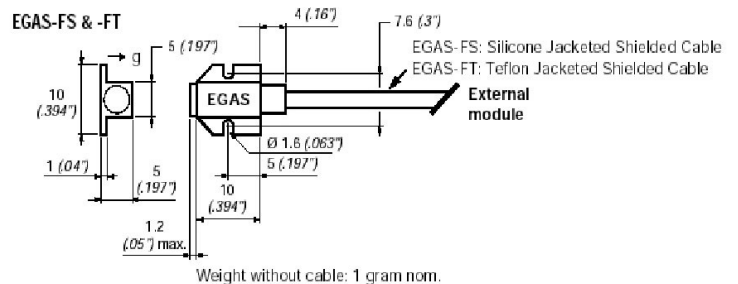
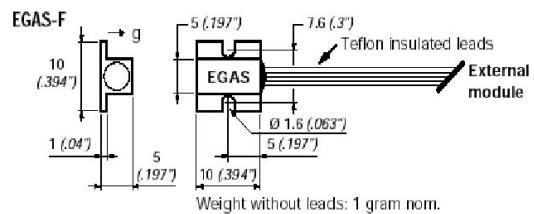
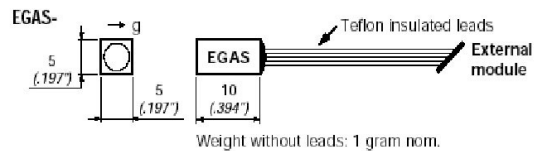
- Small Size
- Weighs < 1 gram
- Static and Dynamic Measurement
- Frequency Response through 3500 Hz
- 2% Transverse Sensitivity
- Damping Ratio 0.7

## APPLICATIONS

- Sports and recreation
- Modeling
- Biodynamics
- Entertainment



## dimensions



# Model EGAS Accelerometer

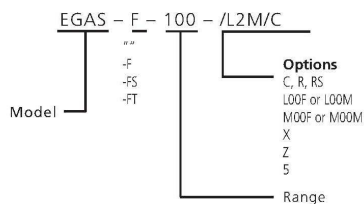
## performance specifications

All values are typical at 25°C and at 15 Vdc excitation unless otherwise stated. Measurement Specialties, Inc. reserves the right to update and change these specifications without notice.

Parameters											
<b>DYNAMIC</b>											
Range(g)		5	10	25	50		100	250	500	1000	2500
Sensitivity (mV/g)		15	10	4	2		1	0.4	0.2	0.1	0.04
Frequency Response (Hz)		0-150	0-200	0-400	0-600		0-900	0-1300	0-1750	0-2500	0-3500
Resonance (Hz)		300	400	800	1200		1800	2600	3500	5000	10000
Non-Linearity (%)							±1				
Transverse Sensitivity (% MAX)							3				
Zero Acceleration Output (mV)							±15				
Thermal Zero Shift (50°C/100°F)							±1.0mV				
Thermal Sensitivity Shift (50°C/100°F)							±2.5%				
Damping Ratio (Nominal)							0.7				
<b>ELECTRICAL</b>											
Voltage Excitation (Vdc)							15				
Input Resistance (Ohms)							1300				
Output Resistance (Ohms)							1500				
Cable Output Connections											
	Red						+EXC				
	Black						-EXC				
	Green						+OUT				
	White						-OUT				
<b>PHYSICAL</b>											
Case Material							Aluminum				
Cable Connections							24 inch, 4 conductor leads				
Weight (grams)							<=1				
Mounting							Adhesive and Screw Mount Versions Available				
<b>ENVIRONMENTAL</b>											
Shock Limit for Sensitive Axis (EGAX), all Axis (EGAXT)							10,000				
Operating Temperature (°C/°F)							-40 to 120/-40 to 250				
Compensated Temperature (°C/°F)							20 to 80/70 to 170				

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## ordering info



- COMPENSATED TEMPERATURE RANGES:**  
 STANDARD = 20°C to 80°C (70°F to 170°F)  
 Z\* = Non-standard, contact factory.  
 S = 5 Wire
- 5 WIRE BRIDGE WIRING FOR ADJUSTABLE ZERO OFFSET:**
- EXCITATION VOLTAGE:**  
 STANDARD = 15VDC
- SPECIAL LEAD LENGTH:**  
 LOOF = Replace "00" with total length in feet.  
 LOOM = Replace "00" with total length in meters.  
 MOOF = Replace "00" with distance between sensor and module in feet.  
 MOOF = Replace "00" with distance between sensor and module in meters.
- SPECIAL MODULE LOCATION:**  
 MOOF = Replace "00" with distance between sensor and module in meters.
- CONNECTOR WIRED TO LEADS:**  
 C = Microtech type male or equivalent (w/o mate)