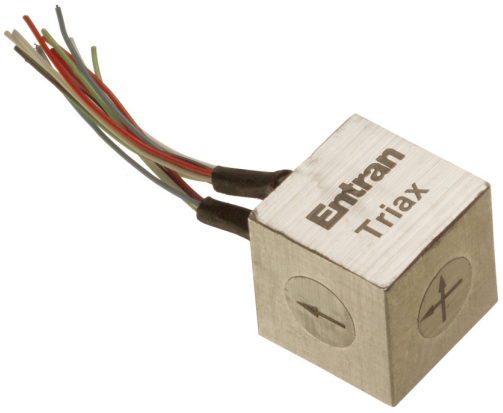
Model EGAXT3 Accelerometer

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



The Model EGAXT3 miniature triaxial accelerometer combines a damping ratio of 0.7 (Nominal) with built-in overrange stops that are set to protect the unit against 10,000g shocks. This is ideal for applications which may experience rough handling or in situations where the accelerometer must survive a high initial overload in order to make a low g measurement. These units feature a Wheatsone Bridge output with compensated temperature range of 20 to 80 ℃.

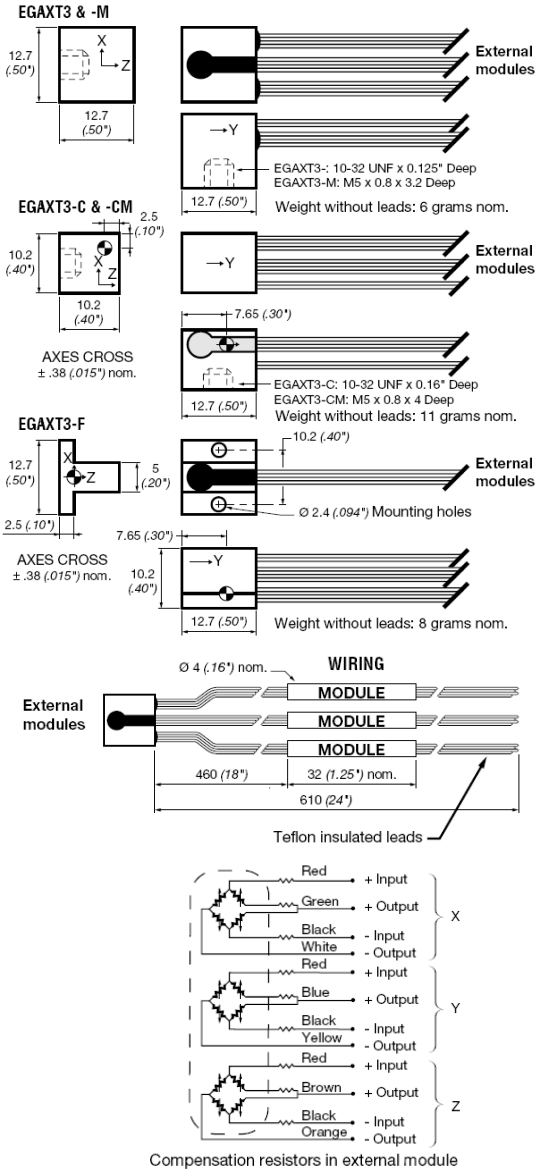
FEATURES

- Miniature Triaxial
- Low Weight
- Static and Dynamic Measurement
- Frequency Response through 3000 Hz
- ±1% Non-Linearity
- -40℃ to +120℃ Operating Range
- 10,000 g Overrange Protection

APPLICATIONS

- Flight Test & Control
- Launch
- Robotics
- Shock Testing

dimensions



32 Journey Ste. 150 Aliso Viejo, CA 92656 949-716-5377 enduser@meas-spec.com

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performance specifications

All values are typical at +24°C, 100Hz and 15Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters											
DYNAMIC											**Notes**
Range (g)	±5	±10	±15	±25	±50	±100	±250	±500	±1000	±2500	
Sensitivity EGAXT (mV/g)	5.2-11.3	4.2-9.0	3.1-6.8	2.1-4.5	1.57-3.38	1.05-2.25	.52-1.13	.35-.75	.17-.38	.07-.15	
Frequency Response min. (Hz)	0-120	0-140	0-220	0-300	0-350	0-400	0-500	0-750	0-1000	0-1400	±1/2dB
Frequency Response nom. (Hz)	0-250	0-300	0-450	0-600	0-700	0-900	0-1000	0-1500	0-2000	0-3000	±1/2dB
Natural Frequency (Hz)	500	600	900	1200	1400	1700	2000	3000	4000	6000	
Non-Linearity (%FSO)	±1	±1	±1	±1	±1	±1	±1	±1	±1	±1	
Transverse Sensitivity (%)	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Damping Ratio	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	Nominal
Shock Limit (g)	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	All 3 Axes

ELECTRICAL		
Zero Acceleration Output (mV)	±15	Differential
Excitation Voltage (Vdc)	15 (can be used from 2 to 15Vdc but lower excitation voltage will decrease sensitivity accordingly)	
Input Resistance (Ω)	1000	Nominal
Output Resistance (Ω)	450	Nominal
Insulation Resistance (MΩ)	>100	@50Vdc
Ground Isolation	Isolated from Mounting Surface	
ENVIRONMENTAL		
Thermal Zero Shift	±2.5mV / 50°C (±2.5mV / 100°F)	
Thermal Sensitivity Shift	+1 to -4% / 50°C (+1 to -4% / 100°F)	
Operating Temperature	-40 to 120°C (-40 to 250°F)	
Compensated Temperature	20 to 80°C (70 to 170°F), contact factory for other temperature compensation options	
Storage Temperature	-40 to 120°C (-40 to 250°F)	
Humidity	Epoxy Sealed	
PHYSICAL		
Case Material	Aluminum	
Cable	12x Teflon Leads, 24 inch	
Weight	6-11 grams	
Mounting	Adhesive or Screw Mount Versions Available (-F configuration)	
AWG	#34	

Wiring color code:

X-axis:	+Excitation = Red;	-Excitation = Black;	+Output = Green;	-Output = White
Y-axis:	+Excitation = Red;	-Excitation = Black;	+Output = Blue;	-Output = Yellow
Z-axis:	+Excitation = Red;	-Excitation = Black;	+Output = Brown;	-Output = Orange

ordering info

EGAXT3 – F – 100 - /L2M/C

- Model: EGAXT3
- Housing: " " or F
- Range (X/Y/Z): 100
- Options: C, L00F or L00M, M00F or M00M, V1 thru V15, S

COMPENSATED TEMPERATURE RANGES:	STANDARD	=	20°C TO 80°C (70°F TO 170°F)
	Z*	=	Non-Standard, contact factory
5 WIRE BRIDGE WIRING FOR ADJUSTABLE ZERO OFFSET:	5	=	5 wire
EXCITATION VOLTAGE:	STANDARD	=	15 Vdc
	V00	=	Replace "00" with Excitation between 1 and 15. If less than 15, Sensitivity (FSO) will decrease accordingly.
SPECIAL LEAD LENGTH:	L00F	=	Replace "00" with total length in feet
	L00M	=	Replace "00" with total length in meters
SPECIAL MODULE LOCATION:	M00F	=	Replace "00" with distance between sensor and module in feet
	M00M	=	Replace "00" with distance between sensor and module in meters
CONNECTOR WIRED TO CABLE:	C	=	Microtech male or equivalent *w/o mate)

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