



- DC Response Accelerometer
- Durable, Low Noise Cable
- Vehicle Crush Zone Testing
- Low Cost, High Performance

The Model 1201 Accelerometer is a small, compact uniaxial device designed for vehicle impact and road testing. Its mechanical overload stops provide high shock protection in rugged applications. Featuring ranges from  $\pm 50$  g to  $\pm 1000$ g and frequency response to 3000 Hz, this sensor is easily mounted in hard to get places on vehicles under test.

For a similar accelerometer designed for bolt mounting, see the model 1201F.

## FEATURES

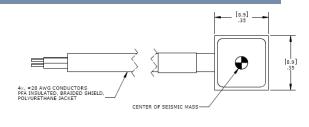
- Advanced MEMS Sensing Element
- ±50g to ±1000 g Dynamic Range
- 2-10 Vdc Excitation
- 0-50 °C Temperature Range
- ±40 mV Zero Measurand Output
- Gas Damping
- Connector Options
- Mechanical Overload Stops

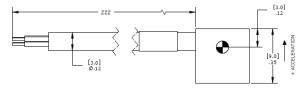
## **APPLICATIONS**

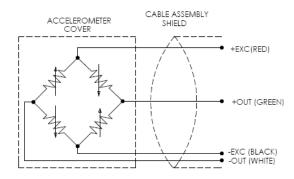
- Crash Testing
- Crush Zone Testing
- Impact Testing
- Off-Road Testing
- Transportation Testing



# DIMENSIONS







### PERFORMANCE SPECIFICATIONS

All values are typical at  $\pm 24^{\circ}$ C, 80 Hz and 10 Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters <b>DYNAMIC</b> Range(g) Sensitivity (mV/g) <sup>1</sup> Frequency Response (Hz) Natural Frequency (Hz) Non-Linearity (% FS) Damping Ratio	-0050 ±50 2.0 0-800 2000 ±1 0.7	-0100 ±100 0.9 0-1000 3000 ±1 0.5	-0200 ±200 0.9 0-1400 4000 ±1 0.5	-0500 ±500 0.40 0-2000 6000 ±1 0.3	-1000 ±1000 0.15 0-3000 7000 ±1 0.1	Notes @ 10Vdc excitation ±5% Typical
Transverse Sensitivity (%) Shock Limit (g)	<3 3000	<3 3000	<3 4000	<3 5000	<3 5000	
<b>ELECTRICAL</b> Zero Acceleration Output (n Excitation (Vdc) Input Resistance $(\Omega)$ Output Resistance $(\Omega)$ Insulation Resistance (M $\Omega$ ) Ground Isolation	2 to 10 2400-60 2400-60 >100		surface.			@50Vdc
ENVIRONMENTAL Thermal Zero Shift (%FSO/ Thermal Sensitivity Shift (% Operating Temperature (°C) Humidity	/°Č) ±0.2 ) -20 to +	85 Sealed, IP65				From 0 to +50°C From 0 to +50°C
<b>PHYSICAL</b> Case Material Cable Weight (grams) Mounting		ed Aluminum AWG Conductor ve	Cable Not Included			
<sup>1</sup> Output is ratiometric to excitation voltage						
Calibration supplied:	d: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±5% Frequency Limit					
Ontional accordantion	101	Three Chennel	DC Different	ial Amplificr		

Optional accessories:	121	Three Channel DC Differential Amplifie		
-	140A	Auto-zero Inline Amplifier		

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### ORDERING INFORMATION

PART NUMBERING Model Number+Range+Cable Length+Options

1201-GGGG	i-ZZZ-	XXX		Option	al Dash Numbers
I	I	I	Options (otherwise leave blank)	-001	5Vdc Calibration
1	<u> </u>		Cable (360 is 360 inches)	-002	2Vdc Calibration
I			Range (0100 is 100 g)	-005	Lemo FGG.1B.307 and Dallas DS2401
Installed					

Example: 1201-1000-360 Standard Configuration: 1000g, 360" (30ft) cable, No Options

#### **NORTH AMERICA**

Measurement Specialties, Inc., a TE Connectivity Company Tel: 800-522-6752 Email: <u>customercare.hmpt@te.com</u>

#### EUROPE

MEAS France SAS a TE Connectivity Company Tel: 800-440-5100 Email: <u>customercare.lcsb@te.com</u>

#### ASIA

Measurement Specialties (China), Ltd., a TE Connectivity Company Tel: 0400-820-6015 Email: customercare.shzn@te.com

#### TE.com/sensorsolutions

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