

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China













- Full Scale range ±2 g to ±500 g
- DC Response
- Integrated Over-range Stops
- Solid State Reliability
- High Level Output Model with Integrated Amplifier

DESCRIPTION

The FA101 is a general purpose accelerometer which is especially useful for measuring low-level ranges. Packaged in a rugged metal case, the FA101 accelerometers are designed for easy handling to suit a wide range of environmental conditions. They are also available with built-in A1/A2 module, providing internal signal conditioning.

With many years of experience as a designer and manufacturer of sensors, Measurement Specialties Inc. has the expertise to customize and/or design sensors for specific uses and testing environments. To meet your needs we also offer complete turnkey systems. Our conditioning electronics can power the sensor, amplify the electronic signal, and display the data digitally. A turnkey measurement system arrives with matched components, formatted, calibrated and ready for your immediate use.

FEATURES

- Full Scale Range ±2 g to ±500 g
- DC Response
- Integrated Over-range Stops
- Solid State Reliability
- High Level Output Model with Integrated Amplifier

APPLICATIONS

- Structure vibration analysis and control
- Monitoring of machinery
- Robotics and effectors
- Laboratory and Research

STANDARD RANGES

Measurement Range (g)	±2	±5	±10	±20	±50	±100	±200	±500
Over-range (g)	400	400	400	400	1000	2000	2000	2000
Frequency Response ±5% (Hz) FA101/FA101-24/FA101- A2	0-200	0-250	0-300	0-500	0-750	0-1000	0-1200	0-1250
Frequency Response ±5% (Hz) FA101-A1	0-100	0-150	0-250	0-400	0-700	0-700	0-700	0-700
Frequency Response ±5% (Hz) FA101-A3	0-200	0-250	0-300	0-500	0-750	0-1000	0-1000	0-1000



PERFORMANCE SPECIFICATIONS

Ambient Temperature: 20±1°C (unless otherwise specified)

Parameters	
Operating Temperature Range (OTR)	-20 to 80º C (0 to 176°F)
Compensated Temperature Range (CTR)	0 to 60° C (32 to 140°F)
Zero Shift in CTR	< 2 % F.S./ 50° C (100°F)
Sensitivity Shift in CTR	< 2 % of reading 50°C (100°F)
Range (F.S.)	± 2 to ± 500g
Over-Range	From 400-2000g
Accuracy	
Non-Linearity	<±2% F.S.
Transverse Sensitivity	<3%

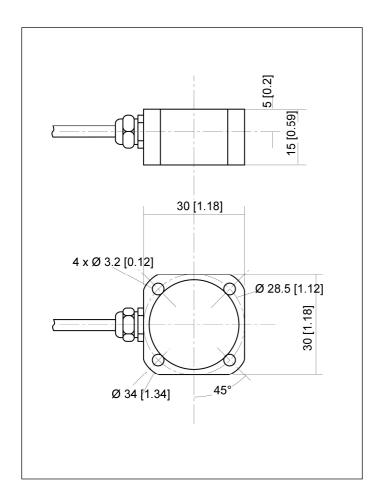
Electrical Characteristics

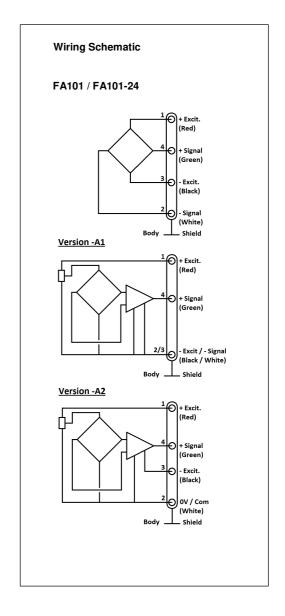
Model	FA101	FA101-24	FA101-A1	FA101-A2	FA101-A3
Supply Voltage	10Vdc	14 – 36Vdc	10 to 30Vdc	±15Vdc	12 to 36Vdc
F.S. Output	±20 to ±100mV	±20 to ±100mV	±2V(±250mV)	±5V±5%F.S	4 to 20mA
Zero Offset	<±10mV	<±10mV	2.5V(±250mV)	0V±5%F.S.	12mA±5%F.S.
Input Impedance	10kΩ	10kΩ	<30mA	<30mA	-
Output Impedance	<5kΩ	<5kΩ	<1kΩ	<1kΩ-	-
Insulation under 50Vdc	≥100MΩ	≥100MΩ	≥100MΩ	≥100MΩ	≥100MΩ

- 1. Electrical Termination: Cable gland termination; 2 m [6.5ft] cable length standard
- 2. Material: Housing in aluminum alloy
- 3. Weight w/o cable: <25g [0.055 lb]
 4. CE conformance according to EN 61010-1, EN 50081-1, EN 50082-1



DIMENSIONS & WIRING SCHEMATIC (IN METRIC AND IMPERIAL)







OPTIONS

-24 : Regulated excitation

A1: Amplified Tension output with unipolar power supply

A2: Amplified Tension output with bipolar power supply

A3: Amplified Current loop output

ET1: CTR -20 to 100°C [-4 to 212°F] OTR=CTR (Option unavailable with version A3)

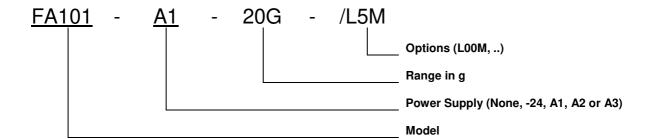
ET2: CTR-40 to 120°C [-40 to 248°F] OTR=CTR (Optio n unavailable with version A3)

L: Linearity ≤±1% F.S.

ZI: Zero shift ≤±1% F.S. / 50°C (100°F)

L00M: special cable length, replace "00" with total length in meters

ORDERING INFO



NORTH AMERICA EUROPE ASIA

Measurement Specialties, Inc.
Vibration Design Center
32 Journey - Suite 150
Aliso Viejo, CA 92656
United States USA

Tel: 1-949-716-0877 Fax: 1-949-916-5677 t&m@meas-spec.com Measurement Specialties (Europe), Ltd. 26 Rue des Dames 78340 Les Clayes-sous-Bois, France

Tel: +33 (0) 130 79 33 00 Fax: +33 (0) 134 81 03 59 cs.lcsb@meas-spec.com Measurement Specialties
(China), Ltd.
No. 26 Langshan Road
Shenzhen High-Tech Park (North)
Nanshan District, Shenzhen
518057
China

Tel: +86 755 3330 5088 Fax: +86 755 3330 5099 pfg.cs.asia@meas-spec.com

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.