

Digital triaxial MEMS accelerometer and temperature sensor

883M

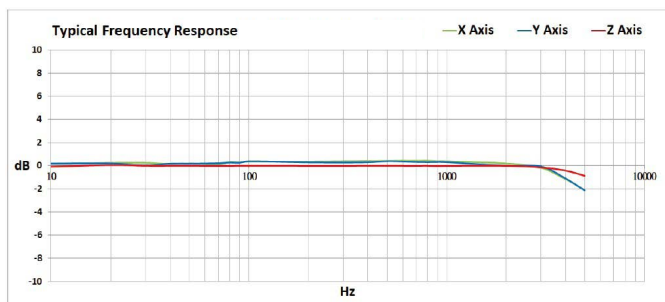
SPECIFICATIONS

DYNAMIC	
Acceleration range	±16 g, peak
Resolution	0.488 mg
Frequency response, ± 3 dB	2 Hz - 5 kHz
Resonance frequency	6.9 kHz
CALCULATED VIBRATION METRICS (X, Y, AND Z AXES)	
Acceleration, RMS	2 Hz - 1 kHz; 10 Hz - 5 kHz
Acceleration, peak	2 Hz - 1 kHz; 10 Hz - 5 kHz
Velocity, RMS	10 Hz - 1 kHz; 10 Hz - 5 kHz
Velocity, peak	10 Hz - 1 kHz; 10 Hz - 5 kHz
Displacement, RMS	2 Hz - 1 kHz; 10 Hz - 1 kHz
Displacement, peak	2 Hz - 1 kHz; 10 Hz - 1 kHz
OTHER OUTPUTS	
Temperature	-20° to +70° C
True peak	Fs @ 13.333 kHz
Spectrum	0 Hz - 5 kHz, 6145 lines
Time wave	13,333 samples, 1 second
Other features	crest factor standard deviation
COMMUNICATION	
Interface	RS485
Protocol	Modbus RTU
Recommended baud rate	9,600 or 115,200 bps
Max. baud rate	921,600 bps



Key features

- Modbus RTU communication protocol
- Digitally outputs vibration spectrum, time waveforms, and vibration characteristic values
- Frequency bands align with ISO 10816-3 and ISO 20816-3 guidelines



Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.

Digital triaxial MEMS accelerometer

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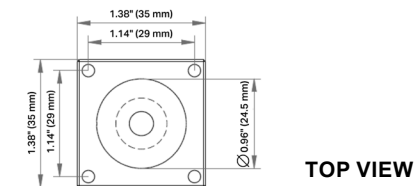
SPECIFICATIONS

ELECTRICAL		
Power	6 - 24 VDC	
LED Indicator	1 (RGB)	
ENVIRONMENTAL AND MECHANICAL		
Dimensions	35mm dia. x 26 mm h	
Weight	75 grams	
Sealing	IP67	
Case material:	upper lower	A6061 aluminum 303 stainless steel
Connector	4-socket M8	
Mating connector	4-pin M8	
Recommended cabling	4-conductor, PVC jacket, shielded	
Mounting	adhesive mount via sensor flat base screw mount adapter ¹ (optional) magnet mount adapter ¹ (optional)	
Operating temperature	-20° to +70° C	
Storage temperature	-20° to +80° C	
Operating humidity	5 - 95% RH	

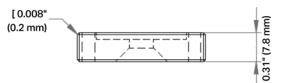
Notes: ¹ Mounting adapter allows the installer to mount the sensor in a specific orientation, as required for triaxial sensors, and provides proper cable exit placement.

SCREW MOUNT ADAPTER

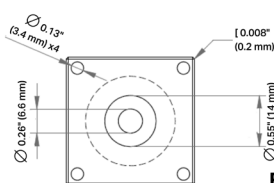
MAGNET MOUNT ADAPTER



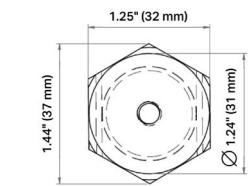
TOP VIEW



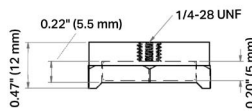
SIDE VIEW



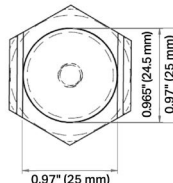
BOTTOM VIEW



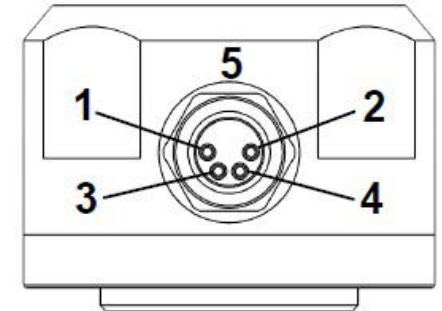
TOP VIEW



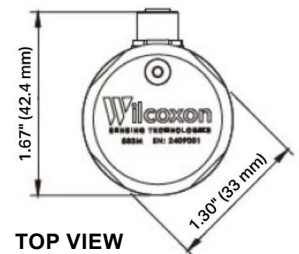
SIDE VIEW



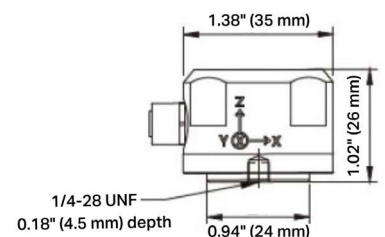
BOTTOM VIEW



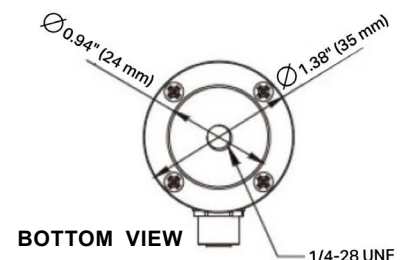
Connections	
Function	Connector pin
power	1
ground	2
signal +	3
signal -	4
shield	5 (housing)



TOP VIEW



SIDE VIEW



BOTTOM VIEW

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