

# Digital triaxial MEMS accelerometer and temperature sensor

## 883M

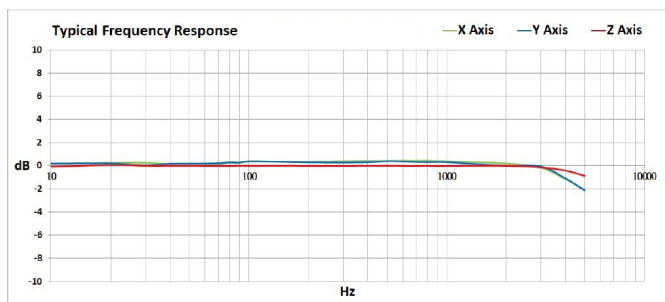
### SPECIFICATIONS

DYNAMIC	
Acceleration range	±16 g, peak
Resolution	0.488 mg
Frequency response, ± 3 dB	2 Hz - 5 kHz
Resonance frequency	6.9 kHz
FREQUENCY BAND OUTPUTS (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

## 883M

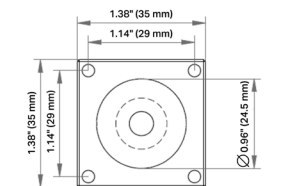
### SPECIFICATIONS

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 <sup>1</sup> (optional) magnet mount adapter <sup>1</sup> (optional)	
Operating temperature	-20° to +70° C	
Storage temperature	-20° to +80° C	
Operating humidity	5 - 95% RH	

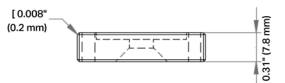
Notes: <sup>1</sup> Mounting adapter allows the installer to mount the sensor in a specific orientation, as required for triaxial sensors, and provides proper cable exit placement.

#### SCREW MOUNT ADAPTER

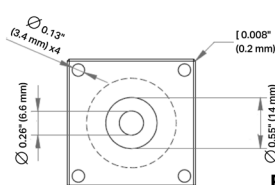
#### MAGNET MOUNT ADAPTER



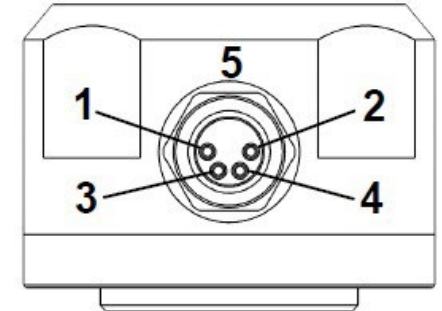
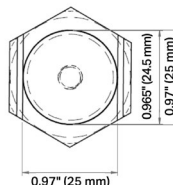
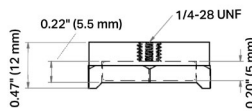
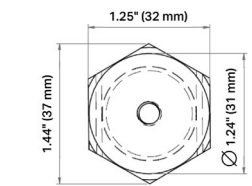
TOP VIEW



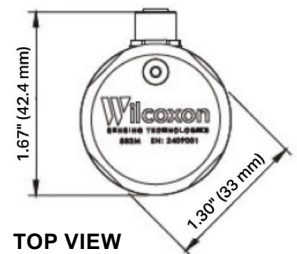
SIDE VIEW



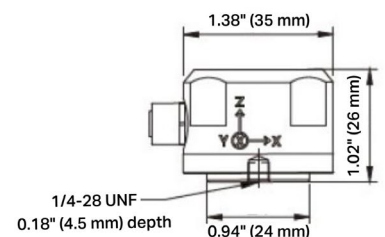
BOTTOM VIEW



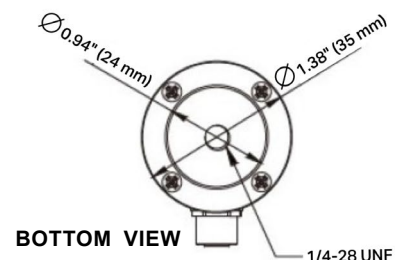
Connections	
Function	Connector pin
power	1
ground	2
signal +	3
signal -	4
shield	5 (housing)



TOP VIEW



SIDE VIEW



BOTTOM VIEW

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