

Digital triaxial MEMS accelerometer and temperature sensor

883M

Wilcoxon
SENSING TECHNOLOGIES

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

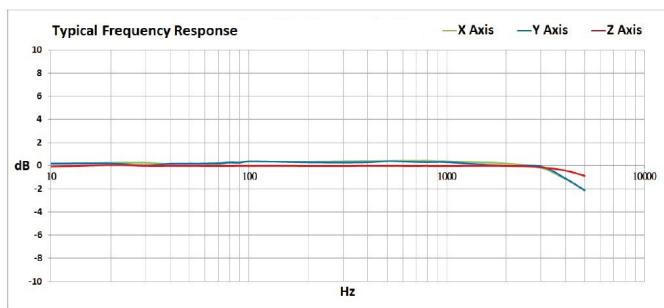
Recommended baud rate 9,600 or 115,200 bps

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.

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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 A6061 aluminum
lower 303 stainless steel

Connector 4-socket M8

Mating connector 4-pin M8

Recommended cabling 4-conductor, PVC jacket, shielded

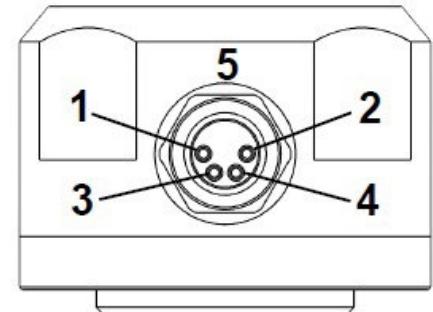
Mounting adhesive mount via sensor flat base
screw mount adapter¹ (optional)
magnet mount adapter¹ (optional)

Operating temperature -20° to +70° C

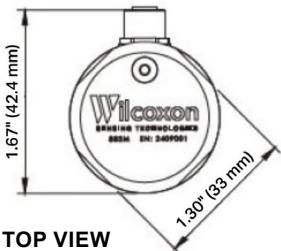
Storage temperature -20° to +80° C

Operating humidity 5 - 95% RH

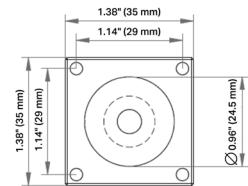
Notes: ¹ Mounting adapter allows the installer to mount the sensor in a specific orientation, as required for triaxial sensors, and provides proper cable exit placement.



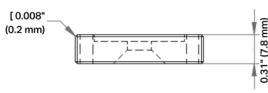
Connections	
Function	Connector pin
power	1
ground	2
signal +	3
signal -	4
shield	5 (housing)



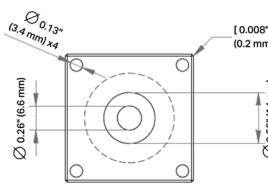
SCREW MOUNT ADAPTER



TOP VIEW

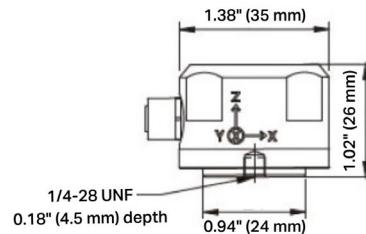
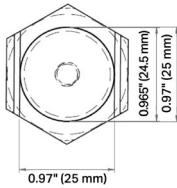
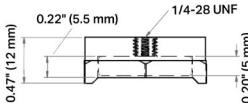
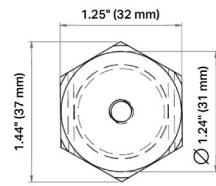


SIDE VIEW

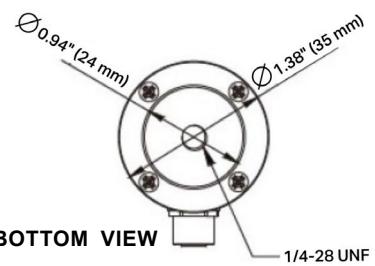


BOTTOM VIEW

MAGNET MOUNT ADAPTER



SIDE VIEW



BOTTOM VIEW

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