

# Accelerometer inline adapter Modbus output

## ILA210

### SPECIFICATIONS

#### SENSOR INPUT

Channels .....	vibration <b>or</b> vibration & temperature
Compatible accelerometers .....	IEPE, single or dual (vibration & temperature) output
Connector .....	4-pin M12
Mating cable connector .....	4-socket M12
Recommended sensor cable:	
Vibration only .....	shielded, twisted pair
Vibration & temperature .....	shielded, three-conductor



#### VIBRATION CHANNEL

Input sensor type .....	vibration (1-1000 mV/g)
Frequency response .....	1 Hz - 10 kHz (0 to -3 dB)
Power .....	IEPE (23 V, 3 mA)
Input range .....	±10 V
Coupling .....	AC
Input impedance .....	>100 kΩ
Max sampling rate .....	25.6 kHz

#### VIBRATION OUTPUT

Acceleration RMS frequency bands .....	2 Hz - 1 kHz, 10 Hz - 10 kHz
Acceleration peak frequency bands .....	2 Hz - 1 kHz, 10 Hz - 10 kHz
Velocity RMS frequency bands .....	2 Hz - 1 kHz <sup>1</sup> , 10 Hz - 1 kHz <sup>1</sup> , 10 Hz - 10 kHz
Velocity peak frequency bands .....	2 Hz - 1 kHz, 10 Hz - 1 kHz, 10 Hz - 10 kHz
Displacement RMS frequency bands .....	2 Hz - 1 kHz <sup>1</sup> , 10 Hz - 1 kHz <sup>1</sup> , 10 Hz - 10 kHz
Displacement peak frequency bands .....	2 Hz - 1 kHz, 10 Hz - 1 kHz, 10 Hz - 10 kHz
True peak .....	Fs @ 25.6 kHz
Power spectrum .....	0 Hz - 10 kHz, 6400 lines
Time waveform length .....	1 second
Other features .....	crest factor, standard deviation

#### TEMPERATURE CHANNEL

Input sensor type .....	dual vibration & temperature output
Input range .....	0-5 V
Coupling .....	DC
Input impedance .....	>100 kΩ
AD resolution .....	12 bits
Output .....	temperature units, °C / °F

#### COMMUNICATION

Protocol .....	Modbus RTU, server
Digital output connector .....	4-pin M12
Mating cable connector .....	4-socket M12
Recommended output cable .....	shielded, four-conductor

#### PHYSICAL & ENVIRONMENTAL

Power requirement .....	12 - 24 V
Power consumption .....	max 1.2 W
Exterior mold .....	polyamide
Restore RS485 settings .....	push button
Self-test status .....	LED indicator
Operating temperature .....	-20° to +80° C
Ingress protection .....	IP67
Dimensions .....	see page 2

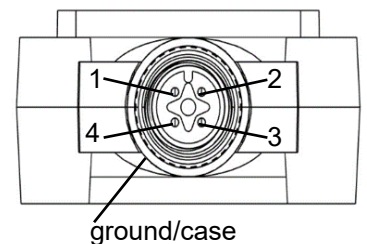
#### Key features

- Compatible with IEPE vibration or dual-output (vibration & temperature) sensors
- Modbus RTU output
- Frequency bands align with ISO 10816-3 and 20816-3 guidelines
- Utility software for configuration
- Stackable on a DIN rail or panel mount

Sensor input connections	
Connection	Function
pin 1	accelerometer power/signal
pin 2	accelerometer and temp sensor common
pin 3	temp sensor signal (if applicable)
pin 4	NC
ground/case	shield

Modbus RTU output connections	
Connection	Function
pin 1	power, 12-24V
pin 2	common
pin 3	A
pin 4	B
ground/case	shield

**Notes:** <sup>1</sup> Frequency bands align with ISO 10816-3 and 20816-3 guidelines to assess the vibration of industrial machines

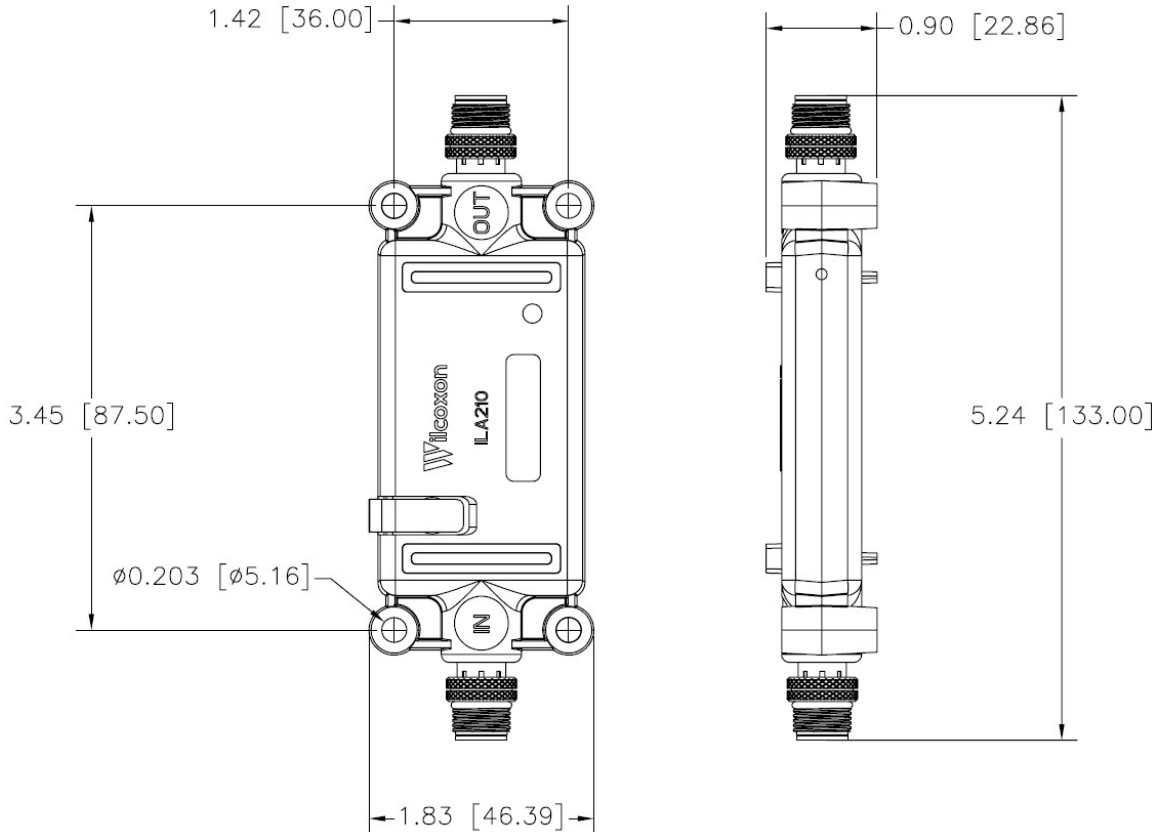


Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.

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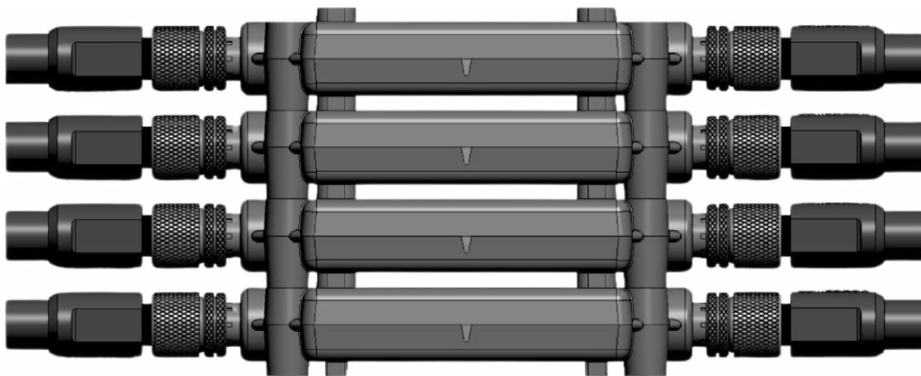
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### DIMENSIONS



### STACKING FEATURE

Interlocking features on the top and bottom of the mold facilitate stacking.



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