

Accelerometer inline adapter MQTT output

ILA230

PRELIMINARY

SPECIFICATIONS

SENSOR INPUT

Channels	vibration or 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 frequency band:	
Select 1 band <i>and</i> RMS or Peak	2 Hz - 1 kHz, 10 Hz - 10 kHz
Velocity frequency band:	
Select 1 band <i>and</i> RMS or Peak	2 Hz - 1 kHz ¹ , 10 Hz - 1 kHz ¹ , 10 Hz - 10 kHz ¹
Displacement frequency band:	
Select 1 band <i>and</i> RMS or Peak	2 Hz - 1 kHz ¹ , 10 Hz - 1 kHz ¹ , 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 OUTPUT

Protocol	MQTT
Digital output connector	RJ45 Ethernet jack
Mating cable connector	RJ45 Ethernet plug
Recommended cable	Cat5e or above

PHYSICAL & ENVIRONMENTAL

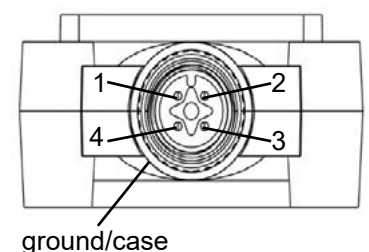
Power requirement	power over Ethernet, IEEE 802.3af compliant
Power consumption	max 2 W
Exterior mold	polyamide
Restore settings	push button
Self-test status	LED indicator
Operating temperature	-20° to +80° C
Ingress protection	IP67

Notes: ¹ Frequency bands align with ISO 10816-3 and 20816-3 guidelines to assess the vibration of industrial machines and ISO 17243 guidelines to assess the vibration of machine tool spindles

Key features

- Compatible with IEPE vibration or vibration & temperature sensors
- MQTT output
- Power over Ethernet
- Frequency bands align with ISO 10816-3, 20816-3 and 17243 guidelines
- Web interface 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
pin 4	NC
ground/case	common



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