



A unique, innovative and scalable technology to monitor industrial machines regardless of design or age.


A TURNKEY SOLUTION

AsystomSentinel is an intelligent, multi-sensor device that captures and analyzes the signals from equipment and autonomously communicates the results to a secured, private cloud server via wireless LoRa (LongRange) network. It provides real-time status of each monitored equipment and alerts in case of anomalies. All the collected data are available from a visualization platform that can be consulted on all media. The AsystomSentinel device is managed remotely through the same visualization platform.





 AsystomSentinel device
works on motors, pumps &
valves


+


 Gateway

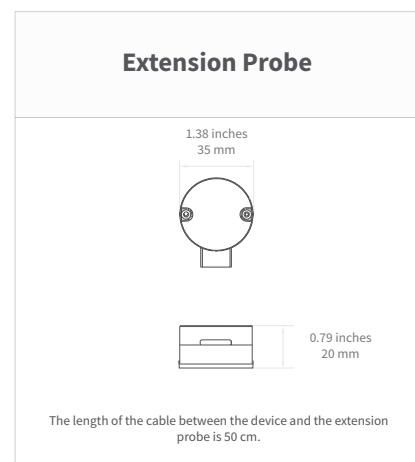
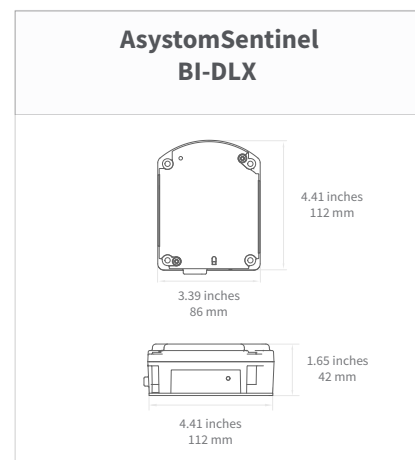
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 Cloud
Services

+


 Visualization
platform

SPECIFICATIONS	
WEIGHT	1.10 lbs, 500g (with battery)
MOUNTING	Very high bonding adhesive qualified by Asystom Other mounting option, contact us
SENSORS	Monitoring Vibration analysis : Typical Bandwidth 2Hz to 1750 Hz Sampling rate : 4.5 kHz Full scale range +/- 16g Typical RMS noise : 7 mg Nonlinearity : +/- 0.5 % Acoustic analysis: Typical Bandwidth 70 kHz Sampling rate : 180 kHz (120 db SPL) Signal-to-Noise : 64.3 dB Total Harmonic Distortion : 0.20% Surface temperature : -40 °C to + 80 °C -40°F to + 176°F Ambient temperature: 0 to 58°C .
	AsystomAdvisor applicability Rotating machines from 300 RPM. For other use cases contact us.
	External Sensor (Option) Current input 4-20 mA (max. 0-30 mA) - Input 0-3V Wet Contact (On / Off) - Maximum 24V
	Other sensors⁽¹⁾ Contact us for other sensor integration on project basis (temperature probe or other).
CONNECTIVITY	LoRa wireless network (Long Range) via private or public LoRaWAN
MEASUREMENTS	Statistical (RMS, Peak, Kurtosis) or Frequency domain (FFT Zoom) Periodicity adjustable down to 1 minute in good radio condition. Measurement can be set upon a wake up event
COMMUNICATION	Bidirectional between devices and server
POWER	4xAA lithium batteries up to 10 years autonomy. (typical at 1 measurement per hour)
ENVIRONMENT	Working tempeature : Device : -40°C to +58°C (-40°F to + 136°F) Extension Probe : -40°C to 80°C (-40°F to +176°F) Relative Humidity : Designed for outdoor use
CASING	IP 66



PRODUCT REFERENCE

PREDICTIVE DEVICE (ASYSTOMSENTINEL)

BI-DLX-1xx-00

LORA VERSIONS BY REGIONS


Ref.	Model	Region
0	EU868	Europe, MEA
1	US915	North America
2	AS923	Asia Pacific
3	AU915	Brazil
(2)		Other

ADDITIONAL VERSIONS⁽¹⁾

2	Current loop 4-20 mA or Voltage 0-3 V
3	Wet contact

ASYSTOMSENTINEL INTELLIGENT DEVICE

ADDITIONAL ASYSTOMSENTINEL MODELS

		STANDARD FEATURES
MODELS	BS-DLX (on-project basis)	Vibration analysis Acoustic analysis Contact temperature Ambient humidity Ambient temperature
	BX-DLX ()	Vibration analysis Acoustic analysis Contact temperature Battery life extension Extension probe

CERTIFICATIONS

The marking on the product certifies that the product conforms to the following guidelines. A copy of the certificate can be provided upon request.



Rated voltage and maximum current



Waste management (WEEE)

REFERENCE	DESCRIPTION
2011/65/EU	Restriction of hazardous substances (RoHS)
2012/19/EU	Waste of electrical & electronic (WEEE)
2014/30/EU	Electromagnetic compatibility (EMC)
2014/53/EU	Radio Equipment (RED)
ETSI CEI 61010-1	Safety rules for electrical measuring equipment, regulation and laborator

¹With extension probe, vibration, acoustic and contact temperature measurements are collected from the extension probe.

²Contact us for more information.