






A unique, innovative and scalable technology to monitor industrial machines regardless of design or age, certified for zone 1 explosive gas atmosphere other than mines susceptible to firedamp.

A TURNKEY SOLUTION	<p>AsystemSentinel 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 AsystemSentinel device is managed remotely through the same visualization platform.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>AsystemSentinel device works on motors, pumps & valves</p> </div> <div style="text-align: center;">+</div> <div style="text-align: center;">  <p>Gateway</p> </div> <div style="text-align: center;">+</div> <div style="text-align: center;">  <p>Cloud Services</p> </div> <div style="text-align: center;">+</div> <div style="text-align: center;">  <p>Visualization platform</p> </div> </div>	
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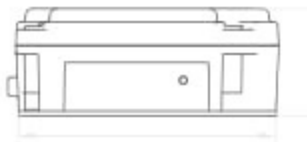
		SPECIFICATIONS
WEIGHT		1,10 lbs, 500 g (with battery)
MOUNTING		Very high bonding adhesive qualified by Asystem Other mounting option, contact us
SENSORS	Monitoring	<p>Vibration analysis: Typical Bandwidth: 1750 Hz Sampling rate: 4.5 kHz Full scale range: +/- 16g Typical RMS noise: 7 mg Nonlinearity: +/- 0.5 %</p> <p>Acoustic analysis: Typical Bandwidth: 70 kHz Sampling rate: 180 kHz (120 db SPL) Signal-to-Noise: 64.3 dB Total Harmonic Distortion: 0.20%</p> <p>Surface temperature: -20°C to + 80°C -68°F to + 176°F</p>
	Shock detection⁽¹⁾	Alarm threshold adjustable from 15g to 200g Precision 0,3 g (3-axis detection)
	Other sensors⁽¹⁾	Gyroscope
CONNECTIVITY		LoRa wireless network (Long Range) through AsystemLora gateway (gateway sold separately) or, as an option, via private or public LoRaWAN ⁽¹⁾
MEASUREMENT FREQUENCY		Measurement frequency adjustable from 1 minute Measurement can be set upon a wake up event
COMMUNICATION		Bidirectional between devices and server
POWER		4xAA lithium batteries up to 10 years autonomy.
ENVIRONMENT		<p>Operating temperature: Main Unit: -20°C to +58°C (-68°F to + 136°F) Extension Probe: -20°C to 80°C (-68°F to +176°F)</p> <p>Relative Humidity: Designed for outdoor use</p>
CASING		IP 66 and ATEX/IECEX

**AsystemSentinel
BX-DLX
Main Unit**



4.41 inches
112 mm


3.39 inches
86 mm



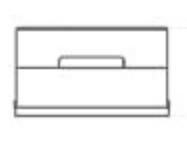
1.73 inches
44 mm

4.41 inches
112 mm

Extension Probe



1.38 inches
35 mm



0.79 inches
20 mm

The length of the cable between the device and the extension probe is 50 cm / 20 inches.

¹Additional option for AsystemSentinel device. Contact us for more information.

PRODUCT REFERENCE

PREDICTIVE DEVICE (ASYSTOMSENTINEL)

BX - DLX - 10x - XX

1 2 3

1	ASYSTOMSENTINEL INTELLIGENT DEVICE	DLX
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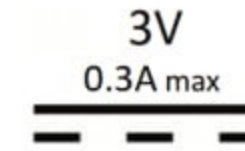
REGIONS	Model	LoRa Versions
Europe, MEA	0	EU868
North America	1	US915
Asia Pacific	2	AS923
Brazil	3	AU915
More	(2)	

SHOCK OPTION	AsystemSentinel without shock option	AsystemSentinel with shock option
Reference	00	01

ATEX / IECEx Marking
Ex ib mb IIC T4 Gb

CERTIFICATION

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)
2014/34/EU	Equipment and protective systems intended for use in potentially explosive atmospheres
2014/53/EU	Radio Equipment (RED)
ETSI CEI 61010-1	Safety rules for electrical measuring equipment, regulation and laborator

ATEX / IECEx Certificate
INERIS 20ATEX0056X IECEx INE 20.0067X

ADDITIONAL ASYSTOMSENTINEL MODELS

		STANDARD FEATURES	OPTIONAL FEATURES ⁽¹⁾
MODELS	BS-DLX (Indoor)	Vibration analysis Acoustic analysis Contact temperature Ambient humidity Ambient temperature	Extension probe
	BI-DLX (Outdoor)	Vibration analysis Acoustic analysis Contact temperature Battery life extension Extension probe	External Option : Current loop 0-24 mA - Input 0-3V Contact (On / Off) - Maximum 24V Temperature Probe PT100 Thermocouple JKTE External Power Supply

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

²Contact us for more information.