

SIGFOX PIEZO-ELECTRIC 10KHZ VIBRATION SENSOR

SKU: WSSFC-V1A

SIGFOX PIEZO-ELECTRIC 10KHZ VIBRATION SENSOR WSSFC-V1A



WSSFC-V1A-H1.PNG



WSSFC-V1A is a cost effective, Sigfox accelerometer single-axis vibration sensor designed for condition monitoring and preventive maintenance applications. The piezo-electric accelerometer is available in ranges $\pm 25g$ or $50g$ and features a flat frequency response up to $>10kHz$. Its accelerometer features a stable piezo-ceramic crystal in shear mode with low power electronics, sealed in a fully hermetic package. The Piezo Electric technology incorporated in the WSSCF-V1A accelerometer has a proven track record for offering the reliable and long-term stable output required for condition monitoring applications. The accelerometer is designed and qualified for machine health monitoring and has superior Resolution, Dynamic Range and Bandwidth to MEMS devices. Beside that it can also measure the temperature at mounting point. With Ultra-low power design and smart firmware allow the complete Wireless and Sensor package run on 2 x AA battery up to 10 years. It can support all regions of Sigfox network in over the World, RC1, RC2, RC3, RC4, RC5, RC6, RC7.

Typical Applications: Machine Health Monitoring, Predictive Maintenance Installations, Vibration Monitoring, Impact & Shock Monitoring, Bearing monitoring, ...



SIGFOX READY

Device are best operating performance on the SIGFOX network



10 YEAR BATTERY

Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology allow the sensor can last up to 10 years with 2 x AA batteries 1.5VDC



10 KHZ BANDWITH

Wide bandwidth up to 10,000 Hz



HIGH PERFORMANCE PIEZO-ELECTRIC SENSOR

Hermetically Sealed, Piezo-Ceramic Crystal, Shear Mode accelerometer sensor is designed and qualified for machine health monitoring and has superior Resolution, Dynamic Range and Bandwidth to MEMS devices

WIRELESS SIGFOX VIBRATION SENSOR INSTALLED ON MOTOR/FAN



WSSFC-V1A-H2.PNG

DAVITEQ TECHNOLOGIES INC

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SPECIFICATION

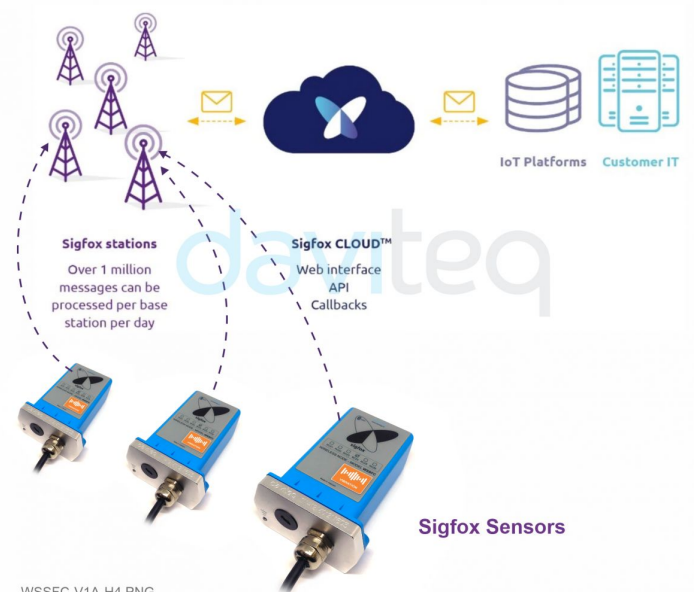
SENSOR SPECIFICATION:	
Sensor technology	Hermetically Sealed, Piezo-Ceramic Crystal, Shear Mode
8-Parameter Measurement	Acceleration RMS & Peak Velocity RMS & Peak Displacement RMS & Peak Frequency & Temperature
Acceleration Range & Shock Limit (g)	±25 or 50, 10,000
Frequency Response and Resonant (Hz)	2-10000, > 30000
Non-Linearity, Transverse Sensitivity	±2%FSO, < 5%
Temperature measuring and operating range, accuracy & resolution (°C)	-40.. +85, +/- 0.5, 0.125
Sensor Material, rating and mounting	304SUS, IP67, M6 Screw
*Notes	All above values are typical at +24°C, 80Hz
Connector	M12-M 5-pin (Coding A) with 2m cable, wired to Sigfox node
SIGFOX SPECIFICATION:	
Sigfox zones	select RC2-RC3-RC4-RC5 or RC1-RC6-RC7
Antenna	Internal Antenna 2 dbi
Configuration	via offline USB cable (PC software is supplied at free) and via Downlink
Battery	02 x AA Type 1.5VDC, working time up to 10 years (depends on configuration) ** 7 years working with 30 minutes update, RC4, 1 x transmit
RF Module complies to	CE, FCC, ARIB
Working temperature	-40°C..+60°C (using Energizer Lithium Ultimate AA battery)
Dimensions & Net-weight	H106xW73xD42, 190 grams
Housing	Aluminum+Polycarbonate, IP67
Mounting	Wall mount bracket

WIRELESS VIBRATION SENSOR INSTALLED ON BEARING



WSSFC-V1A-H3.PNG

SYSTEM ARCHITECTURE



WSSFC-V1A-H4.PNG

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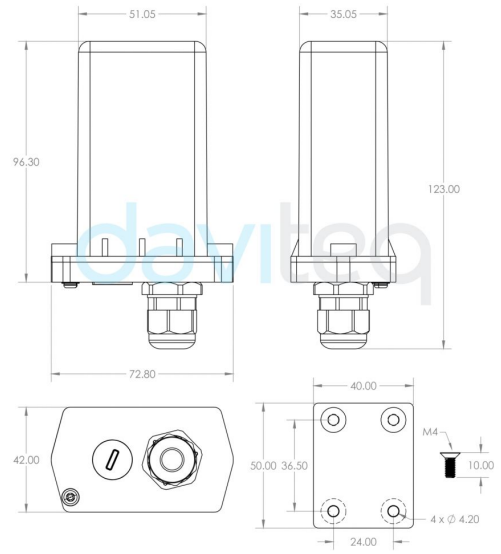
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VIBRATION SENSOR WITH M6 SCREW



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DIMENSION DRAWING OF WIRELESS SENSOR (Unit: mm)



WSSFC-V1A-H6.PNG

RECOMMENDED BATTERIES

E91 AA Alkaline battery



- 18 .. + 60 oC working temperature
- 10-year shelf life
- 3000 mAh Capacity
- Price: 1X

L91 AA Lithium battery



- 40 .. + 60 oC working temperature
- 20-year shelf life
- 3500 mAh Capacity
- Price: 3.5X

WSSFC-V1A-H7.PNG



WSSFC-V1A-H8.PNG

ORDERING INFORMATION

ITEM CODE	DESCRIPTIONS
WSSFC-V1A-9-025	SIGFOX PIEZO-ELECTRIC 10KHZ VIBRATION SENSOR, +/- 25G, INTERNAL ANTENNA, TYPE AA BATTERY 1.5VDC, IP67, RC2-RC3-RC4-RC5 ZONES
WSSFC-V1A-8-025	SIGFOX PIEZO-ELECTRIC 10KHZ VIBRATION SENSOR, +/- 25G, INTERNAL ANTENNA, TYPE AA BATTERY 1.5VDC, IP67, RC1-RC6-RC7 ZONES

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