

AVIDSmartSensors™ - Vibration



AVIDSmartSensors Vibration sensor is a battery operated digital vibration sensor with a microprocessor controlled 418 MHz. FCC certified radio transmitter. The AVIDSmartSensors Vibration sensor has an on board time of day clock that allows it to spend most of the time in a low power quiescent state. At predetermined time intervals the clock will wake up the onboard microprocessor. Unique serial number information and digital Vibration data is combined with a CRC-16 error check and transmitted in a very short data packet that results in a transmitter on time of only 15 milliseconds. This architecture allows the AVIDSmartSensors Vibration sensor to consume very low energy resulting in a battery life of up to 5 years.

Main Features

- § Digital broad range vibration measurement via internal accelerometer
- § 64-Bit unique ID
- § Up to 600 foot transmission range
- § 30 second transmission interval
- § Patent pending
- § Battery life up to 5 years
- § Very small (1.3" X 2.1" X .6") ABS enclosure
- § Complies with part 15 of the FCC rules
- § Water resistant coating for wet environments
- § Internal loop antenna

The electronics are coated with a conformal material that provides a moisture barrier against condensation. Submersion in water is not recommended. An integral pushbutton is used to activate the service switch. The Sensor is shipped with the transmitter turned off (anytime the Sensor is to be shipped the transmitter should be turned off or must be placed in a shielded container to prevent interference that might cause shipping problems). Start the Sensor by removing the paper strip from the battery and pressing the service switch (you will feel the button click).

When the service switch is pushed a data transmission occurs immediately and a special mark is introduced in the ID field of the transmitted data packet to indicate which sensor is in service or installation.

Parameter	Units
Transmission Rate	30 Seconds
Shelf Life with Battery Installed	10 Years in Quiescent Mode
Dimensions (enclosure)	1.5 W X 2.1 H X .6 D (inches)
Weight	1 oz.
Storage Temperature	-40° to 85° C
Operating Temperature	-40° to 85° C
Battery Life with Transmission	3-7 Years
Battery	3.6 volt Lithium