

Wireless Flex Sensor



Technical Overview

General Description

The OEM RF Wireless Flex Sensor measures the amount of bend (force) applied to the ribbon sensor.

Features

- Detects and measures bend of ribbon sensor.

Principle of Operation

The OEM Wireless Flex Sensor uses a flexible, stress sensitive ribbon (potentiometer) to accurately measure the amount of bend or force applied to the ribbon. The sensor returns a value of the amount of bend to the sensor monitoring software. The data is stored in the software and can be reviewed and exported as a data sheet or graph. Notifications can be set up to alert the user when a set threshold has been met or exceeded.

OEM Sensor Core Specifications


- Power: 3.0 V coin cell battery
- Communication: RF 900, 868 and 433 MHz
- Antenna: 4" wire antenna
- Operating Temperature: -40° to 85°C (-40° to 185°F)
- Device Range: 250 - 300 ft. non-line-of-sight*
- Only 1 inch by 1 inch

* Actual range may vary depending on environment.

Applications

- Measure mechanical movement.
- HVAC air flow monitoring.
- Monitor if seats are occupied.

Specifications

Supply Voltage	2.0 - 3.6 VDC *
Current Consumption	0.7 μ A (sleep mode) 2 mA (radio idle/off mode) 2 mA (measurement mode) 25 mA (radio RX mode) 35 mA (radio TX mode)
Electronics Operating Temperature Range	-40°C to +85°C (-40°F to +185°F) **
Available Operating Frequencies	900 MHz (25 Channels), 868 MHz (5 Channels) and 433 MHz (15 Channels)
Base Resistance	100 Ω - 500 K Ω
Certifications	 900 MHz product; FCC ID: ZTL- RFSC1 and IC: 9794A-RFSC1. 868 and 433 MHz product tested and found to comply with: CISPR 22:2008-09 / EN 55022:2010 - Class B and ETSI EN 300 220-2 V2.4.1 (2012-05).

* Hardware can not withstand negative voltage. Please take care when connecting a power device.

** At temperatures above 100°C, it is possible to lose programmed memory.

 **Warning: Do not kink or damage the flexible ribbon!**

For more product information, to get a quote, or to place an order, please contact our sales department at 801-561-5555. Visit us on the web at www.oemsensors.com.

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