

## 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 $\mu$ A (sleep mode) 2 mA (radio idle/off mode) 2 mA (measurement mode) 25 mA (radio RX mode) 35 mA (radio TX mode)
Operating Temperature Range	-40°C to +85°C ( -40°F to +185°F ) **
Optimal Battery Temperature Range (Coin Cell)	+10°C to +60°C ( +50°F to +140°F )
Base Resistance	100 $\Omega$ - 500 K $\Omega$

\* 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](http://www.oemsensors.com).

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