**Typical Applications**

- Structural Health Monitoring (Airplanes, Bridges, Buildings, Cranes, Platforms, Machinery, etc.)

**Benefits**

- **Long lifetime** (minimum expected life without battery replacement 3 years)
- **Small size and light weight**
- **High Accuracy**
- **Wireless communication**: no wiring needed for deploying the system
- **(Optional) High rate data transmission triggered by sudden strain changes**:
  - A balance between power consumption and performance.
  - Perfect for recording the waveform of a sudden strain change.
  - The triggering threshold is adjustable from 16µStrain to 512µStrain; the sampling interval can be changed from 25ms to 200ms.
- **Easy mounting**
  - Self-adhesive, no drilling is required (e.g. steel).
  - Flange-mount, drilling is required (e.g. concrete).
- **Quick installation**: 1-2 minutes
- **Complementary sensing**: temperature, battery voltage, etc.

**Specifics**

- **Dimensions**:
  - Wireless transmitter: 50mm (1.96”) x 50mm (1.96”) x 34mm (1.34”)
  - Strain Gauge sensor: 76.2mm (3”) x 33.4mm (1.3”) x 10mm (0.4”)

- **Weight**:
  - Wireless transmitter: 120g (4.23 oz.)
  - Cable (1ft): 10g (0.35oz.)
  - Strain sensing element: 17g (0.6 oz.)

- **Resolution**: 2µ Strain

- **Operating temperature**: -40°C to +65°C (-40 °F to +150°F)

- **Long communication range**: 1.0km free space

**Description**

SenSpot™ provides an easy to install, scalable solution for distributed structural integrity monitoring. When the change in the strain goes over the threshold, SenSpot™ event-detecting strain gauge can be triggered and sample at a high rate so that the detailed information of the change can be recorded. Like other SenSpot™, it uses Resensys’s proprietary sensing, scheduling and ultra-low power synchronization technology. SenSpot™ is designed to operate maintenance-free for more than a decade. After installation, SenSpot™ does not need calibration, battery replacement, or any other maintenance during its entire service life. Due to small size and lightweight, adhesive-mount
SenSpot™ sensors can be applied easily to as many critical spots on a structure as needed, with minimal installation effort.

**Wireless Transmitter Dimensions**

Wireless transmitter is universal and it reads the analog measurement from the sensing element and transmits the digitized data wirelessly to SeniMax. These units come in either self-adhesive or flange-mount form factors.

All dimensions are in mm [inch].
**Strain Gauge Sensing Element Dimensions**

The strain gauge sensing element outputs the strain analog signal on its cable after it gets the excitation signal from the wireless transmitter part. This sensor is self-adhesive and it is meant to be used on steel structures.

![Top View Diagram]

- Dimensions: 76.22 [3.000], 25.02 [0.985], 33.00 [1.299]

![Side View Diagram]

- Dimensions: 9.00 [0.354], 5.00 [0.196], 2.50 [0.098]

All dimensions are in mm [inch].
The data shown in SenScope™

The data marked in blue are event packets while the data marked in red are regular strain measurements. The event packets show more detail about the change in a period of time while the regular packets show the trend in the long term.