

### Typical Applications

- Bridge health monitoring
- Structural integrity monitoring (buildings, dams, tunnels, etc.)

### Benefits

- **Long lifetime** (battery life of 10 years)
- **Wireless communication** (IEEE 802.15.4)
- **Lightweight (about 245 gr)**
  - Wireless transmitter: 120 g (4.2 ounces)
  - Cable (1ft): 10 g (0.35 ounces)
  - Displacement sensing element (1"): 115 g (4.0 ounces)
- **Small size:**
  - Wireless transmitter: 50mm (1.96") x 50mm (1.96") x 34mm (1.34")
  - Displacement sensing element: 158mm (6.25") x 22mm (0.9") (1"displacement)
- **Adjustable sampling interval** (From 18sec to 10min)
- **Long communication range:** 1.0km (0.62mile) free space



**element:** 28mm (1.1"), 53mm (2.1"), 78mm (3.1"), 103mm (4.1")

- **Measurement non-linearity:**  $\leq \pm 0.10\%$  (Full Stroke)
- **Working temperature:** -40°C to +65°C (-40°F to +150°F)
- **Ingress Protection:** IP65, weatherproof. Protected against rain, snow, and UV exposure
- **Power source:** replaceable lithium-ion battery

### Specifications

- **Resolution:** 0.1mm (4mil)
- **Measurement Range:** 25mm (1"), 50mm (2"), 75mm (3"), 100mm (4"), 150mm(6"), 300mm(12")
- **Mechanical stroke length of the sensing**

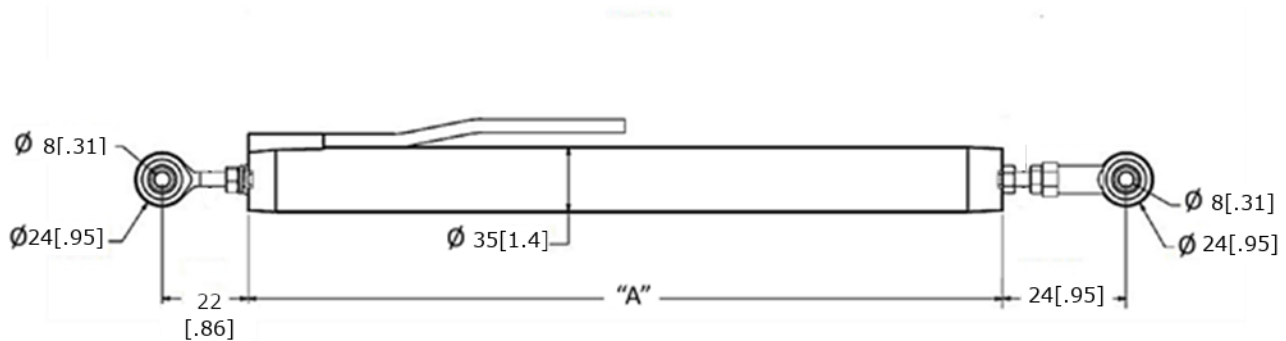
## Description

SenSpot™ provides an easy to install, scalable solution for distributed structural integrity monitoring. Resensys SenSpot™ technology offers a high performance method for large-scale sensing, wireless synchronization, and ultra-energy efficient wireless communication.

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 light weight, adhesive-mount SenSpot™ sensors can be applied easily to as many critical spots on a structure as needed, with minimal installation effort.

SenSpot™ displacement meter can be used for measuring the progress of the existing cracks in a structure. This device has a sliding element which moves with displacement of structure or growth of a crack.

## Displacement sensing element

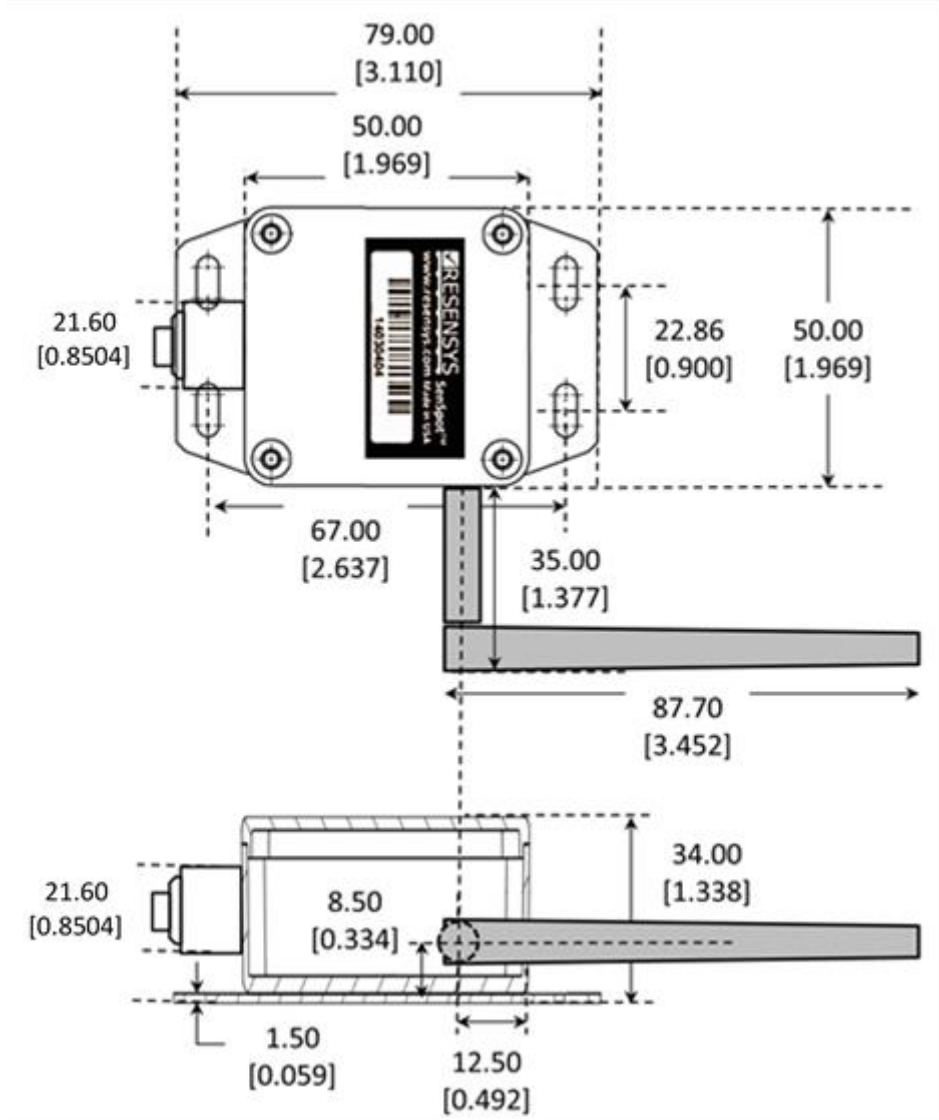


All dimensions are in mm [inch].

Model	2"	3"	4"	6"
Dimension "A" (mm)[inch]	176 [6.9]	201 [7.9]	227 [8.9]	277 [10.9]

# SenSpot™ - Wireless Transmitter

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



All dimensions are in mm [inch].

