SenSpot™ Displacement Meter

Ultra-Low Power Precision Sensing & Wireless Communication

Typical Applications

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

Features & Benefits

- **Long lifetime** (battery life of 10 years)
- **Wireless communication** (IEEE 802.15.4)
- **Lightweight (about 245 gr)**
  - Wireless transmitter: 4.2 ounces (120 gr)
  - Cable (1ft): 0.35 ounces (10 gr)
  - Displacement sensing element: 4.0 ounces (115 gr)
- **Adjustable sampling interval**
- **Resolution:** 2.5µm (0.1mil)
- **Repeatability:** 10µm (0.4mil)
- **Full range:** .5in, 1.0in, 2.0in, 3.0in, 4.0in, 5.0in, 6.0in, 12.0in
- **Working temperature:** -40 to +150°F (-40 to +65°C)
- **Long communication range:** 0.62mile (1.0km) free space
- **Ingress Protection:** IP65, weatherproof and protected against rain, snow, and UV exposure
- **Small size:**
  - Wireless transmitter: 1.96” x 1.96” x 1.34”
  - Displacement sensing element: 6.25”x0.9”
- **Power source:** replaceable lithium-ion battery

Description

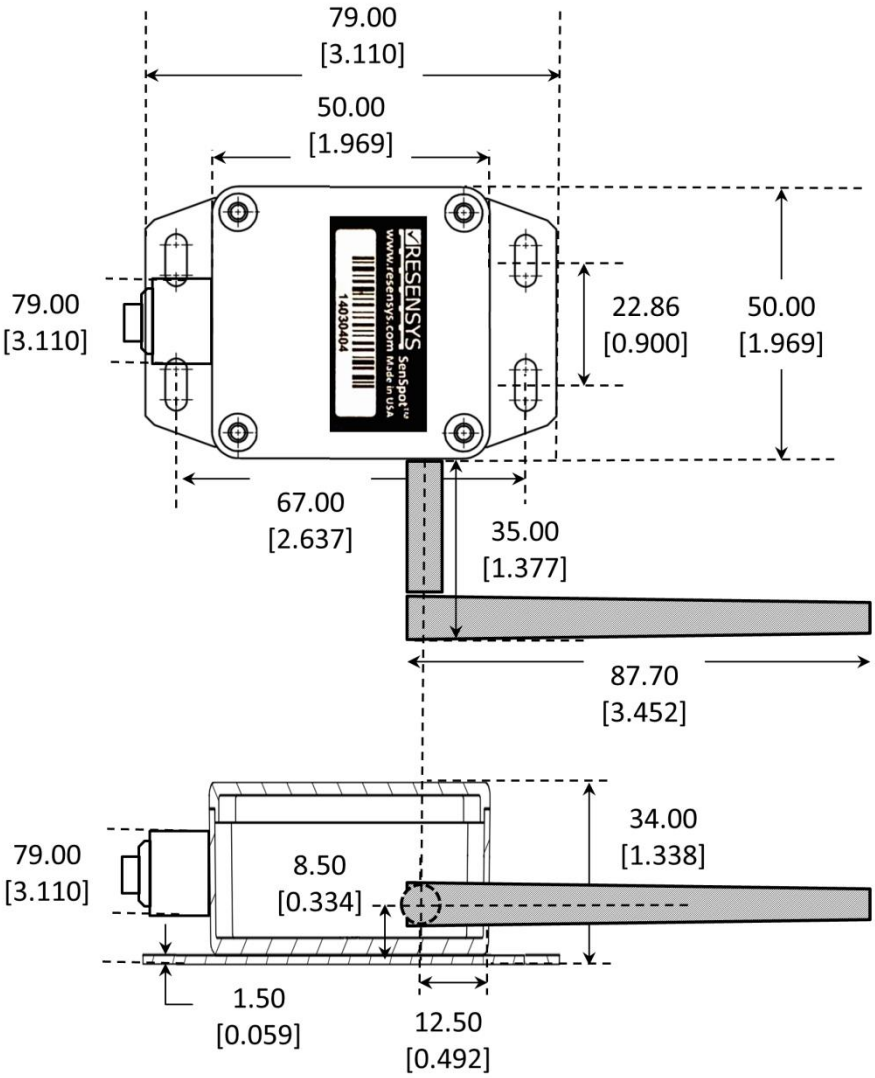
SenSpot™ provides an easy to install, scalable solution for distributed structural integrity monitoring. Resensys SenSpot™ technology offers a high performance method for large-scale sensing, wireless synchronization, and ultra-energy efficient wireless communication.

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 lightweight, 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 measurement and 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.

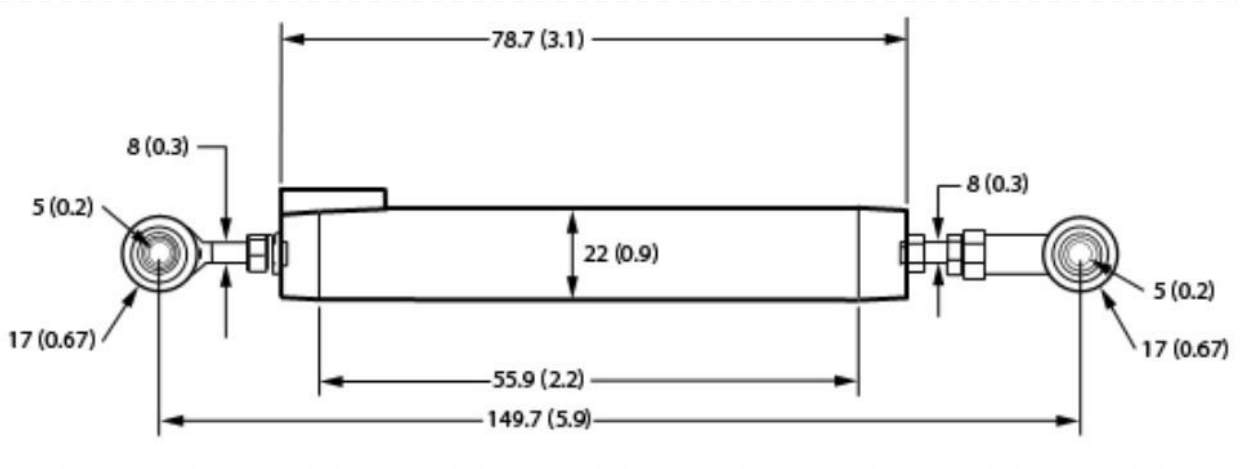
SenSpot™ - Wireless Transmitter

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].

Displacement sensing element



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