

Typical Applications

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

Benefits

- **Ultra-low-power** (minimum of 10 years of operation without battery replacement)
- **Power source:** replaceable lithium-ion battery
- **Wireless communication** (IEEE 802.15.4)
- **Lightweight**, about 120 gr
- **Flange-mount (adhesive-mount) installation**
- **Adjustable sampling interval**
- **Resolution:** 15 arc seconds (0.005 degrees)
- **Working temperature:** -40 to +150°F (-40 to +65°C)
- **Long communication range:** 0.62mi (1.0Km) free space
- **Small size:** 1.96" x 1.96" x 1.34"
- **Ingress Protection:** IP65

Description

SenSpot™ provides an easy to install, scalable solution for distributed structural integrity monitoring. SenSpot™ inclination/tilt uses Resensys's proprietary Active RF Technology. Resensys ART technology offers a high performance method for large-scale sensing, wireless synchronization, and ultra energy efficient wireless communication.



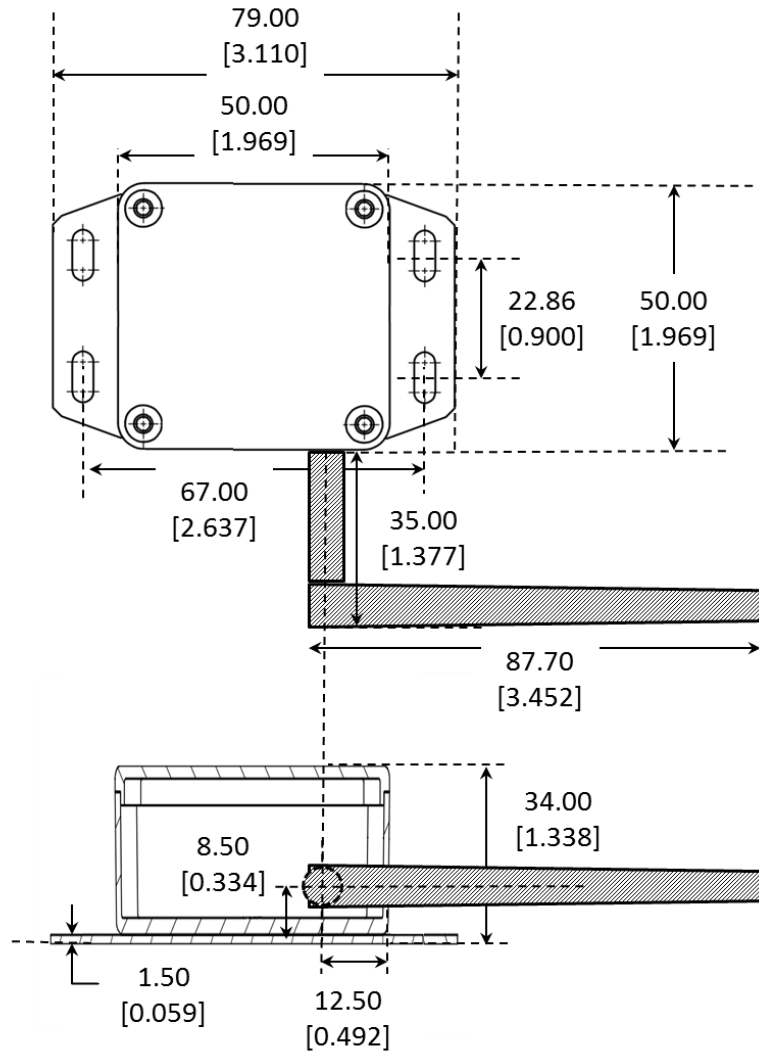
SenSpot™ Inclination/Tilt

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 for at least 10 years. 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.

As a part of the Resensys solution for integrity monitoring system, SenSpot™ inclination/tilt can be used to monitor smallest movements of structural components such as piers, decks, bearings on a highway bridge. In addition, SenSpot™ inclination/tilt monitors changes in these parameters as the structure expands or contracts as a result of temperature variations. In addition to bridges, SenSpot™ inclination/tilt can be used in a variety of other structures. Examples include buildings, dams, etc.

Tilt SenSpot

The tilt sensor is built-in the SenSpot unit. The readout is transmitted wirelessly to SeniMax. The SenSpot can be both self-adhesive or flange-mount.



All dimensions are in mm (inch)

Low Tilt SenSpot Direction Diagram

