

## Typical Applications

- Indoor and outdoor distributed monitoring (aircraft, buildings, bridges, machinery, etc.)

## Benefits

- **Long lifetime** (minimum expected life without battery replacement 10 years)
- Wireless communication (IEEE 802.15.4)
- **Lightweight**, about 135 gr
  - Wireless Transmitter about 120 gr.
  - 1ft cable 10 gr.
  - Humidity/Temperature sensor 5 gr.
- **Self-adhesive**, no drilling is required
- **Easy mounting and quick installation**, 1-2 minutes
- **Adjustable sampling interval**
- **Resolution:** 1 percent (humidity), 0.5 °C (Temperature)
- **Working temperature:** -40 to +150°F (-40 to +65°C)
- **Working humidity:** 0 to +100%
- **Long communication range:** 1.0km free space
- **Small size:**
  - Wireless transmitter: 1.96" x 1.96" x 1.34"
  - Humidity/Temperature sensor: 4.30"x1.30"x0.25"
- **Power source:** replaceable prime lithium-ion battery
- **Probe length:** standard 1, 3, and 5 ft (customizable up to 200 ft)

## Description

SenSpot™ provides an easy to install, scalable solution for distributed structural integrity monitoring.



SenSpot™ Humidity/Temperature uses Resensys's proprietary Active RF Technology, similar to other SenSpot™ in its family. 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 decades. SenSpot can operate for at least 10 years without battery replacement. Due to small size and lightweight design, the adhesive-mount SenSpot™ can be applied easily to as many critical spots on a structure as needed, with minimal installation effort.

SenSpot™ Humidity/Temperature has a measurement probe which can easily extend the data point to even inside and inaccessible area of a structure. The probes can be customized to be up to 200 feet long.

# SenSpot™ – Wireless Transmitter

This part of the SenSpots is universal and it reads the analog measurement from the sensor and transmits the digitized data wirelessly to SeniMax™. Wireless transmitter can be both self-adhesive or flange-mount.

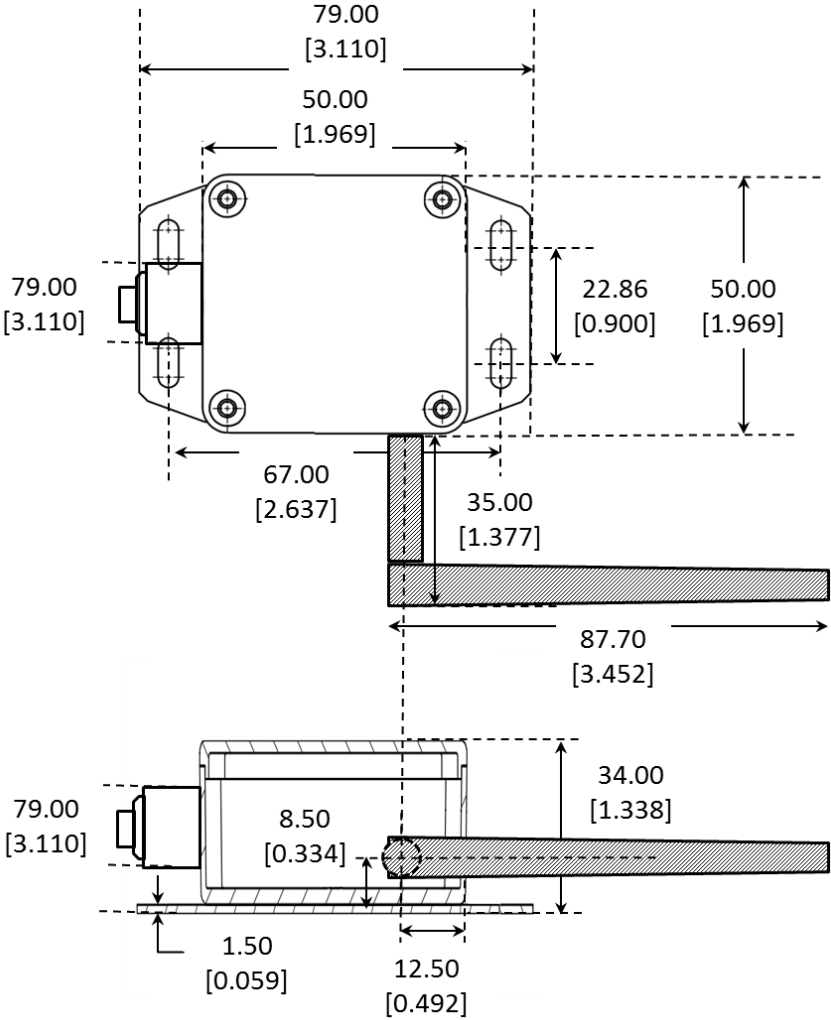


Figure 1: Temperature/humidity SenSpot™ sensor dimensions. All measurements are in mm [inch].

# Data shown in SenScope™ from a deployed SenSpot™ sensor

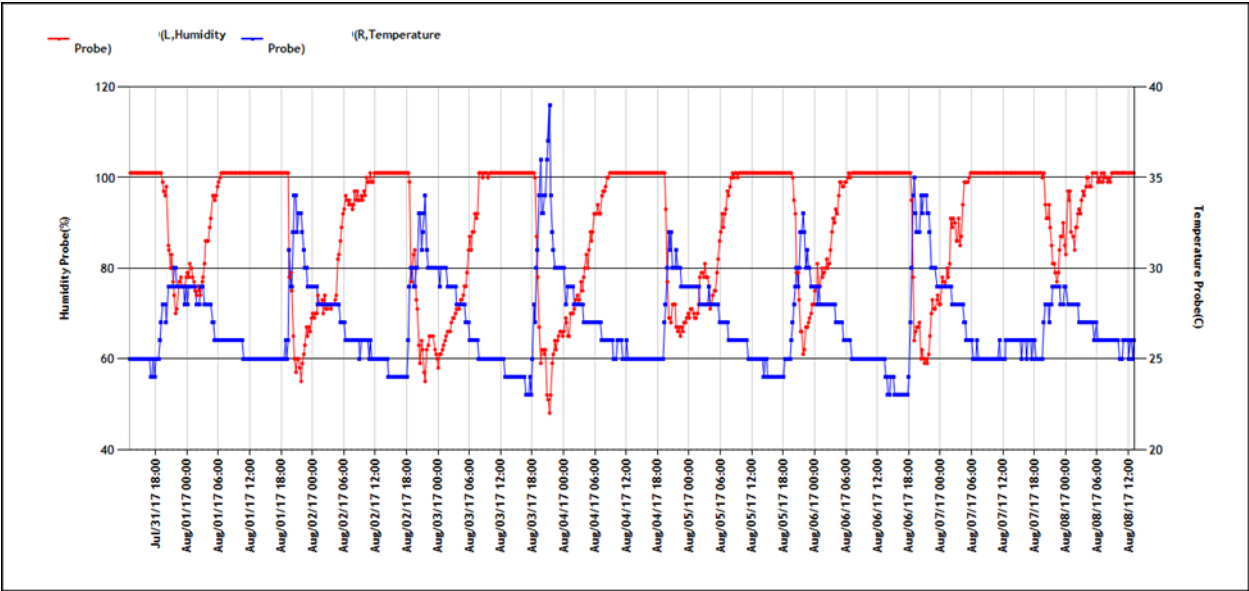


Figure 2: Temperature and humidity measurements for a wireless temperature/humidity SenSpot™ sensor