SenSpot™ 4-Channel Temperature Sensor

Ultra-Low Power Precision Sensing & Wireless Communication

Typical Applications

- Outdoor ambient temperature monitoring
- Concrete and steel temperature monitoring

Features & Benefits

- **Long lifetime:** (battery life of 10 years)
- **Multi-channel synchronized sensing:** Up to 4 channels
- **Wireless communication:** IEEE 802.15.4
- **Lightweight (about 550 g)**
  - Wireless transmitter: 200 g (7.1 oz.)
  - Sensing probes (typical 4 x 10ft probe cable): 350 grams (12.3 oz.)
- **Adjustable sampling interval**
- **Resolution:** 0.1°C (0.05°F)
- **Working temperature:** -40°C to +65°C (-40°F to +150°F)
- **Long communication range:** 1.0km (0.62mi) free space
- **Customizable probe length:** up to 6m (20ft)
- **Ingress Protection:** IP65, weatherproof and protected against rain, snow, and UV exposure
- **Small size:**
  - Wireless transmitter: 140.21mm (5.52”) x 60.5mm (2.382”) x 32.5mm (1.28”)
- **Power source:** replaceable lithium-ion battery

Description

SenSpot™ provides an easy to install, scalable solution for distributed structural integrity monitoring. SenSpot™ Temperature Sensor uses Resensys’s proprietary technology for reliable and accurate measurement, 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 for at least 10 years. Due to small size and lightweight, SenSpot™ sensors can be applied easily to as many critical spots on a structure as needed, with minimal installation effort.

Temperature SenSpot™ can be used to monitor temperature on structural elements of bridges, buildings, etc.

Wireless Transmitter Dimensions

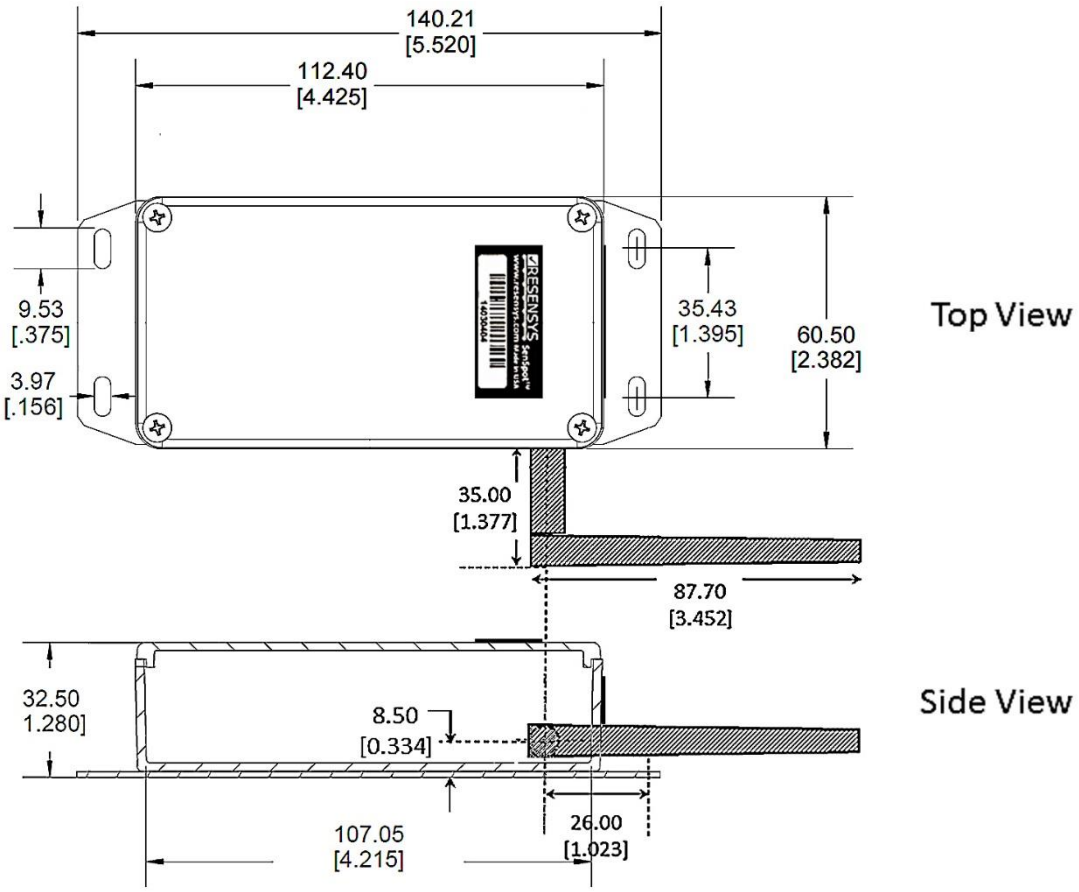

Figure 1: Dimensions of the SenSpot™ 4-Channel Temperature Sensor, all dimensions are in mm [inch]