

MOSS Outdoor

Technical Specification

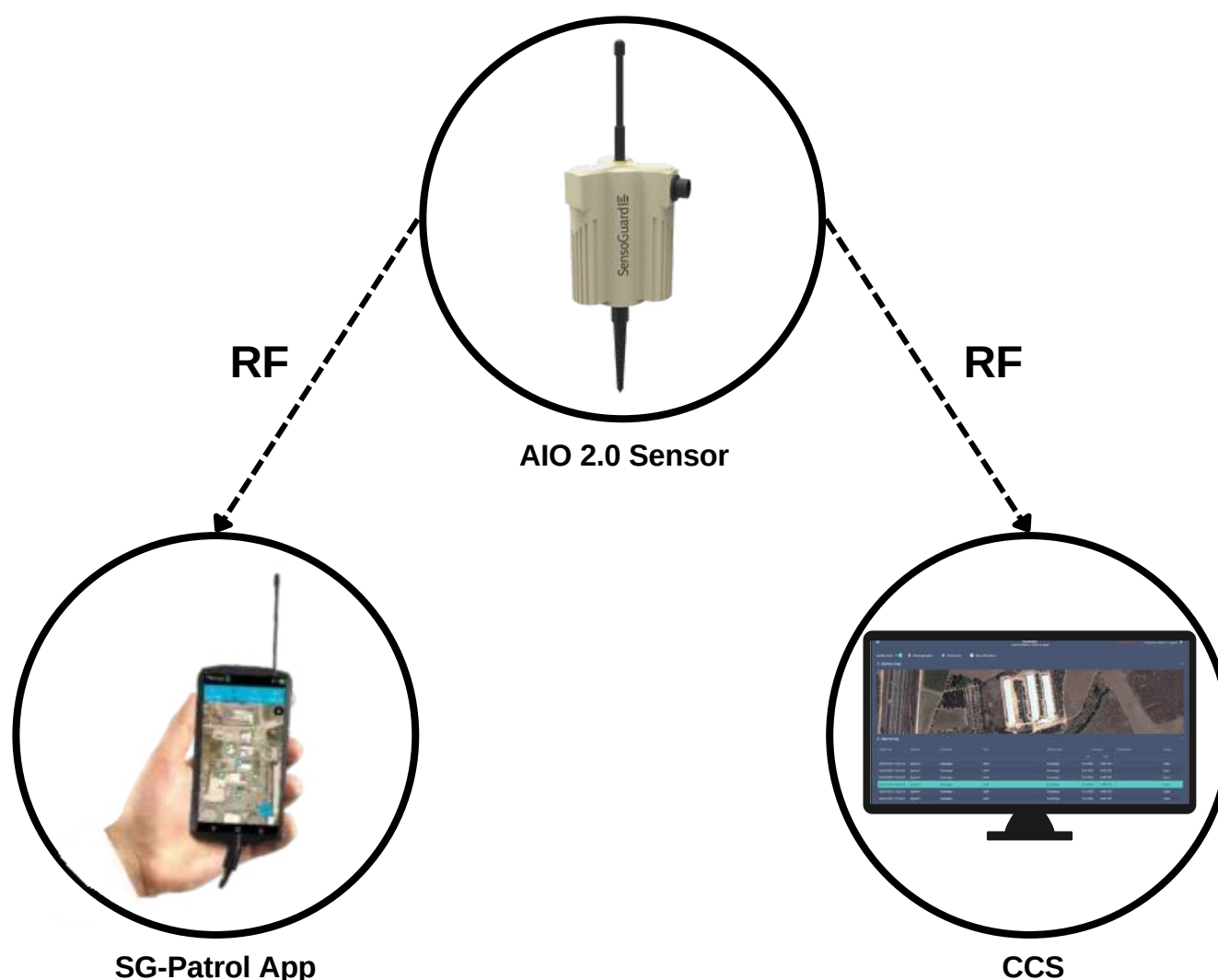
Operation Principle

MOSS Outdoor is an autonomous wireless sensors kit designed for tactical/mobile applications. Each sensor contains internal rechargeable lithium battery for approximately 12 months of continuous operation. The wireless communication of sensors is RF-UHF and based on the LoRa technology. Upon alarm detection, the sensor sends a message to a remote wireless receiver which is connected to a ruggedized smartphone.



Wireless Communication

The MOSS transmits alarms using RF-UHF communication. In order to save battery life, the RF transceiver is usually shutdown and turned on only for alarm transmission. The network topology is STAR topology which ensures minimal delay between alarm detection by sensor and recipient of alarm on the wireless receiver for display on SG Patrol App.



Overview

SensoGuard MOSS (Mobile Operations Sensors System) was designed to assist in mobile/tactical applications which require immediate security solution. Our Tactical wireless sensors provide immediate complete 360° situational awareness by using a combination of Outdoor and Indoor sensors.

The MOSS Kit can be installed in few minutes, and doesn't require power or communication infrastructure to operate. Designed for Military, LEA's, VIP protection and security guards.



Key Features

- MIL-STD 810G compliant
- Ultra-low power consumption
- RF Frequency: 433MHz / 868MHz / 915MHz
- Wide temperature range
- Maintenance free, plug & play operation
- RoHS compliant

AIO 2

Technical Specification

Version 1.2 | March 2025

Detection Capabilities

Footsteps Detection	Up to 18m/60ft radius
Vehicle Detection	Up to 35m/115ft radius
Digging Detection	Up to 35m/115ft radius
Detection Zone	360° coverage

Communication

RF Frequency	433Mhz (Default), 868/915Mhz (Optional)
Network Protocol	LoRA (Long Range) low-power wide-area network
Transmission Range (Antenna 2cm below ground)	Up to 250m/820ft radius
Transmission Range (Antenna 5cm above ground)	Up to 1Km/3,280ft radius

Environmental & Power

IP Rating	IP68 (MIL-STD 810G)
Operating Temperature	-40°C to 85°C / -40°F to 185°F
Battery Life	Up to 1 year (rechargeable)

Physical Specifications

Dimensions (Sensor)	95mm x 70mm / 3.74" x 2.7"
Dimensions (Spike)	75mm / 2.95"
Weight	500g / 1.1lbs
Installation Depth	30-50cm / 11.8"-19.6"



Overview

AIO 2 is a wireless seismic sensor designed for tactical/mobile applications. It continuously monitors the area for patterns of footsteps, vehicles, and digging activity. Upon detection, it sends wireless alerts to a remote Hub, PC, or smartphone receiver.



Key Features

- UGS Covert wireless sensor
- MIL-STD 810G compliant
- LoRA network technology
- Maintenance-free, plug & play operation
- RoHS compliant

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Wireless Phone Receiver (Type C)

Technical Specification

Communication

RF Frequency	433Mhz (Default), 868/915Mhz (Optional)
Network Protocol	LoRA (Long Range) low-power wide-area network
Transmission Range	Up to 1Km

Environmental & Power

IP Rating	IP67
Power Consumption	16mA

Physical Specifications

Dimensions (Without Antenna)	157mm x 42mm x 66mm / 6.1" x 1.6" x 2.5"
Weight	35g / 0.08lbs



Overview

This Wireless Phone Receiver is an innovative solution for real-time security monitoring, offering robustness, portability, and ease of use for on-the-go surveillance.

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