

4000SE Sensors

Cellular, Wi-Fi and Bluetooth® Sensor

Revolutionary Approach for Mobile, BYOD, Retail and More

The Inpixon Indoor Positioning Analytics (IPA) platform uses a network of RF sensors that detect and locate all cellular, Wi-Fi, and Bluetooth devices. Inpixon 4000SE sensors deliver powerful wireless sensing capabilities with performance characteristics superior to any other available wireless sensor. With the Inpixon 4000SE deployment headaches have been reduced through daisy chaining and internal antennas.

The Inpixon 4000SE is a passive RF sensor able to detect signals ranging from simple pings to a cell tower to active wireless transmissions. The sensor combines cellular, 802.11 a/b/g/n, and Bluetooth device detection in a single package. The location of a device can be determined through the 4000SE sensors from cellular, Wi-Fi or Bluetooth devices. The 4000SE has configurable software that dynamically surveys active channels and detects any transmission from any Bluetooth (Classic or BTLE) device being used.



Device Types Detected

Any transmitting device on cellular, Wi-Fi or Bluetooth.

Cell Phones, iPads, iPhones, Android, Windows, Laptops, Tablets, MiFi Devices, Cellular Broadband Cards, WiFi Cards, WiFi Access Points, Mobile Phone Hands-free Headsets, Wireless speakers/audio systems, Wireless networking between PCs and or PC input/output devices, Personal Health and Fitness Devices, Beacons, Sensors

Wireless Events Detected

Phone Calls, Text Messages, Internet Browsing, Data Transmissions, Emailing, Tower Pings, Network Registrations, Bluetooth Pairing and Setup, Data Transfers, Sent Commands

Software Programmable Receivers Frequency Bands

300-348 MHz, 387-464 MHz, 600-1000 MHz, 1710-1790 MHz, 1850-1990 MHz, 2500-2570 MHz, and more

Wi-Fi Modes Detected

802.11b/g (2.4 GHz), 802.11a (5GHz), 802.11n mixed, legacy and greenfield modes, (2.4 GHz, 5 GHz)

RF Sensitivity

GSM: -55 dBm typical
3G: -95 dBm typical
Wi-Fi: -100 dBm typical
Bluetooth: -70 dBm typical

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North American Cellular Detection

Frequencies (MHz): 699-716, 777-798, 806-849,
1710-1785, 1850-1910, 2500-2570

Protocols: 2G/3G, GSM, CDMA, W-CDMA, iDEN/SMR

International Cellular Detection

Frequencies (MHz): 880-915, 1710-1785, 1920-1980,
2500-2570

Protocols: 3G, GSM, W-CDMA

Maximum Range Up to 50m (164 feet) *

*(*Detection range is highly variable depending on various factors such as the power class, antenna configuration and path loss)*

LAN Type: Assigned Static IP Addresses or DHCP clients

Power Over Ethernet with Daisy Chain Ability

IEEE 802.3af PoE Compliant (End span injector compatible) for non-daisy chain configurations
Passive 48V PoE required to daisy chain up to 4 sensors together

Power Requirements

Single Sensor: 24 to 48VDC 8W Input
Daisy Chained: 48VDC 120W Input to a passive PoE Switch

Operating Temperature: -20° to +70°C (-4° to + 158°F)

Dimensions: 200mm x 159mm x 70 mm
(7.87" x 6.26" x 2.76")

Weight: 709 grams (1.56 lbs.)

Antennas: Internal, optional external omnidirectional whip

802.3 LAN Network Interface

Software Compatibility: Inpixon Indoor Positioning Analytics solution



Daisy Chaining

The ability to string sensors together adds simplicity to installation giving AirPatrol's superior detection new superiority over competitors.

Using a passive PoE (Power over Ethernet) switch, up to four AirPatrol 4000SE sensors can be strung together in a line that provides both power and data.

This eliminates the need to have individual power connections for each sensor.

These latest sensors allow up to four different chains operating from the same switch. Since up to four sensors can be on a single chain, up to 16 sensors can operate from a single switch.

Each chain can be up to 330 ft. (100m) in length.