

BROADSENSE

GPS Jamming and Spoofing Detection Sensor



What is BroadSense?

BroadSense is a GPS jamming and spoofing detection sensor designed to provide real-time and historical situational awareness data. Utilizing sophisticated GNSS receivers and jamming and spoofing detection algorithms, BroadSense can detect when the GPS signal or GPS spectrum is compromised.

Critical Infrastructure Relies on GPS

GPS is used in nearly every critical infrastructure system that we depend on to maintain our way of life, such as power grid systems, transportation systems, cellular communication networks, financial services, agriculture and more...

Trust in Safran Federal Systems

You can rely on Safran Federal Systems' solutions knowing that BroadShield algorithms have been rigorously tested and field-proven for over a decade. Our detection capabilities are regularly updated to conform to new and emerging threats.

Attacks on the Rise

An increased number of GPS jamming and spoofing attacks have been reported and documented in recent years. With high quality software-defined radios (SDRs) becoming more affordable, hardware capable of GPS jamming and spoofing is more available than ever. Open source projects have been found to turn these low cost SDRs into GPS jammers and spoofers. It is more critical now than ever to ensure the necessary precautions are taken to protect your PNT systems.

Safran Federal Systems is the trusted Resilient PNT mission partner to U.S. government and defense organizations, from the lab to the field.



BroadSense Nano

BroadSense Nano is a low size, weight and power (SWaP) all in one jamming and spoofing detection sensor, making it extremely easy to integrate and operate. It utilizes a sophisticated multi-frequency GNSS receiver, an integrated or external antenna and advanced algorithms. This allows BroadSense Nano to detect GPS jamming on multiple frequency bands of the GPS spectrum and give accurate figures showing the jamming power level in the environment.

Low SWaP (Size, Weight, and Power) Specs

- Size: 41 x 41 x 19mm (LxWxH)
- Weight: 46 grams
- Power Consumption: 0.7 watts
- Operating voltage: 5V

BroadSense Nano Key Features

- Integrated or external antenna variants
- Proven detection algorithms
- J/S measurements for L1 and L2
- Real-time visual data output (screen)
- Custom NMEA output message via USB or UART

BroadSense Nano Recommended Applications

- UAV Platforms
- Dismounted Warfighters
- Cell Towers
- Situational awareness in GPS degraded or denied environments

BroadSense Nano Ordering Information

- A-BSN-N100 - Internal integrated antenna
- A-BSN-NE00- External antenna with female MCX antenna port and 5m cable

The external antenna is a U-Blox ANN-MB series antenna.

<https://www.u-blox.com/en/product/ann-mb-series>



A-BSN-N100



A-BSN-NE00



Data Output

