BROADSENSE nano

WHAT IS BROADSENSE NANO?

BroadSense Nano is a low SWaP all in one jamming and spoofing detection sensor. It utilizes a sophisticated multi-frequency GNSS receiver, an integrated antenna and advanced Talen-X 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.

* Can be configured for mounted or dismounted applications, and can operate on the ground or in over-the-air environments.

ASSURE YOUR PNT

An increased number of GPS jamming and spoofing attacks have been reported and documented over the past five years.

With high quality software-defined radios (SDRs) becoming more affordable, hardware capable of GPS jamming and spoofing is more available than ever.

There is now open source software available that can turn these low cost SDRs into GPS simulators and jammers.

It is more critical now than ever to ensure the necessary precautions are taken to protect your PNT systems.

Talen-X's jamming and spoofing detection algorithms have been rigorously tested and field proven dating back to 2008.

Talen-X is continually updating our detection capabilities to conform to emerging threats and jamming and spoofing.

TALEN-X
COMMUNICATE - NAVIGATE - EXCEL

WEBSITE
www.talen-x.com

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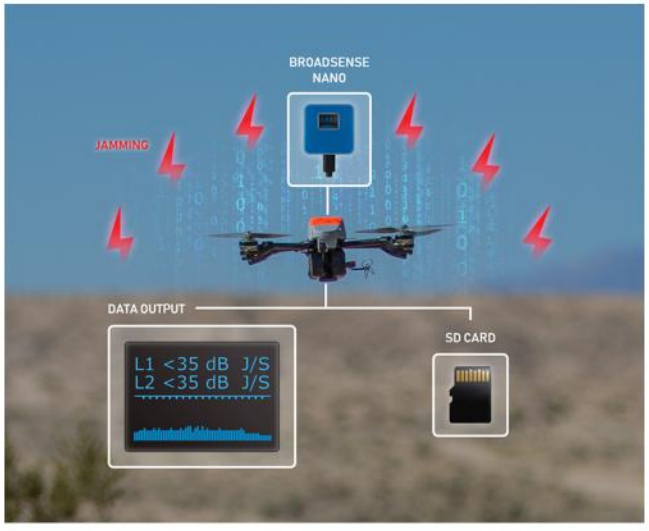
☑ REQUEST A QUOTE
☑ SCHEDULE A DEMO

BROADSENSE nano

APPLICATIONS

Perfect for UAV, dismounted and light mounted applications where size weight and power need to be minimized and jamming levels need to be known. Can also be used for navigation on these platforms as it leverages the ublox ZED-F9P dual band GNSS receiver module. This receiver tracks all current constellations on the L1 and L2 frequency bands. No need for external antenna as it includes an integrated dual frequency antenna. Can output data over USB and SPI which makes it ready for integration into many UAV platforms that support external sensors such as the Pixhawk. Supports an OLED screen that a dismounted user could use to view jamming to signal ratio levels as well as a spoofing detection indicator.



- **UAV Platforms**
- **Dismounted Warfighters**
- **Self-Driving Cars**
- **Light-Mounted Platforms**
- **Cellular Towers**
- **More...**

TALEN-X

DETECTION

JAMMING

- GPS L1/L2
- J/S measurements ~35-95dB
- CW Tone
- Swept CW
- Pulsed CW
- AWGN
- BPSK
- BOC

SPOOFING

- GNSS Simulators
- Anomalies in the GPS Data
- Data inconsistencies
- Jumps in position and time

TECHNICAL SPECIFICATIONS

- **U-blox ZED-F9P Dual Band GNSS receiver**
- **Dual band integrated antenna with 20dB LNA**
- **Optional OLED screen to display J/S measurements and spoofing detection**
- **Can be powered through USB or pin headers**

SWaP

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

Data Ouput

- USB Micro port
- SPI via pin headers
- UART via pin headers
- Configured to output real-time jamming to signal ratio measurements from 35-95dB on both L1 and L2 frequency bands.
- Spoofing detection flags
- NMEA data output to be used for system navigation

