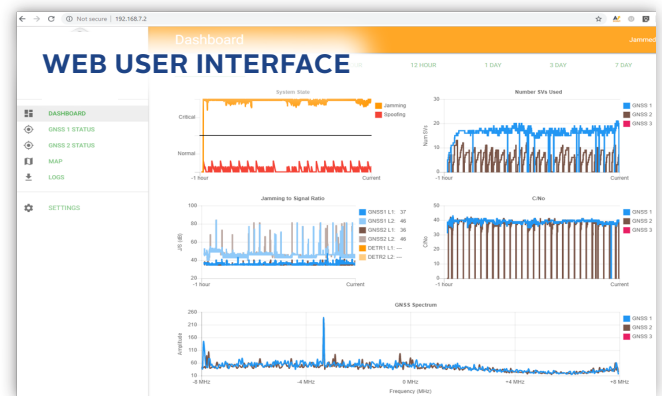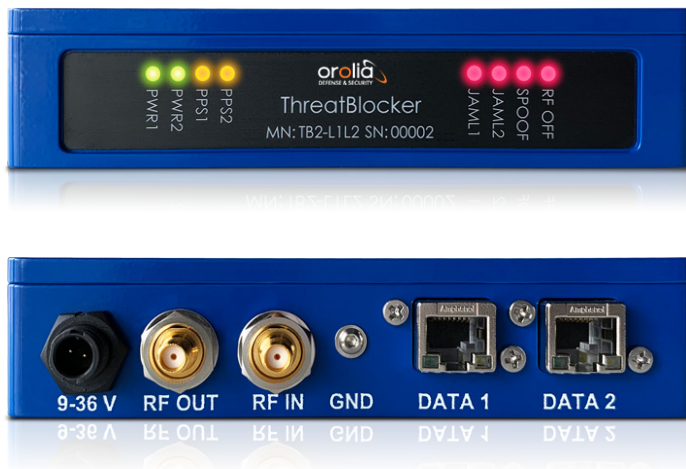# ThreatBlocker
GPS Jamming and Spoofing Data, Detection, and Protection

The Problem

- The world has become dependent on GPS to maintain our way of life

- Jamming and spoofing hardware/open source software is more accessible than ever before

- New solutions require system overhauls, changing all GPS components and antennas

- Solutions that protect the integrity of our GPS systems are required today

WHAT IS BROADSHIELD?
Patented GPS jamming and spoofing detection algorithms.

WHAT IS BLISS?
A digital processing technique to suppress jamming signals.

NEW CAPABILITIES
- L1 & L2 anti-jam (AJ) capabilities
- L1 & L2 jamming detection
- L1 & L2 J/S measurements
- Ideal for common jammers

The Solution

ThreatBlocker provides GPS jamming and spoofing data, detection, and protection; leveraging Orolia Defense & Security's patented BroadShield software and The Aerospace Corporation's BLISS (Blind Interference Signal Suppression) algorithms. It is configurable to meet your requirements and is designed to be installed in-line with your existing hardware. Install ThreatBlocker in-between a FRPA (Fixed Radiation Pattern Antenna) and GNSS receiver/system. Threatblocker has LED status indicators for real-time awareness, robust API for data output, and an intuitive web user interface to view real-time and historical data.

The Global Leader in
Resilient PNT

ITAR Controlled

Specifications

Size, Weight and Power
Size: 144 x 164 x 32mm (WxDxH)
Weight: 840 grams
Power: 10 Watts (Peak)

Ruggedization and Compliance Certifications	
Wide voltage input: 9-36V	RoHS 3, Safety EN 60950, CE
Operating temp: -40C to +85C	Environmental MIL-STD-810, IP67
EMI/EMC EN 55032, FCC 47 CFR PART 15/EN 55024/2014/30/EU	

Data output via Light Weight Ethernet (LWE)
Built-in API
RaptorX plugin
WebUI

PLOT – LIVE FIRE FIELD TEST

Data output from ThreatBlocker is compatible with an existing RaptorX plugin, allowing for a GPS jamming heat map. Blue corresponds to low J/S while red corresponds to high J/S.
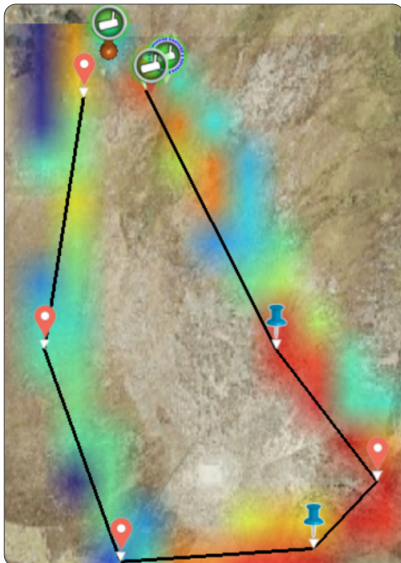
STANDARD CONFIGURATION

+ -
Power Input
9-36V

L1/L2
Antenna

POWER RF OUT RF IN ETHERNET DEBUG

Exposed RF

RF OUT

System Computer
or Sensor Network

GPS Receiver

Protected
RF

20 dB Attenuator
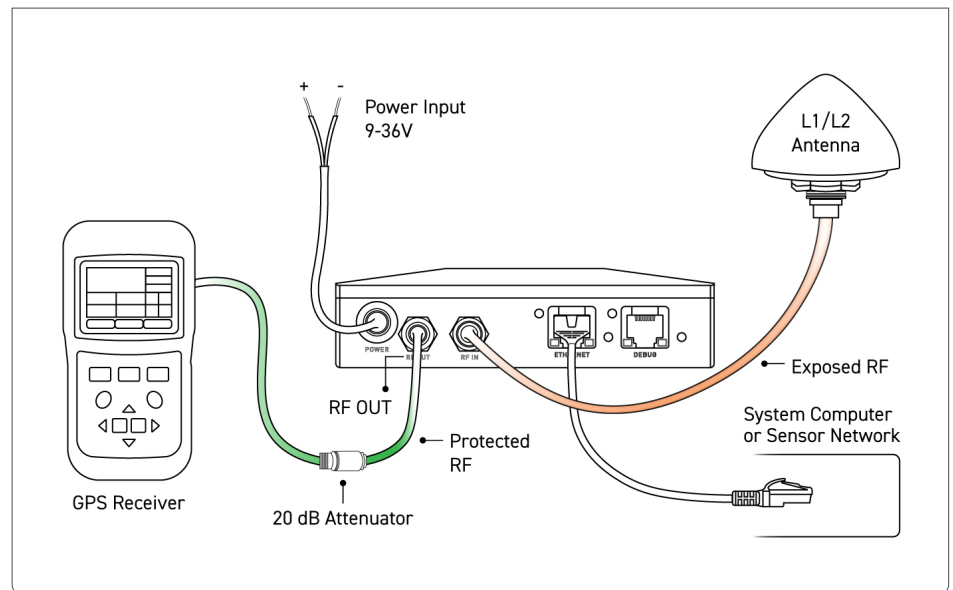
J/S MEASUREMENTS – LIVE FIRE FIELD TEST

J/S (dB)

90
80
70
60
50
40
30

TIME (s)

L1 J/S

L2 J/S