



### Features

- Null steering technology in tiny form factor
- Single, retrofit, board-level solution
- Size / Weight: 40.3 x 65.2 x 12.3mm / 35g
- Nominal power consumption <1W
- -40°C to +85°C
- Protected frequency: GPS L1 (C/A Code)
- Passthrough frequencies: GPS L2 & Glonass G1
- Minimal latency: 100ns ± 15ns (constant)

### How does it work?

**The Vulnerability of GNSS** is well understood. The satellites orbit at 20,000 KM altitude and emit a signal which is incredibly weak when received by GNSS receivers (~-125dBm). It is a simple matter to overpower this signal with a simple jammer bought online to block it completely.

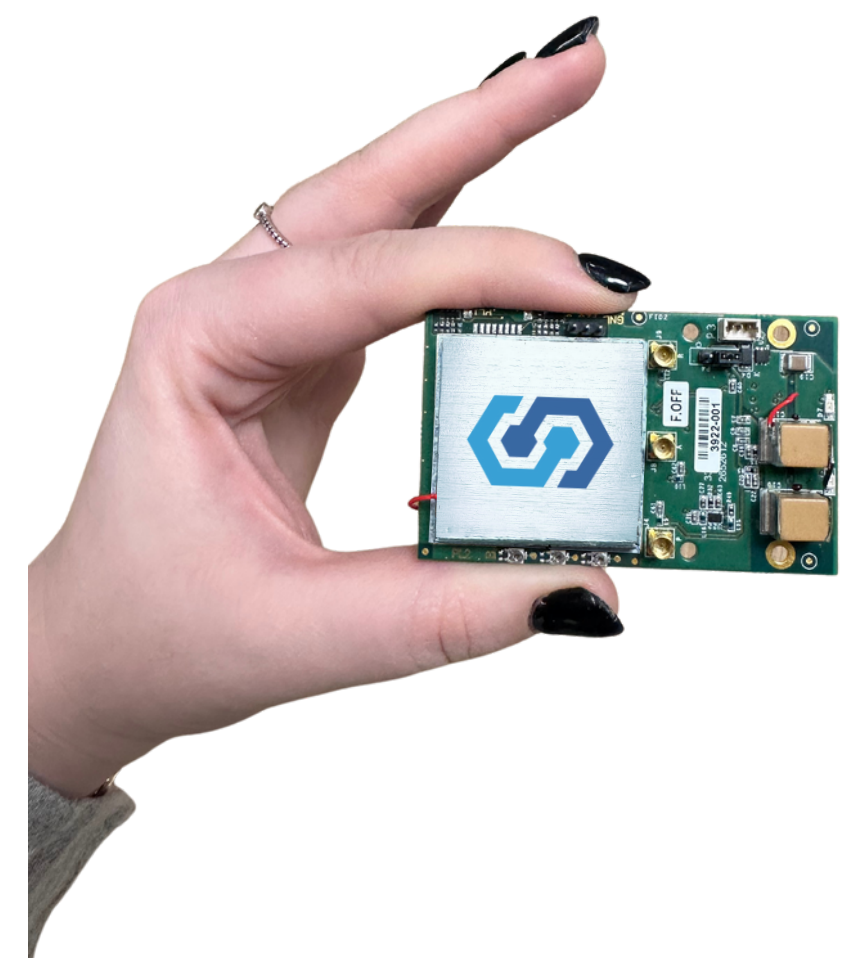
**The Null Steering Algorithm** was originally developed for military applications to protect wireless signals. GPSdome OEM adds our own sophisticated algorithms and proprietary RFIC to detect suspicious signals, combines antenna patterns, creates and dynamically steers a null in the direction of the hostile signal.

**Seamless Integration** on existing PCB externally connected to your antenna input the GPSdome OEM can work with any two off-the-shelf active 26dB antennas. For an even tighter integration, circuit-level antennas could be used and bring the entire solution to under 100g.

**GPSdome OEM is Retrofit and Standalone** The OEM is compatible with most GNSS receivers and off-the-shelf antennas. Since it does not include the receiver and antennas, it could be added to almost any system as a retrofit upgrade.

**Jamming Detection** is available from an LED on the GPSdome OEM itself or via an external connection that can be integrated into any computer system.

## GPSdome OEM: Industry's Most Disruptive GPS Anti-Jammer



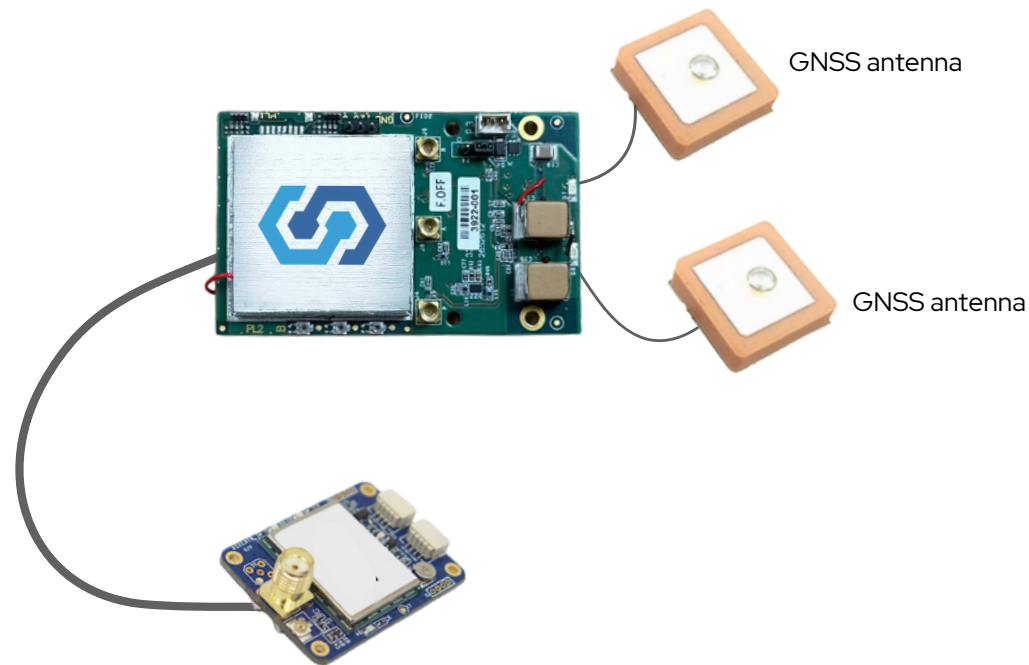
GPSdome OEM is a small-sized, light weight add-on board that could be retrofitted inside almost any UAV, side-by-side to the controller. It provides protection against GPS jamming, ensuring continuity of autonomous navigation and operation during jamming conditions. No other solution that offers such protection is as small, light, affordable, or as easily installed as GPSdome OEM.

**Small • Simple • Flexible • Retrofit**

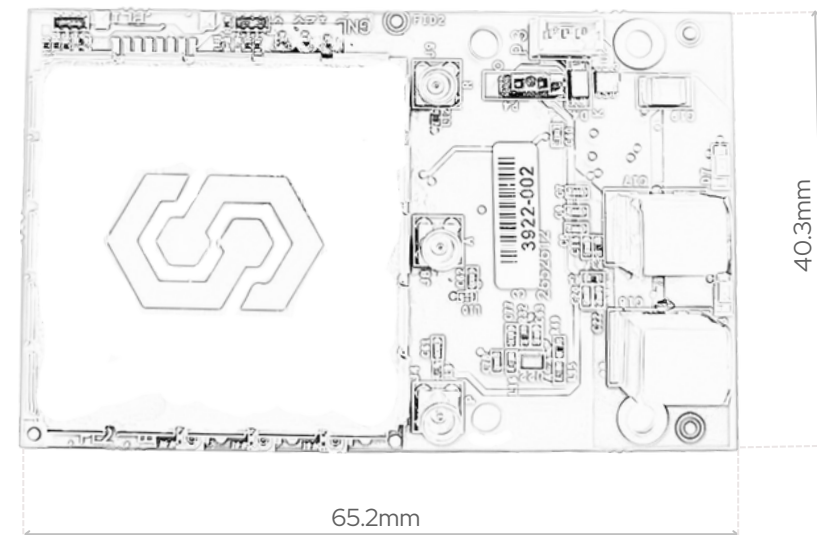




## System Diagram



## Product Dimensions



## Product Specifications

Physical		RF Interfaces		Safety & Compliance	
<b>Enclosure</b>	40.3mm x 65.2mm x 12.3mm	<b>Antenna Connectors (P/A)</b>	50Ω SMA 2.75 - 3.3VDC, designed for 26dB ±2dB gain	<b>FCC Compliant</b>	
<b>Weight</b>	35g			<b>CE Compliant</b>	
		<b>Receiver Connector (R)</b>	50Ω SMA requires 3.7 - 32VDC <1W	<b>RoHS Compliant</b>	
Environmental		Performance		Optional Connection Description	
<b>Operating Temperature Range</b>	-40°C to +85°C	<b>Protected Signal</b>	1575.42 MHz (GPS L1 C/A Code)	<b>Red Wire</b>	3.7 - 32VDC <1W
		<b>Passthrough additional 2 GNSS signals</b>	GPS L2 & Glonass G1	<b>Black Wire</b>	GND
		<b>Latency</b>	100ns ±15ns (fixed)	<b>Brown &amp; White</b>	Open drain interference detection
		<b>Compression Point</b>	25dBm		
		<b>Insertion Loss</b>	±2dB		

## Ordering Information

Product Name	Product Number	Description
<b>GPSdome OEM</b>		GPS L1 Protection, G1 & L2 Passthrough. External Power & Interference Indication Over 3 Wire Cable.

