

Features

- Null steering technology in tiny form factor
- Enclosed 74x47x25mm, 150g
- Nominal power consumption <1W
- IP67, -40°C to +85°C (enclosed)
- Protected frequency: GPS L1 (C/A Code)
- Passthrough frequencies: GPS L2 & Glonass G1
- Minimal latency: 100ns ± 15ns (constant)

GPSdome: Industry's Most Disruptive GPS Anti-Jammer



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 jammer bought online to block it.

The Null Steering Algorithm was originally developed for military applications to protect wireless signals. GPSdome 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. Installation Couldn't Be Easier just mount the 2 antennas on a flat, sky-facing base with at least 10cm separation (optimally > 25cm), connect the antennas through GPSdome, connect GPSdome to the antenna input on your GNSS receiver and feed it with power.

GPSdome is Completely Standalone GPSdome is compatible with almost any GNSS receiver on the market as well as most off-the-shelf active GNSS antennas. GPSdome does not include the GNSS receiver or the antennas.

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

GPSdome is a small-sized, add-on device that 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.

Available also in OEM version



35g OEM Solution

Small · Simple · Flexible · Retrofit

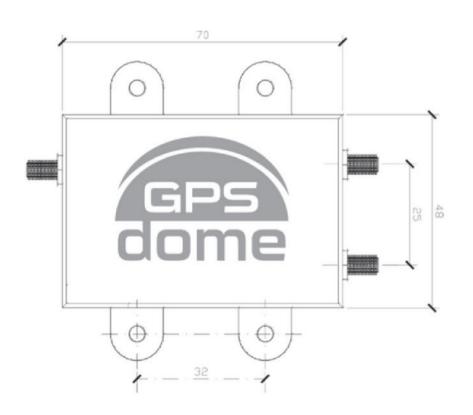




Product Diagram



Product Dimensions



Product Specifications

Physical		
Dimensions	74mm x 47mm x 25mm (excluding mounting lugs)	
Weight	150g	
Mounting	4 x M3 bolts (not supplied)	
OEM		
Dimensions	40mm x 65mm x 11mm (excluding mounting lugs)	
Weight	35g	
Mounting	4 x M2.5 bolts (not supplied)	

Performance		
Protected Signal	1575.42 MHz (GPS L1 C/A Code)	
Passthrough additional 2 GNSS signals	GPS L2 / L5 / Glonass G1	
Latency	100ns ±15ns (fixed)	
Compression Point	25dBm	
Insertion Loss	±2dB	
Environmental		
Operating Temperature Rang	-40°C to 85°C	
Waterproof Ratin	i g IP67	

Safety & Compliance				
FCC Compliant				
CE Compliant				
RoHS Compliant				
EPS Product Wire				
Connection Description				
Red Wire	3.7 – 32VDC <1W			
Black Wire	GND			
Brown & White	Open drain interference detection			
RF Interfaces				
Antenna Connectors (P/A)	50Ω SMA 2.75 - 3.3VDC, designed for 26dB ±2dB gain			
Receiver Connector (R)	50Ω SMA requires 3.7 – 32VDC <1W			

Ordering Information



Protected frequency:

1 – GPS L1

Connector/ Cable

P – Phantom power supply (over RF cable) E – external cable

Passthrough frequency (optional):

0 - null

2 – GPS L2

3 - GPS L5

4 – GLONASS G1