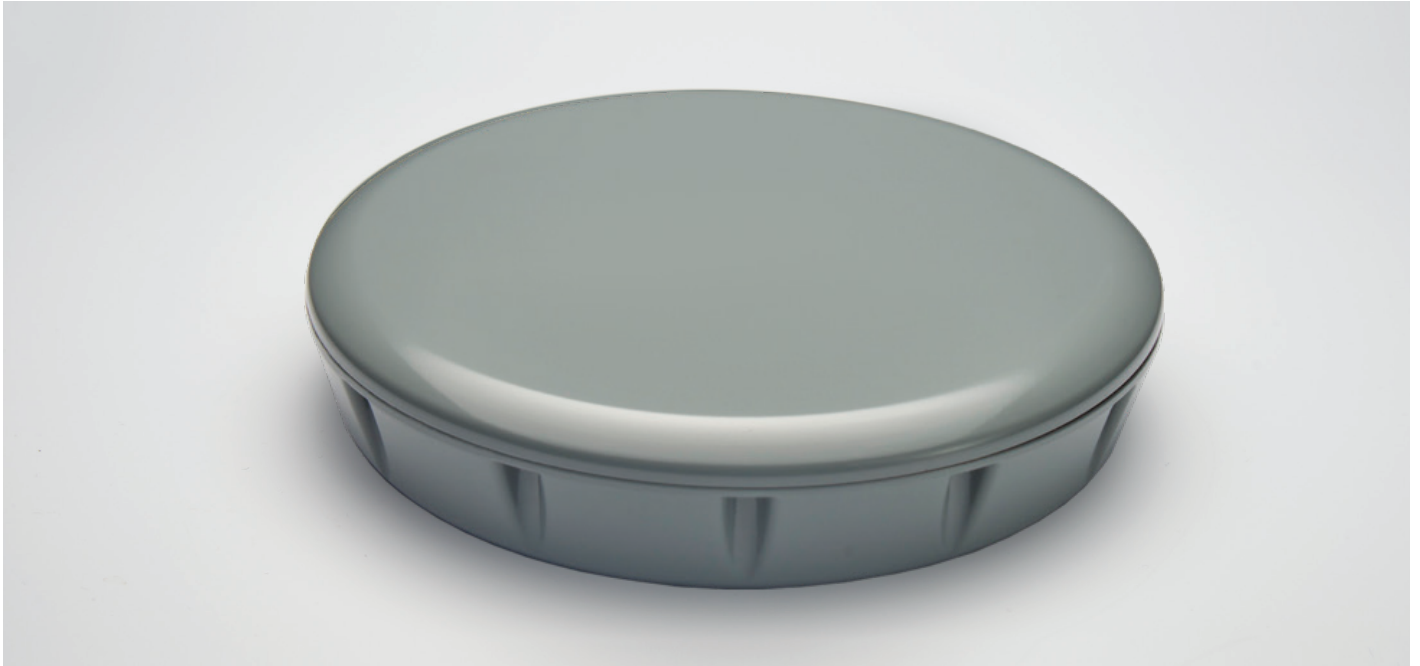


GNSS Anti-Jam Antenna



Safeguard against GNSS Interference

Global Navigation Satellite System (GNSS) is an essential service providing Position, Navigation and Timing. It enables value added services to critical operations across various domains. GNSS signal is received below the noise level of the receiver, making the signal susceptible to interference. A low power interference source is capable of denying GNSS reception by receivers within a large area.

How It Works

The GNSS Anti-Jam Antenna is the foundation in any layered GNSS resiliency configuration to safeguard access to the GNSS reception under intentional or unintentional interference. The GNSS Anti-Jam Antenna features an integrated antenna array coupled with signal processor within a single enclosure. The system automatically nulls up to three concurrent interference sources to ensure continuous protection to connected receiver.

The low power compact design allows for easy integration with new system builds or as a drop-in replacement for legacy system providing uninterrupted GNSS reception to the platforms.

Key Applications

- Intelligent traffic management
- Vessel safety and security
- Ship navigation
- Fleet management system
- Airport / port operation
- Autonomous platforms (USV, UGV)

Key Features

- Anti-jam protection against multi-jammer scenarios
- Adaptive digital nulling offers excellent interference suppression
- Compatible with legacy GPS receivers
- Compact lightweight design for easy integration to new and existing legacy fleets
- Robust response to narrow and wideband interference

Technical Specifications

GNSS Signals - Centre Frequency	
GPS L1 C/A & L1C, BeiDou B1C	1575.42 MHz
BeiDou B1I	1561.098 MHz

Controlled Reception Pattern Antenna (CRPA)	
Number of Elements	4
Bandwidth	20 MHz
Noise Figure (Maximum)	5 dB
RF Output	50 Ω

Interference Rejection	
Interference Types	CW, CHIRP, AWGN
Interference Suppression	Up to 40 dB
Simultaneous Nulling Direction	3

Physical and Electrical	
Dimension	\varnothing 188 mm x 48 mm
Weight	< 2.5 kg
Power Consumption	< 12 W
Input Voltage	+24 VDC to +28 VDC

Environmental Temperature	
Operating	-40°C to +70°C
Storage	-55°C to +85°C