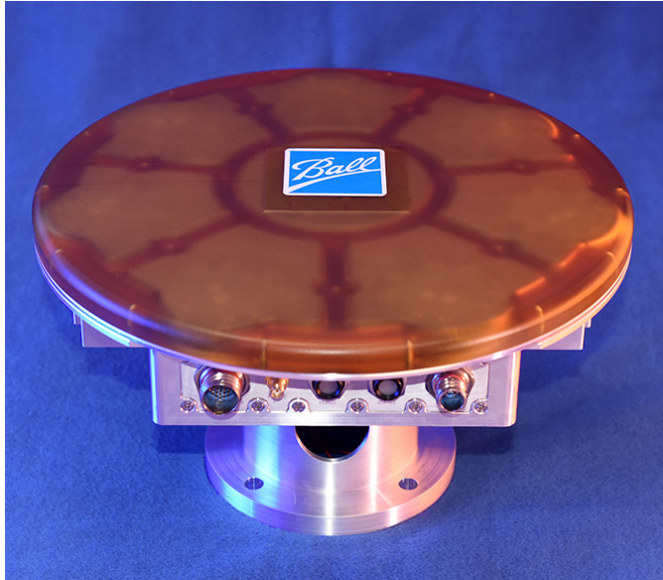


# CAGE 8 GPS ANTI-JAM SYSTEM FOR A-PNT



**GO BEYOND WITH BALL.®**

In today's battlespace, reliable situational awareness can make all the difference. Ball Aerospace GPS Anti-Jam (AJ) systems provide the warfighter with the most reliable AJ antenna and electronics available to enable Assured-Positioning, Navigation and Timing. Go with the Ball Compact Adaptive GPS Element (CAGE) 8 GPS Anti-Jam System for Assured-Positioning, Navigation and Timing (A-PNT) and you'll go forward with confidence.

## OVERVIEW

As adversaries' threats mature, the need to upgrade the nation's tactical platforms becomes critical. Ball's GPS AJ systems offer easy integration so you can field the latest technology faster and cost effectively. They are low-SWaP-C, verified M-code compatible, are scalable and expandable to any size of platform. Planned upgrades include beamsteering, pseudolite processing and direction finding.

Our antenna design experts use analysis and modeling to evaluate operational scenarios and design an AJ solution that best meets customer needs. We pay attention to mission needs throughout the process, including parameters such as SWaP, delay, and specific platform design considerations.

Ball's AJ electronics are integrated directly with the antenna, improving performance and reducing integration cost and complexity.

This superior performance is rooted in our continuous advancement of GPS AJ technology that began in the early 1990s. We've invented techniques for improving gain and temperature stability while partnering with the DoD on assessing mission challenges and evaluating system performance to provide the most robust hardware solution for critical missions. Our GPS AJ enables collaboration and shared situational awareness with other nodes in the netcentric battlefield, helping warfighters keep every advantage in the fight.

Go with Ball's CAGE GPS AJ System for A-PNT and you go confidently. We offer multiple low-cost and high-end GPS AJ solutions for the military and manufacture thousands of antenna products each year—with 100 percent quality ratings and on-time delivery—to the government.

## CUSTOMIZABLE PERFORMANCE

• Antenna Gain	Exceeds modern GPS standard for state 5 link. Contact Ball for exact specifications.
• Bandwidth	±12 MHz
• Number of Elements	8 L1 and 8 L2
• Form Factor	Customizable shaped
• Diameter	11.75 in. (typical)
• Height	2.25 in. (typical)
• Weight	10 lbs. (maximum)
• Power Handling	40 W (typical)

## ADVANTAGES

The Ball CAGE 8 AJ System for A-PNT and related Ball GPS technology has been extensively tested by the government in the lab, field and operational tests. It is:

- Compatible with VICTORY open systems architecture for providing in-vehicle networks
- Verified M-code compatible
- Upgradeable to include beamsteering, pseudolite identification and direction finding capabilities
- Compatible with Global Navigation Satellite System (GNSS)
- Customizable, scalable and expandable to mission needs
- One "smart" antenna unit with integrated electronics
- An easy retrofit solution with AJ capability that minimizes host-platform impacts
- Able to be installed without modifying the receiver

The Ball CAGE 8 offers:

- Full field-of-view, multi-element, anti-jam Controlled Reception Pattern Antennas (CRPA)
- Adaptive, null steering electronics
- Space-Time Adaptive Processing (STAP)