RIMCO JSC

NavGate-1M Anti-Jamming Navigation System (AJNS)



Army require precision and accuracy to execute their missions, which becomes more difficult when GNSS is compromised when using enemy Electronic Warfare Systems.

The Anti-Jamming Technology from RIMCO JSC is battletested assured positioning technology that protects the satellite signals your UAV's, Ships, Tanks and Infantry Fighting Vehicle based on.

RIMCO JSC NavGate-1M includes a Rugged GNSS Receiver and Anti-Jamming Antenna (AJA-4), threats to support mitigate the evolving electronic threats that warfighters are facing today.

Our AJA-4 comprises the best ground GNSS anti-jam antenna electronics available, featuring an integrated, 4,8 or 16-element controlled reception pattern antenna (CRPA).

NavGate-1M generates and distributes assured positioning, navigation and timing information to all systems on board the platform through one device.

Our NavGate-1M provides a flexible single device solution that can be adapted, enhanced, updated and supported throughout the life of the host platform.

KEY FEATURES & BENEFITS

- Make in Russia
- Embedded Liquid Crystal Display (LCD) or Vacuum Fluorescent Display (VFD) for navigation information
- Embedded Black-box Data Recorder
- Embedded Telecom Module (option)
- Black-box Data Recorder
- Rugged Steel Construction Case
- Delivers exceptional anti-jamming
- Incorporates 4,8 or 16-element CRPA
- OANS units employ rugged design which offers high reliability (high MTBF) and low Life-Cycle-Cost.
- Performance (Actual performance for specific threat environments varies and is classified. Contact us for more information)

This approach simplifies design, manufacture, logistics, accounting and long-term support. It provides the user with a solution to all platform needs through one device, fitted with selected sensors, which can be upgraded throughout the life of the vehicle.

Housed in a small, lightweight and rugged chassis, NavGate-1M provides the interfaces needed to enable further navigational augmentation through the integration of additional external sensors (such as INS, sea lag or odometers).

Over the years, RIMCO JSC has gained vast experience in integrating immune navigation and anti-jamming solutions into various platforms. Our stringent procedures and MIL-STD compliance enable high overall quality and reliability.

Specification

Frequency

- NaviC: L5
- GLONASS: L1CA, L2CA, L2P, L3 CDMA
- Galileo: E1, E5a, E5b, E5 AltBoc, E6
- GPS: L1C/A, L1PY, L2C, L2P(Y), L5
- Beidou: B1I, B1C, B2a, B2I, B2b, B3I
- QZSS: L1C/A, L1C/B, L2C, L5
- Horizontal standalone: 1.2 m

Vertical standalone: 1.9 m

Time precision: 5 ns

Data Update Rate: 100 Hz

Liquid Crystal Display Dimensions: 70,4 x 20,8 mm

Black-box Data Recorder (memory capacity): 128 Mbit

Dimensions: 198 x 132 x 85 mm

Weight: 1200 g

Supply Voltage: +12 V

Power Consumption: 0.5 W

Operating temperature: - 40° C to + 71° C Storage temperature: - 55° C to + 85° C

Interfaces

RS-232/RS-422/USB

Anti-jamming technology

The "RF add-on" configuration allows for plug-and-play AJA-4 installation on top of existing NavGate-1M. **Delivers anti-jamming performance of ~95 dB J/S***

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