

MAGR-2K-M Miniaturised Airborne GPS Receiver

Flexible, secure and future-ready

Upgrade to the most adaptable military GPS receiver available

With a solid record of in-service performance and an open-systems architecture, the Collins Aerospace Miniaturised Airborne GPS Receiver product line offers unparalleled reliability and extensibility in a single, bolt-on solution.

More than 3,500 of our MAGR variants have been delivered for service aboard 20 types of fixed-wing and rotary-wing platforms across more than a dozen countries.

Greater functionality and affordability

MAGR-2K-M is an upgrade to incorporate the latest GPS and M-code capabilities to the MAGR-2K-S24 design – in a form-and-fit replacement that will continue to provide reduced maintenance costs. Open architecture allows for future technology capabilities to be incorporated.

The MAGR-2K-M has reserve capacity for both processing and functional upgrades. It incorporates newer processors and memory to provide increased memory space and computing throughput with lower power consumption.

MAGR-2K-M is the affordable path for acquiring and staying current with all GPS technology advancements envisioned for the next 15 years.

Improved navigation and anti-jam capability

With 24-channel, all-in-view tracking and reduced receiver channel switching between satellites, the MAGR-2K-M

continues the legacy of providing improved navigation accuracy and integrity. It also provides greater resistance to interference and jamming and incorporates the M-code capability. The GPS Receiver Application Module (GRAM-S/M) – with Selective Availability and Anti-Spoofing Module (SAASM) and M-code – provides greater security and flexibility.

Supports GATM

MAGR-2K-M will continue to meet the requirements for civil interoperability for Global Air Traffic Management (GATM). In the GATM domain, it will operate as the primary means of navigation for en route and non-precision approach phases of flight. This capability is reinforced by Military Standard Order (MSO-C145b) certification.

Increased reliability, easier maintenance

MAGR-2K-M continues our commitment to reliability improvements, with a predicted Mean Time Between Failure (MTBF) greater than 7,500 hours.

Similar to MAGR-2K-S24, an extensive built-in test addresses more than 95% of all failure modes, eliminating the need for external test equipment.

MAGR-2K-M is a Line Replaceable Unit (LRU) with a mean time to replace of 30 minutes. Scheduled maintenance occurs only twice a year, when the three “C” batteries are replaced.



Key features and benefits

Open, extendable and scalable GPS solution for all platforms

Assured Position, Navigation and Timing (APNT) via the Military GPS User Equipment (MGUE) GRAM-S/M with anti-spoofing and time integrity monitoring

Provides a C/A, Y and M-code-capable, data-fused PNT solution

Compliant with CI-MAGR-700 and IS-GPS-179

MSO-C145b certification

MAGR-2K-M, antenna electronics and antenna available as a package

Backwards compatibility option with Legacy MAGR-2K-S24 for SAASM Y-code based host platforms, with a pathway to full M-Code capability and MSO via software upgrade

Reserve capacity available for both processing and functional upgrades

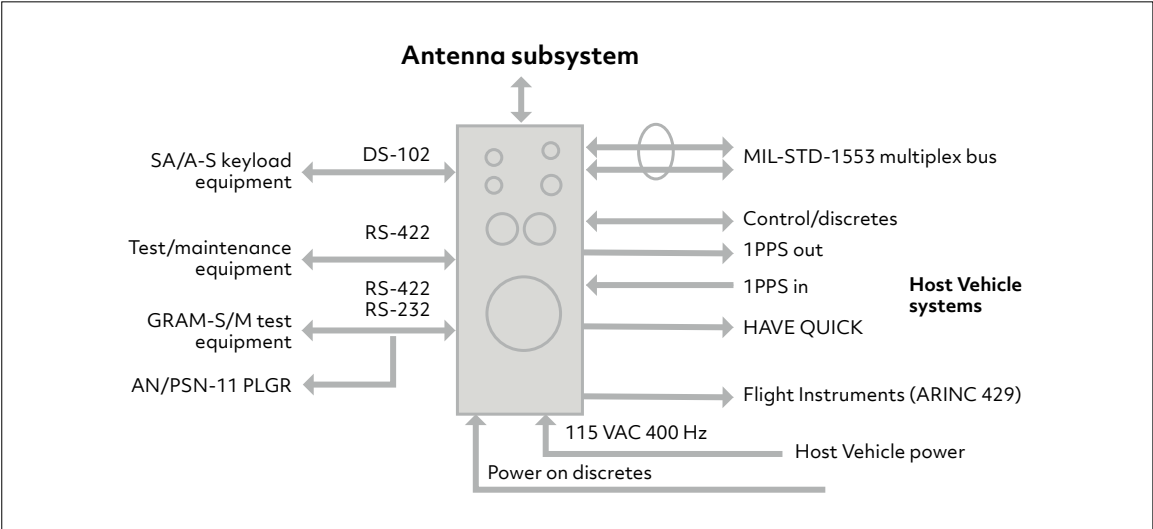
Incorporates nonvolatile memory

Form-and-fit compatible with MAGR, MAGR-2000 and MAGR-2K-S24

Two-level logistics support with obsolescence mitigation

Taking production orders for U.S. DoW and foreign military sales

MAGR-2K-M Miniaturized Airborne GPS Receiver



Functional interfaces

Specifications accuracy (nominal)	Size	12.8 x 3.2 x 6.8 in. 325.6 x 81.5 x 172.2 mm
	Weight	11.5 lb. (5.23 kg)
	Power	115 V, 400 Hz 40 W (average)
	Temperature	-55 °C to +95 °C (storage)
	MTBF	>7,500 hours

Learn more at rtx.com/collinsaerospace

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