BAE SYSTEMS

Remote Secure Receiver (RSR)

Small, powerful, and trusted

Addresses critical combat needs

Remote Secure Receiver plugs and plays with commercial and military devices, providing the world's smallest, most trusted Global Positioning System, or GPS, to almost any application. The positioning, navigation and timing (PNT) needs of soldiers are rapidly changing. Armies are moving to modernized systems that require improved size, weight and power (SWaP) and seamless interoperability with both military and commercial devices.

Military operations also continue to rely on PNT data that only GPS can provide. In combat, the accuracy and confidence of PNT data can mean the difference between life and death. Non-military GPS receivers simply aren't good enough when lives are on the line. Missions such as call for fire, contact reporting, targeting, border patrol, and tactical surveillance all depend on trusted, high-assurance PNT.

The mission need for trusted PNT is clear, and the GPS jamming and spoofing threat is growing. The mission impacts of unassured PNT can be deadly. A navigating soldier's position can be 500 meters off in just five minutes. These challenges can seriously limit the ability of soldiers to successfully conduct operations.

BAE Systems leverages industry-leading military GPS capabilities and low-SWaP attributes to address critical combat needs.

RSR is the world's smallest, most trusted and lowest power Selective Availability Anti-spoofing Module remote GPS. Ideal for dismounted soldiers, RSR plugs and plays with commercial devices to provide secure, trusted military GPS in a small, lightweight, low-power remote package unmatched by any other product on the market today.

Key features and benefits

- Trusted, SAASM-based military GPS*
- Plugs and plays with multiple platforms, including commercial devices
- High-integrity signal quality*
- Fast acquisition time
- Anti-jamming and spoofing for GPS-degraded environments*
- Data integration with COTS and MOTS devices
- Flexible I/O – 1PPS, USB, RS-232, NMEA or IS-GPS-153*
- Small and low power; no internal batteries
- Pseudolite capable with software upgrade*

Secure, trusted military GPS in a small, lightweight, low-power remote package

Application flexibility

- Handheld
- Targeting
- Ground vehicles
- Airborne assets
- Robots

Military GPS

- SAASM
- L1/L2 operation
- Integrated antenna
- Keys
  - Black and red key operation
  - Supports Over The Air Rekeying (OTAR)
  - Unclassified when keyed

Power

- No internal batteries
- No power required to maintain crypto
- External power input
  - <500 mW (continuous track)
  - Input voltage: 2.5V - 5.5V

Ruggedized for extreme conditions

- Built for MIL-STD-810F qualification to survive harsh operating environments
- Temperature range — Operating: -20° to +70°C; Storage: -40° to +70°C
- Water resistant — Immersible to 1 meter
- EMI 461 (RE-102 and RS-103)
- Rugged cables available on request; includes key fill, USB and RS-232

Physical characteristics

Size	2.6x1.8x1.0 in. (6.6 x 4.6 x 2.5 cm)
Weight	< 3.5 oz (.099 g)

Data integration with COTS and MOTS devices

- Windows® devices
- Android® devices
- Linux® devices
- Military radios

Main I/O connector

- Nonproprietary connector
- USB – NMEA or IS-GPS-153
- RS-232 – NMEA or IS-GPS-153
- 1PPS timing
- External on/off discrete

Auxiliary connector

- Crypto key fill
- Waterproof
- Attached cover

* Not available with consumer-grade, commercial products. Specifications subject to change without notice.

For more information contact:
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