Achieving the required weapons effects on the modern battlefield requires rapid engagement and high accuracy. With that in mind, BAE Systems brings you the NavStrike™ GPS receiver, the most advanced Y-Code GPS receiver in the combat-proven family of BAE Systems’ munitions receivers.

 Derived from the field-proven, 12-channel NavStrike and Joint Direct Attack Munitions (JDAM) receivers, our NavStrike offers high-performance GPS for tightly coupled Global Positioning System/inertial Navigation System (GPS/INS) integrations.

Engineered using the vast BAE Systems experience in delivering precise and reliable weapons GPS capabilities to the battlefield, NavStrike provides: enhanced direct-Y acquisition, 24-channel all-in-view navigation, high jamming immunity, fast initial acquisitions, carrier loop aiding, fast cold start, and extended range correlation.

**Key features and benefits**

- 24-channel SAASM-based design
- High-rate aiding
- SA/AS capable*
- >6,000 correlators for fast acquisition
- All-in-view track and navigation
- High anti-jamming immunity
- High accuracy
- Antenna masking selection
- Precise time transfers (timing pulse not needed)
- Simultaneous ionospheric correction
- Carrier loop aiding
- Carrier phase measurement outputs
- Fifth-generation SAASM-based design
- Dual- or single-frequency (L1/L2) tracking
- Enhanced direct-Y code acquisition/cold start
- 24-channel all-in-view tracking
- No need for active antenna electronics
- Field-reprogrammable software
- Designed for high-g vibration and shock
- High-speed serial interface
- SAASM extended functions, including black-key
- Field clock recalibration for extended storage
High accuracy in a compact package

NavStrike combines a small, cost-effective package with high accuracy and reliability, all keys to your success in missile and munitions applications. Experience NavStrike’s accurate GPS navigation, either as a stand-alone system or integrated with an existing INS or Doppler reference system.

Precise

This embedded receiver module offers full Precise Positioning Service (PPS) accuracy. Simultaneous L1/L2 operation provides real-time ionospheric corrections for further accuracy enhancements. Its primary communication interface is a high-speed RS-422 serial port.

Delivers precise GPS navigation

System characteristics

- **Receiver**: L1 frequency, C/A and P or Y code*, L2 frequency, P or Y code*
- **Dynamics**: >10 g acceleration
- **TTFF**: <8 sec - time uncert: ≤10 μs, <25 sec - time uncert: ≤10 ms, 77 s nominal cold start without initialization data
- **Time accuracy**: ≤±30 nanoseconds RMS
- **Position accuracy**: <3 meters CEP*, <2 m typical, Greater accuracy with 24 channels
- **Velocity accuracy**: <0.07 m/sec RMS typical
- **Crypto key input**: Serial port, KYK-13/KOI-18/CYZ-10*
- **Fault coverage**: >95%

Growth path

Modular design and field-programmable software ease maintenance, provide a growth path and reduce life-cycle cost. Delivery is assured by using common critical components, processes and manufacturing lines that deliver over 100,000 Selective Availability Anti-Spoofing Module (SAASM)-based GPS receivers per year.

Interaces

- Serial data: RS-422, up to 230 Kbaud
- 1 PPS/TimeMark/HaveQuick
- Single L1/L2 RF antenna port

Physical characteristics

- **Power**: <4.0 W continuous, <3.0 W track
- **Weight**: 0.5 lbs maximum
- **Size/volume**: 3.5 W x 3.0 H x 0.75 D in. maximum
- **Temp. range**: -54 C to +85 C (continuous), -62 C to +95 C (storage)
- **Shock**: 386 g operating

* Export of Precise Positioning Service (PPS) units is authorized for GPS Memorandum of Understanding countries only. PPS security modules must be obtained through Foreign Military Sales (FMS) procurement.