

NavAssure® 200: SAASM P(Y) Code GPS Receiver in Type II SSI Form Factor

Capabilities and Features



The NavAssure® receiver is one of the world's smallest, lightest and lowest power SAASM receiver*. Designed from the ground-up to service the most SWAP constrained applications, NavAssure® allows deployment of SAASM technology in platforms never thought possible. From embedded radios to artillery applications, to micro-UAVs and Blue Force Tracking applications, Mayflower's micro SAASM receiver is redefining the military GPS receiver landscape. NavAssure® 200 is packaged in a Modified Type II SSI GB-GRAM form factor.

NavAssure® 200 Technical Specifications Summary

High level Features**

- Two antenna inputs: primary and auxiliary
- 12 tracking channels - all in view design
- Supports Simultaneous L1 and L2 (C/A and P(Y))
- Next Generation Security Architecture

SWAP Metrics

- Size: 1.75" x 2.45" (GB-GRAM Type II SSI)
- Weight: 32 grams
- Power: < 1.3 W (continuous tracking mode)

Performance Metrics

- 8 second direct-Y acquisition (Hot-Start)
- Position Error: < 5m (1 sigma SEP)
- Velocity Accuracy: < 0.1 m/s (1 sigma)
- PVT output: up to 10 Hz

- Interface: Micro 80-pin connector (Hirose FX10A-80S/8-SV)
- Host Interface: COM1 (LVTTTL or RS-232), COM 2 (LVTTTL)
- Protocol: ICD-GPS-153
(Outputs: PVT, PR/DR, Channel/Satellite/SAASM Status)
- Key Fill Ports: DS-101 and DS-102
- PPS: 1 PPS In/1PPS Out
- Operating Voltage: 3.3 V +/- 10%
- Temperature
Operating: -40°C to +85°C
Storage: -55°C to +125°C
- Built-In Test (BIT): 95% coverage
- Antenna Input: Primary/Auxiliary, Active/Passive (MMCX Right Angle connectors)
- Codes/Frequencies: L1 and L2 Simultaneous, C/A and P(Y)

NavAssure® is a registered trademark of Mayflower Communications Company, Inc.

* The NavAssure® 200 has been granted Security Approval by the GPS Directorate

** Suitable for SWAP constrained embedded radio, UAV and ground applications