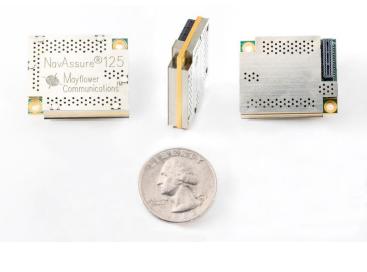


# DATA SHEET

### NavAssure® 125 SAASM P(Y) Code GPS Receiver

Ultra-compact dual frequency SAASM receiver



## **Capabilities and Features**

The NavAssure® 125 receiver is one of the world's smallest, lightest and lowest power SAASM receiver\*. Designed from the ground-up service the most SWAP constrained to applications, NavAssure® allows deployment of SAASM technology in platforms never thought From embedded radios to artillery possible. applications, to micro-UAVs and Blue Force applications, Mayflower's Tracking micro SAASM receiver is redefining the military GPS landscape. *NavAssure*<sup>®</sup> 125 receiver is packaged in a 1.25" x 1" board form factor.

#### High level Features\*\*

- Antenna input: single passive antenna
- All-in-view tracking
- Simultaneous L1 and L2 (C/A and P(Y))
- Next Generation Security Architecture

#### **SWAP Metrics**

- Size: 1.25" x 1" x 0.292"
- Weight: 10 grams
- Power: < 1.3W (continuous tracking mode) : < 1W (Fix Mode)
- Power Supply: 3.3V +/-10%

#### **Performance Metrics**

- 8 second direct-Y acquisition (Hot-Start)
- Position Accuracy: < 3m (1 sigma SEP)
- Velocity Accuracy: < 0.1 m/s (1 sigma)
- PVT output: up to 10 Hz

#### NavAssure® 125 Technical Specifications Summary

1 PPS In/1 PPS Out

- Interface: 30 pin connector (Samtec SEMS-115-02-03.0-FG-D-K)
- Host Interface: COM1/COM2 (3.3V LVTTL)
- Protocol: IS-GPS-153
  - (Outputs: PVT,
    - Channel/Satellite/SAASM Status)
- Key Fill Ports:
- PPS:
  - Operating Voltage: 3.3 V +/- 10%
- Temperature
  - Operating:
    - Storage:
      - -55°C to +125°C IT): 95% coverage

DS-101

- Built-In Test (BIT): 95% cov
- Antenna Input: Passive (Hirose U.FL-R-SMT-1)

0°C to +70°C

Codes/Frequencies: L1 and L2 Simultaneous, C/A and P(Y)

*NavAssure®* is a registered trademark of Mayflower Communications Company, Inc. \* The *NavAssure®* 125 has been granted Security Approval by the GPS Directorate.

- \*\* Suitable for SWAP constrained small UAS and handheld applications
- Directorate. S Directorate. Communications™