

ATACNAV – Advanced Tactical Navigator

The ATACNAV system provides high accuracy real-time Time Space Position Information (TSPI) on static and dynamic platforms. The ATACNAV system utilizes a high performance GPS receiver and a tactical grade inertial measurement unit to provide accurate position, velocity, and attitude information (pitch, roll, heading) at rates up to 100 times per second.

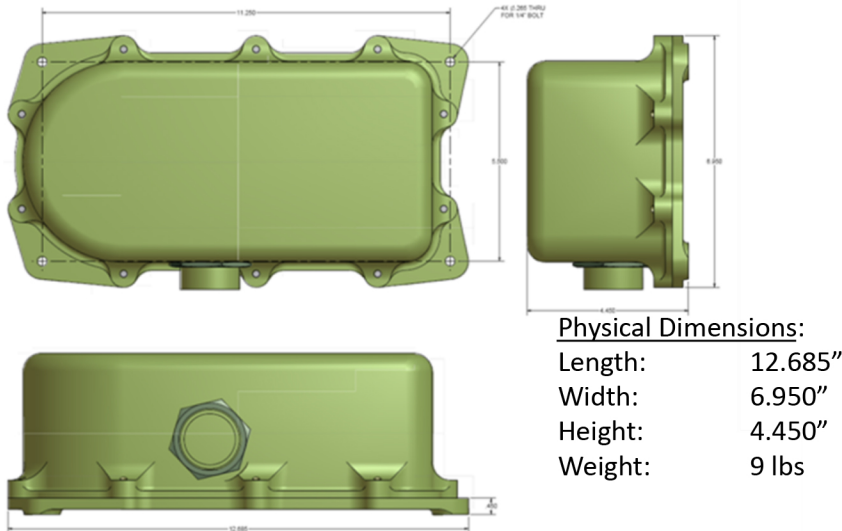
The electronics contained in the ATACNAV are Commercial-Off-The-Shelf (COTS) modular components and Non-Developmental Items (NDI). An option is available that incorporates a SAASM capable GPS Receiver in place of the standard commercial model.

The ATACNAV system provides the following outputs:

- GPS Based 1 PPS signal (RS-422 differential and 10V single ended)
- Time tagged 100 Hz blended INS/GPS navigation data solution (position, velocity, attitude).
- Time tagged raw ΔV and $\Delta \theta$ measurements (100 Hz)
- Time tagged instantaneous rates and accelerations (up to 300 Hz)
- Raw GPS range and phase measurements at 1 Hz

Interfaces include 3 RS-422 serial data ports (baud rates up 921.6 bits/second), 4 discrete inputs and 4 discrete outputs, both single-ended (10V) and differential GPS 1 PPS signal and two (2) 100BaseT Ethernet ports. Custom interface messages are available based on customer needs.

Operating temperature range is -40 C to + 85 C.



Base Model :

P/N: ASEI-AN-001-00 (Quantity 1-5)

Options:

Base Model with dual-frequency GPS receiver

P/N: ASEI-AN-002-00 (Quantity 1-5)

SAASM Compliant GPS Receiver

P/N: ASEI-AN-004-00 (Quantity 1-5)

SAASM Compliant GPS Receiver with Compass

P/N: ASEI-AN-004-20 (Quantity 1-5)