<u>High Accuracy Advanced Tactical Navigation System – ATACNAV-HA & ATACNAV-HA-SE</u>

The High Accuracy ATACNAV system (ATACNAV-HA) is the navigation grade version of the popular ATACNAV system. It combines the navigation grade performance of the Honeywell HG9900 inertial measurement (IMU) and the precision of a Novatel commercial GPS receiver or L3-Interstate Electronics SAASM compliant GPS receiver to provide high accuracy real-time Time Space Position Information (TSPI) on static and dynamic platforms.

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

The ATACNAV system provides the following:

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

Interfaces include three (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) 100Base-T Ethernet ports.

Operating temperature range is -40 C to



Dual Enclosure ATACNAV-HA (External IMU)



Single Enclosure ATACNAV HA-SE

<u>Physical Dimensions</u>:

Length: 12.685"
Width: 7.67"
Height: 8.26"
Weight: 16.4 lbs

High Accuracy ATACNAV Base Model (Commercial GPS Receiver)

P/N: ASEI-AN-001-01 (Dual Enclosure, L1 Only GPS)
P/N: ASEI-AN-001-02 (Single Enclosure, L1 Only GPS)
P/N: ASEI-AN-002-01 (Dual Enclosure, L1/L2 GPS)
P/N: ASEI-AN-002-02 (Single Enclosure, L1/I2 GPS)

SAASM Compliant Option:

High Accuracy ATACNAV Base Model (SAASM Compliant GPS Receiver)

P/N: ASEI-AN-004-01 (Dual Enclosure) P/N: ASEI-AN-004-02 (Single Enclosure)