

NEW PRODUCT NEWS

AUGUST, 2023

FORT FIELD OPS REMOTE TRACKER



When GPS is unusable, FORT finds and tracks your dismounted warfighters with A-PNT **positioning** and **navigation** data.

What is FORT? Fort (Field Ops Remote Tracker) is a small, body-worn sensor-based module that tracks a dismounted soldier when GPS is contested, unavailable or spoofed.



FORT is completely self-contained and relies only on magnetic, inertial, and pressure sensors. It's fused with unique AI/ML algorithms



that compute position by learning the human body kinetics to determine distance and direction of travel.

FORT delivers 10 meter accuracy for every kilometer traveled. FORT's accuracy and performance are backed by a separate set of AI/ML models that correct for



traditional sensor error sources, such as gyro bias drift, ambient magnetic anomalies and age-related performance degradations. These models combine to make FORT's performance stand head and shoulders above current approaches used by competitive INS systems.

Self-Contained - No additional infrastructure required and optimized for SWaP, the tracking unit can be body worn and is easily affixed anywhere (uniform,

pocket, head). The path of travel can be viewed on any iPhone (Android device supported in the near future).

SPECS:

Size: 50.7 x 30 x 15.35 mm

Weight: 22 g

Integrated Sensors:

Magnetometer, Gyroscope, Accelerometer, and Pressure

Communication: BLE or USB to iOS device. Available on Android Q4, 2023

Customizable to mission specifications

Programs: APNT

Modernization Priority

Capability: Sensor Edge AI algorithms; Position, Navigation and Timing (PNT); GPS denied soldier tracking.





About PNI Sensor

PNI is an American positioning and navigation product and technology company that provides highly accurate, precise position and navigation data to systems using proprietary sensors, algorithms and Edge AI.

Building on decades of patented sensor and algorithm development, PNI offers the industry's highest-performance geomagnetic sensor in its class, location and motion coprocessors, high-performance modules, sensor fusion algorithms, and complete sensor systems.

US-based PNI has worked with many notable companies serving the DoD and is experienced in meeting the high standards of the military sector. PNI was selected as the 2023 XTech/ Search 7 winner.

Tracking Accuracy without GPS	Position	1% distance traveled
	Maximum time without external reference for 1% accuracy	30 minutes
Dimensions (l x w x h)		50.7 x 30 x 15.35 mm
Weight		22 grams
Connector		USB Micro
Communication Interface		USB virtual Comm Port
Communication Protocol		PNI Binary
Communication Rate		38400 baud
Operating Temperature		-40°C to +85°C
Storage Temperature		-40°C to +85°C

How does it work? FORT is a self-contained sensor-based tracker that relies on Earth geophysics and human kinetics which cannot be jammed or spoofed.

It uses Edge AI and ML in its patented algorithms, and it has been built to withstand magnetic interference, gyro drift and other forces that can send less sophisticated systems awry.

