

## FIREFLY for Military Operations

FIREFLY serves as an interference-resilient position, navigation, and tracking (PNT) system designed for forward-deployed warfighters operating in GPS-denied areas.



*FIREFLY Device*



*FIREFLY ATAК-Based Visualization Plugin*

FIREFLY integrates interference-resilient location-tracking, environmental sensing, command and control connectivity, and real-time analytics to increase situational awareness and operational visibility of operational personnel in GPS-denied areas. Our simple, lightweight, and cost-efficient system is designed to continuously operate even in electronically contested, adversarial environments, keeping warfighters oriented and safe in the line of duty using currently deployed ATAК devices.

### FIREFLY Helps Warfighters:

- Gain location visibility in GPS-denied areas and difficult environments.
- Operate continuously in RF-hostile environments.
- Seamlessly integrate with ATAК-enabled devices.
- Improve situational awareness to keep warfighters safe and position-oriented.
- Leverage real-time locations to coordinate and adapt operations.
- Reduce response times in critical situations.
- Make tactical decisions based on real-time data.



All of our products are designed and manufactured in the USA.

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## About FIREFLY for Military Operations

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**FIREFLY offers on-demand PNT capabilities for warfighters in GPS-denied areas.** Our cost-efficient system provides real-time geospatial visibility of personnel across large deployment areas and mixed indoor/outdoor environments, integrating seamlessly with Android Tactical Assault & Team Awareness Kits (ATAK) enabled devices. FIREFLY leverages inexpensive, miniaturized computing systems from the Internet of Things, interference-resilient wireless networking connectivity, and transceivers with high-precision timing to build a mesh-connected system that delivers real-time localization information to Commanders and fellow team members.

**FIREFLY has been optimized for localization and tracking** within buildings, dense urban areas, and across complex terrain where access to satellite-transmitted positioning signals is limited, unavailable, or intentionally blocked. Moreover, we have integrated autonomic jamming resilience techniques, designed to functionally adapt during intentional RF-interference injection attacks and ensure operational continuity in RF-hostile environments.

**FIREFLY employs advanced machine learning and analytics,** which drastically reduces information overload during critical situations. These detailed analytics are integrated into easy-to-use visualizations that seamlessly render real-time position and tracking data in Cursor on Target format on ATAK-enabled devices, to enable informed and efficient tactical decision making. Furthermore, while real-time location data is imperative in the moment, this data can also be automatically stored for post-event analysis and operational training, to help you stay one step ahead—at all times.

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## FIREFLY Kit

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**FIREFLY technology transforms every vehicle into an adaptable, mobile tactical hub. The full FIREFLY Kit includes:**

- **FIREFLY Devices**
- **Warfighter Location & Analytics Hub**
- **ATAK-Based FIREFLY Geospatial Visualization Plugin**

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## About Us

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**Namatad, Inc.** creates easy-to-use technology that connects people, promotes safety, and enables data-driven decision making. Founded out of the IPA research lab at the University of Washington, Namatad, Inc. is agile, forward-thinking, and dedicated to its mission to inform, connect, and protect those who protect us all.