

# PathLink

## Data Sheet



## Product Summary

Today's Warfighters require reliable, high-bandwidth communications to maintain situational awareness on the battlefield. When combined with a **Hybrid F/A**-enabled Wide Area Network (WAN) network edge device, Fairwinds' **PathLink** Network Service bonds multiple WAN communication paths to deliver mission critical voice, video and data down to the tactical edge. The **Hybrid F/A** intelligent network routing engine maintains superior performance, across trusted and untrusted connections, in Denied, Degraded, Intermittent and Limited (DDIL) environments.



**PacStar 465: Powered by Hybrid F/A™**

## Hybrid F/A Engine and Associated Network Services

The **Hybrid F/A** engine exists to enrich leading WAN network edge devices with integral, bespoke 5G/WAN performance, and leverage compatible Fairwinds Network Services, including **PathLink** and **ShadowLink**.

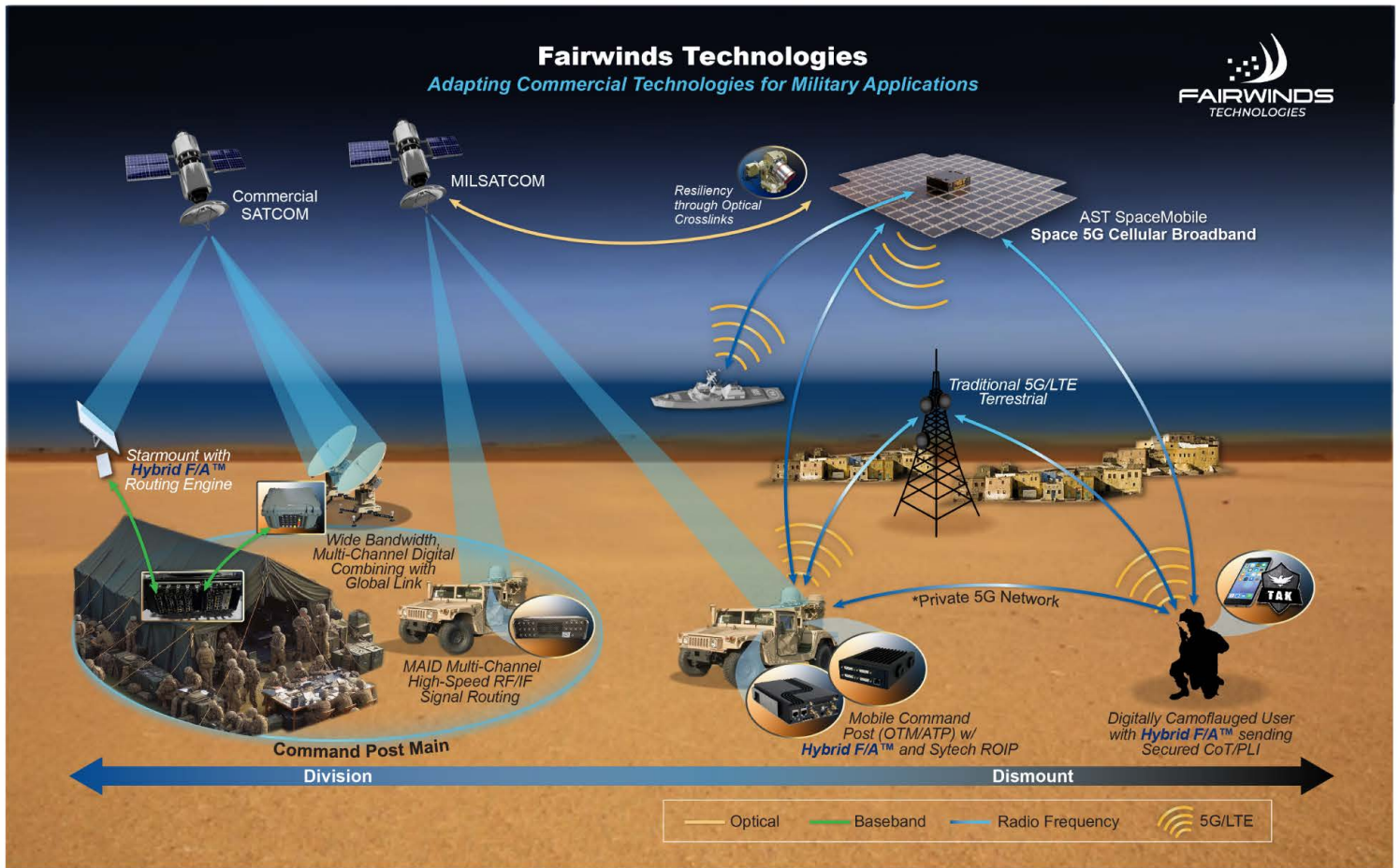
**PathLink** exists within the **Hybrid F/A** family of capabilities, which combines multi-network diversity and data camouflage capabilities to transmit secure and resilient data to Joint Warfighters. **ShadowLink**, another key capability within the **Hybrid F/A** family, makes military communications indistinguishable from routine civilian network traffic via advanced data camouflage capabilities. This protection extends to the tactical edge, effectively denying adversaries the ability to gain intelligence about force movements and operational patterns.

## PathLink: Key Features

- Aggregates separate cellular, satellite and military radio networks into a single communications pipe, enabling high data throughput and <1ms failover, even in denied environments
- Provides real-time access to Position Location Information/Blue Force Tracking and sensor feeds, enabling rapid, informed decision-making from the tactical edge and throughout the coalition
- Intelligent traffic optimization engine continuously monitors and dynamically routes packets to the most optimal network
- Provides quality of service at the byte level
- Remote network operations and configuration present a seamless experience to Joint users

# Technical Details

The **PathLink** Network Service, in conjunction with a **Hybrid F/A**-enabled WAN network edge device, bonds diverse Wide WAN connections including cellular, satellite and military radio communications, into a singular pipe. It employs intelligent routing algorithms to monitor and analyze network metrics such as latency, jitter and bandwidth across all available paths. **PathLink** automatically distributes traffic across bonded networks while continuously monitoring path performance, enabling sub-millisecond failover and dynamic load balancing to maintain optimal data flow. The **PathLink** Network Service and **Hybrid F/A** combine to deliver reliable, high-throughput connectivity and enhance network resiliency down to the tactical edge.



**Hybrid F/A Concept of Operations (CONOPS)**

## Technical Team



Fairwinds designs and integrates communications, networking and IT solutions to serve defense and civilian agencies around the world. Fairwinds strives to meet critical needs, by combining innovative products with specialized services, no matter the mission.

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