

FALCON® IV RF-9800W-E

EMBEDDABLE HIGH-CAPACITY MANET

High-capacity embeddable radio with a resilient cognitive agile MANET (CAMAN™) waveform

Packed with new innovations, the RF-9800W-E unleashes next-gen battlespace connectivity, moving data and C2 from air to ground and back faster, easier and more resiliently. The RF-9800W-E changes the game for robust, MIMO wireless broadband connectivity and control for Group 2+ UAVs.

The RF-9800W-E can create an instant battlefield infrastructure, serving as a resilient comms relay extension between advantage nodes, even in RF-contested, congested or EW-challenged environments.

It combines a groundbreaking cognitive waveform with dynamic spectrum sensing, maximized throughput, a wider continuous spectrum and ultra-low latency. The 9800W-E meets the challenges presented by the rapidly evolving modern battlespace by putting less burden on users while delivering advanced capabilities you won't find on other radios in its class.



A powerful combination of hardware, waveform and intelligent software, our soldier-centered design reduces stress and distraction at critical moments by automatically optimizing and reassigning frequencies without user inputs.

With the addition of dynamic spectrum sensing, Tx power control and interference avoidance, the 9800W-E provides a resilient solution supporting UxV control, video dissemination, SWARM, mobile ad hoc network (MANET) or advantage node range extension.

Operating on and expanded spectrum of 1.3-2.7 GHz or 4.4-5.9 GHz, the RF-9800W-E provides a continuous 2x2 MIMO channel for simultaneous operation across multiple licensed and unlicensed frequency bands — providing more continuous spectrum than any competitive device.

Security of data and management traffic is supported through embedded or external device encryption.



KEY BENEFITS

- > Send and receive more data, faster with Ethernet data rates over 300 Mbps
- > Maintain comms integrity in congested and contested environments
- > Clear, detailed, real-time ISR
- > Full-mesh MANET for instant infrastructure and flexible, self-healing coverage
- > Autonomous network scalability and optimization
- > Radio-family agnostic — can pair with any IP-capable radio
- > Designed to easily integrate into a wide variety of Group 2 UAV platforms



GENERAL	
Resilient Waveform	CAMAN
Frequency Ranges	1.3-2.7 GHz, 4.4-5.9 GHz
Throughput	Over 300 Mbps
Encryption	FIPS 197 advanced encryption standard (AES) with a 256-bit key
Unmanned Aerial Systems Solutions	Group 2+

PHYSICAL	
Dimensions	1.1 H x 5.15 W x 3.0 D in (2.79 H x 13.08 W x 7.62 D cm)
Weight	<1 lbs (<450 g)
Power Input and Consumption	10.5-34.5 VDC, <25W

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