Scalable Communications Solution

FireNet™ Link 16 Radio

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Warfighters today operate in a network-centric, information-intensive environment that demands wide data bandwidth, network diversity, and constant connectivity. Accurate, reliable information needs to be exchanged in real-time to maintain situational awareness. The FireNet radio delivers the operational capability warfighters need to shorten the kill chain. The state of the art, open architecture, Link 16 radio is the highest performance Small Form Factor (SFF) radio available.

Intuitively designed for flexible installation options, our system provides a Modular Open System Architecture (MOSA) solution enabling Line of Sight (LOS), digital voice, data, and network communications. The FireNet system maximizes flexibility with a small light weight, standardized footprint, minimizing the integration effort for ARC-231A equipped aircraft while providing maximum flexibility for new air and ground installations.

There are three install options available:

- ARC-231A mounting tray replacement, remote External Power Amplifier (EPA)
- The EPA is conduction cooled and requires no fans or forced air cooling. The radio requires no additional cooling
- The self contained FireNet radio is a low SWAP, high performance, Link 16 solution that provides installation flexibility while maintaining self-contained cooling to simplify and reduce overall footprint

Key benefits

- Preserves platform investments with deployed ARC-231 radio systems
- Optimized size, weight, and power design allows for easier incorporation into constrained platforms
- Provides a common solution for manned, unmanned, air or ground applications
- Standard Ethernet interface allows for rapid integration
- Uses the program of record waveform reducing life cycle cost
- High quality oscillator allows the Link 16 waveform to remain in synch in the most challenging environments
- The 100W EPA is the highest of any Small Form Factor Link 16 radio

Battle-proven communications

Designed to meet critical mission needs, FireNet Link 16 incorporates the latest in transceiver, modem, amplifier and crypto design:

- FireNet tactical provides a 100W EPA
- Type 1 crypto
- Multiple install options
- FireNet Link16 is a CMN-4/CCR-4 compliant Link 16 terminal that sets the tactical data link standard.
  - Four physical RF connections (1 TX, 3 RX)
  - Secure, high capacity, jam resistant digital data
  - Inter-operable with MIDS-JTRS/LVT terminals

ARC-231A mounting tray replacement, remote External Power Amplifier (EPA)

Simply remove and replace of the ARC-231A mounting tray allows for the addition of a Link 16 waveform without any additional space requirements beyond the remote mounted amplifier.

Split radio with radio and EPA mounted separately

The split radio design allows for flexible install options by allowing remote installation of the RF amplifier from the radio. Both units are conduction cooled and require no fans or forced air cooling.

Self contained radio with EPA top mounted to MOSA radio

The self contained FireNet radio is a low SWAP, high performance, Link 16 solution that provides installation flexibility while maintaining conduction cooling to simplify and reduce overall footprint.

SWaP table

	Depth (inches)	Width (inches)	Height (inches)	Weight (lbs)
FireNet	11.6	5.9	5	11
FireNet EPA	9.6	5.9	2.9	6

For more information contact:
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