

ARGUS HF™

FALCON® IV RF-950H

Tactical HF/VHF Direct Sampling Receiver

The L3Harris Falcon IV ARGUS-HF Direct Sampling Receiver represents a groundbreaking advancement in tactical communications. This state-of-the-art receiver is designed with multi-channel resilient waveform capabilities, ensuring robust performance even in challenging environments. Its versatility is further underscored by its dual-mode functionality; it can operate independently for standalone missions or be seamlessly integrated with the AN/PRC-160 and RF-7800H HF/VHF manpack radios, enhancing their capabilities. The RF-950H is engineered to meet the rigorous demands of modern warfare, providing unmatched situational awareness and resilient communications for operators in the field and maintain a technological edge against any threat.



The L3Harris ARGUS-HF is a cutting-edge VPX-based receiver that elevates HF communication by utilizing MIL-STD-188-141D Appendix G Staring Mode to monitor all HF frequencies simultaneously. It can receive messages from up to 16 stations with its proprietary Last Ditch Data (LDD™) waveform, with reception as its primary role.

Filling a critical need in the market, ARGUS-HF offers a unique multi-receive direct sampling capability, allowing a single station to stay fully informed across the HF spectrum and receive on multiple channels. This feature is valuable for centralized command centers requiring constant communication with dispersed units.

ARGUS-HF is engineered to concurrently receive multiple channels of L3Harris' advanced LDD waveform messages, ensuring robust and reliable communication. It features an integrated visual spectrograph, providing users with real-time observation and monitoring of the channel spectrum to detect and analyze signals effectively. Additionally, the system includes a user-friendly web-based Man-Machine Interface (MMI) designed for streamlined operation, allowing for intuitive navigation and control.

The LDD waveform is tailored for concise, urgent messages in challenging environments, while Direct Sampling and WebMMI facilitate uninterrupted frequency monitoring and streamlined communication.

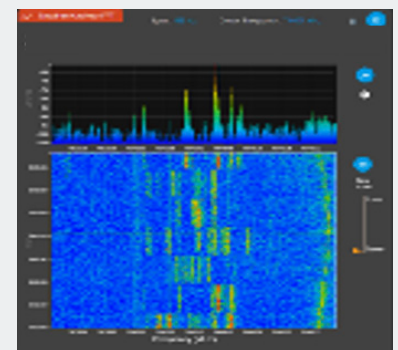
Technologically advanced, ARGUS-HF integrates a 3u VPX and MOSA chassis, ensuring compatibility with L3Harris amplified HF systems. This advanced receiver demonstrates the potential for enhanced tactical HF radio performance and sets the stage for future AI/ML applications in contested operational scenarios.



SIMULTANEOUS SPECTRUM AWARENESS AND MULTICHANNEL RESILIENT WAVEFORM RECEIVER

KEY BENEFITS

- > The only receiver to provide simultaneous visual spectrum awareness over both HF and low VHF bands
- > Receive up to 16 discreet user-configurable channels of resilient waveform data messages
- > Native Web-based MMI provides clear messaging, spectrum visualization and channel configuration
- > Software-defined architecture facilitates updates for future capabilities



GENERAL	
Nomenclature	RF-950H-RX xxx
Frequency Range	1.5– 60.0 MHz
Channel Spacing/Bandwidth	3 kHz

ENVIRONMENTAL	
Operating Temperature	-40°F to +159.8°F (-40°C to +71°C)
Storage Temperature	-40°F to +159.8°F (-40°C to +71°C)
Immersion	2 meters, per MIL-STD-810H 512.6: non-operational
Shock and Vibration Hard mount	Shock, per MIL-STD-810H 516.8: Functional and crash hazard: Operational Vibration, per MIL-STD-810H 514.8: Ground mobile, minimum integrity and loose cargo: Operational Transit Drop, tested to MIL-STD-810G, per 516.6: Non-operational
Sand/Dust/Salt Fog/Immersion/ Rain	Sand/dust, per MIL-STD-810H 510.7: Operational Salt fog, per 509.7: Non-operational Rain, per MIL-STD-810H 506.6: Operational
Humidity	Humidity, per MIL-STD-810H 507.6: Operational / Non-operational

POWER	
Voltage Input	18-36 VDC (28V Nominal)
Power Consumption	14W (28V, 0.5A)

MODES AND WAVEFORMS SUPPORTED	
Narrowband Waveforms	LDD x 16 discrete channels
Audio Modes	USB, LSB, AM, FM – Receive Only

SECURITY	
TRANSEC	32 Bit for LDD, 128 Bit for eLDD™

SPECTROGRAPH	
Audio Output	Output to external device (EUD/Laptop)
Frequency Range	1.5 -60.0 MHz
Audio Recording	.mp4 file output to EUD/Laptop

RECEIVER	
Sensitivity	-113dBm for 10dB SINAD USB
AGC	Algorithm to maintain minimum noise and prevent receiver overload
Filtering	8 High Pass Filters & 7 Low Pass Filters, Advance filtering through SW
Linearity	Third order intercept of +25 dBm with 0dB digital attenuation
Dynamic Range	Desensitization @ Fc +- 5% (3kHz BW SSB Demod) of 110dB Desensitization @ Fc +- 5% (3kHz BW LDD) of 130dB

PHYSICAL	
Dimensions	3.5 H x 5.75 W x 10.75 D in (H x W x D cm)
Volume	166 in³ (272.0 cL)
Weight	9.5 lbs (4.31 kg)
Color	Green, Black, Tan

INTERFACES	
Radio/Other	<ul style="list-style-type: none"> Ethernet USB WebMMI for network monitoring and management Windows based Communications Planning Application (CPA)
Antenna Port	SMA

STANDARD KIT	
RF-950H-RX010	Stand-alone kit
RF-950H-RX020	Tethered Manpack Kit
RF-950H-RX150	Power Amplifier (includes 12242-0700-01, DC power kit, and 12242-0720-01, hardware kit for installation)
RF-950H-RX400	Power Amplifier (includes 12242-0700-01, DC power kit, and 12242-0720-01, hardware kit for installation)

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