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## RIO™ FLEX SIGINT SYSTEM

Rio Flex is a modular, scalable signals intelligence (SIGINT) processing system designed for a variety of manned, unmanned airborne or ground collection platforms.

RIO FLEX HEXACOPTER CONFIGURATION FOR JICD PRECISION GEOLOCATION		
APPLICATION	INDEPENDENT UAS PAYLOAD	PLATFORM PROVIDES 9-36VDC, DATALINK
Datalink Included:	Yes	No
Battery Included:	Yes	No
Battery Life:	2 hrs.	N/A
Size:	12.5 D x 7 W x 4 H (in.)	10 D x 7 W x 3 H (in.)
Weight:	6.25 lbs.	4.95 lbs.
Power:	60W	45W
Modulation Types:	AM, FM, SSB, FSK, BPSK, QPSK, OQPS/SQPSK, QAM MSK	
Geolocation Techniques Supported:	Precision Geo	
Frequency Coverage:	30 MHz to 3 GHz (30 MHz to 6 GHz optional)	
Instantaneous Bandwidth:	20 MHz	
Receiver Channel Quantity:	1	
Datalink Bandwidth Utilization:	As low as 100 kbps BLOS/LOS	
Data Products:	Geolocations/Audio/Digitized Signal Output/Metadata	

### OVERVIEW

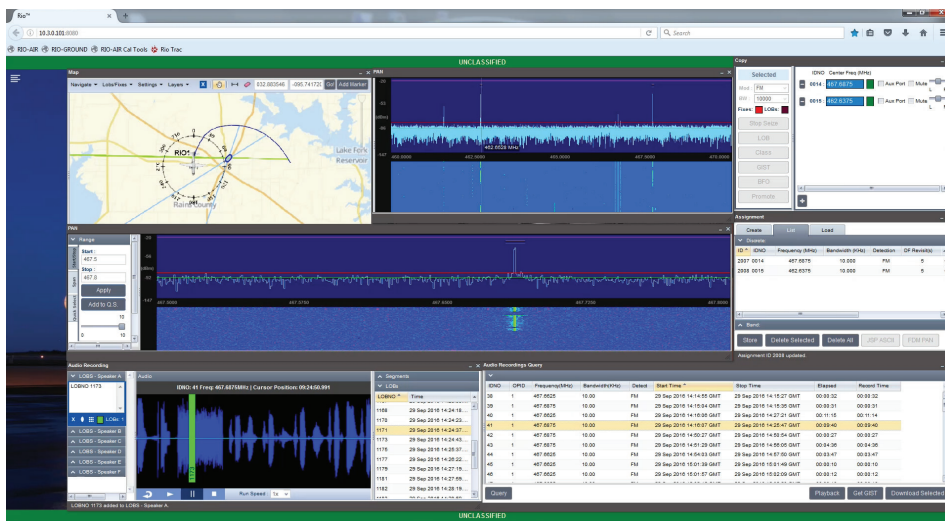
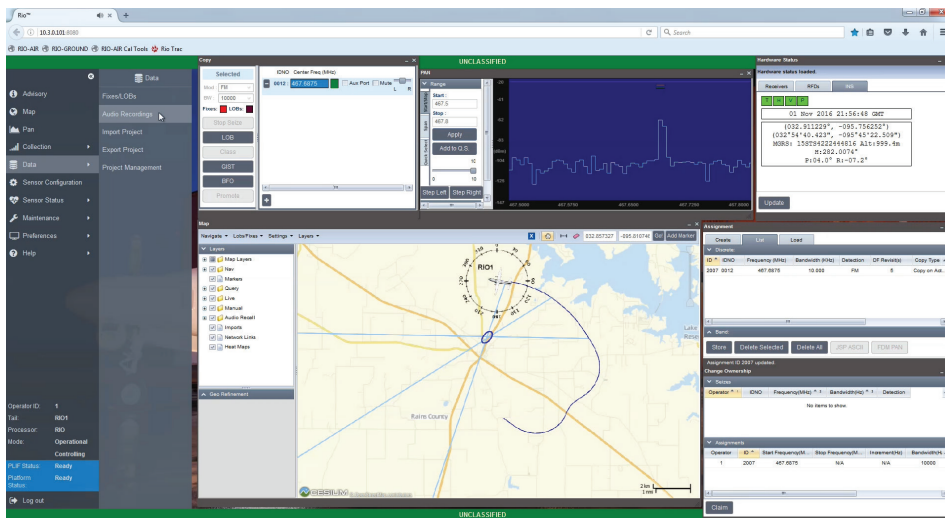
Rio Flex is the latest generation of Rio technology, leveraging over 50 years of investment in advanced SIGINT software-defined radio (SDR) systems to build solutions using readily available modular COTS components. It is scalable in size, weight, and power (SWaP) and it can be fitted to platforms of various sizes and shapes. Rio Flex uses the same modular SIGINT software as other Rio systems to provide proven capabilities for a wide variety of platforms and combines it with the flexibility of modular hardware. This approach enables faster time-to-market for putting cutting-edge SIGINT capabilities in the hands of the warfighters. Rio software modules for search, detection, classification, recording, and precision geolocation are available, along with an internet browser-based real-time operator interface. Rio Flex can also operate autonomously using Rio Virtual Op.



Rio Flex dual-channel SDR and small form factor processor mounted on a hexacopter for JICD precision geolocation applications



Rio Flex 3U JICD precision geolocation collection node using the L3Harris wavebuster 4-channel digital tuner



## RIO FLEX WORKSTATION DISPLAYS

Rio Flex uses a thin client graphical user interface – any workstation can run Rio Flex using a web browser.

## FEATURES

- Designed for size, weight and power (SWaP)-restricted manned and unmanned platforms
- COMINT search, detect, geolocate, copy, special signals and dissemination
- Scalable platform-independence- Modular components can be chosen depending on capabilities of the installed platform, scaling from minimal core components to full platform-independence.
- Member of L3Harris Rio scalable COMINT family - common software and future upgrades
- Remote or local operators using as little as 100 Kbps of IP datalink
- High-resolution maps for situational awareness display signal locations and Rio/platform tracks
- Available to operate in a non-pressurized environment
- Real-time audio and digitized RF recording and playback for later analysis
- Supports at least two operators
- Uses single antenna per frequency band for geolocation
- Joint Interface Control Document (JICD) compliant; interoperable with Theater Net-Centric Geolocation (TNG) networks for multi-platform precision geolocation

### Rio Flex SIGINT System - Rev D

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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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