

# HIGH PERFORMANCE RF SOLUTIONS



## WHEN FAILURE IS NOT AN OPTION, COUNT ON US TO DELIVER THE MOST RELIABLE RF SOLUTIONS.

Signal Solutions, part of the Leonardo DRS Airborne & Intelligence Systems line of business, is a world leader in high-performance Signals Intelligence (SIGINT) tuners, receivers, transceivers, data recording collection systems and software definable radios covering frequency ranges from HF (50 kHz) through SHF (40 GHz). Our products are adaptable for land, sea, and air operations across a variety of platforms as well as tactical, man-portable applications. **Our products are deployed in systems worldwide** by virtually all U.S. military and government agencies, as well as Allied international governments and defense prime contractors.

Our **Watkins-Johnson Company legacy** imparts an un-relinquished reputation as one of the most dependable and innovative RF houses in the world. The Company has served the Intelligence Community for more than 50 years, with cutting-edge size, weight, and power (SWAP) reduction, world-class microwave technology, and tools to search, intercept, analyze, and record signals.

Signal Solutions' background in SIGINT system development provides significant insight into complex problems and necessary development to **achieve high-performance equipment under real world conditions**. Our extensive experience in the design of high-performance SIGINT products, makes DRS Signal Solutions an ideal partner.

Modular technology that can be repackaged into different form factors to meet specific mission requirements.

Product	Description	Frequency Range	Instantaneous Bandwidth	IF Output	Tuning Speed	Channel Count	Form Factor				Rugged	SWAP			Export Control
					Microseconds		Miniature Brick	VME	VPX	Rack-mount		Size (inches) (w x h x d)	Weight (lbs.)	Power (watts)	
SI-8746 Harrier	Tuner/Receiver	10 kHz - 30 MHz	30 MHz	VITA 49	<50	4				1U Half	Yes	8.5 x 1.75 x 22	10	<100	EAR
SI-8728A	Tuner	100 kHz - 30 MHz	25 kHz	VITA 49	2500	8				1U Full	-	19 x 1.75 x 22	<18	<100	ITAR
SI-9332	Switch Matrix	500 kHz - 30 MHz	-	Analog	-	32				1U Full	-	19 x 1.75 x 22	<18	<130	EAR
SI-9150 Polaris Analog	Tuner	2 MHz - 6.2 GHz	40 MHz	Analog	300	1,2,4	X				-	3 x 5 x 1.7*	2.25*	18*	EAR
SI-9150 Polaris Digital	Tuner	2 MHz - 6.2 GHz	85 MHz	VITA 49	300	2,4,5	X				-	3 x 5 x 2.9**	4.3**	42**	EAR
SI-9172 3U Vesper	Tuner	2 MHz - 6 GHz	100 MHz	VITA 49	50	1-5			3U		-		2	65**	EAR
SI-9173 6U Vesper	Tuner	2 MHz - 6 GHz	100 MHz	VITA 49	50	1-10			6U		-		4.5	120***	EAR
SI-8646 Talon	Receiver	20 MHz - 6 GHz	40 MHz	VITA 49	50	4				1U Half	Yes	8.5 x 1.75 x 22	10	100	ITAR
SI-9105 Falcon	Receiver	20 MHz - 6 GHz	40 MHz	VITA 49	50	4,8,12,16				2U Full	-	19 x 3.5 x 22	38	600	ITAR
SI-9170A Sparrow	Tuner	70 MHz - 18.25 GHz	500 MHz	Analog	40	1-2			3U		-		<2	32 (1-CH) 42 (2-CH)	EAR
SI-9174 Sparrow	Tuner	70 MHz - 18.25 GHz	500/80/25/10/5 MHz	Analog or Digital	40	1			3U		-		<2	50	EAR
SI-9918A/SYS	Subsystem	70 MHz - 18.25 GHz	500 MHz	Analog	40	1-8				1U Full	-	19 x 1.75 x 22	<28	175	EAR
SI-9158	Tuner	250 MHz - 18.25 GHz	500 MHz	Analog	35	1		6U			-		4	<50	ITAR
SI-9249/FE	Frequency Extender	3 GHz - 12.4 GHz	-	Analog	400	1	X				-	3 x 5 x 0.5	1	3.2	EAR
SI-8649A/PF PicoFlexor	Receiver	2 MHz - 3 GHz	6 or 25 MHz	VITA 49	500	1-2	X				Yes	3 x 5.7 x 1.3 (1-CH) 3 x 5.6 x 1.8 (2-CH)	<2.5	<8.5	EAR
SI-8649A/PF PicoFlexor Transceiver	Transceiver	RX: 2 MHz - 3 GHz TX: 70 MHz - 6 GHz	RX: 25 MHz TX: 56 MHz	RX: VITA 49 TX: Analog	<500	2	X				-	3.5 x 5.7 x 1.9	2.5	10	EAR
SI-8979A/SYS RF Survey	Subsystem	2 MHz - 3 GHz	6 MHz	VITA 49	500	2	X				Yes	6.8 x 3.2 x 1.8	2.1	<9	ITAR
RT-3030/SYS	Recorder	2 MHz - 6.2 GHz	85 MHz	VITA 49	300	2,4,5	Pelican case				-	21.5 x 16 x 12	40	180	TBD
Modular Scout	Recorder	-	Mid - Wideband	Analog	-	-	X				Yes	2.6 x 4x 8.6	3.2	<15	EAR
RDA2	Recorder	-	Mid - Ultra Wideband	-	-	-				4U Full	-	19 x 7 x 22	100	600	EAR

\*4-Channel Configuration    \*\*5-Channel Configuration    \*\*\*10-Channel Configuration

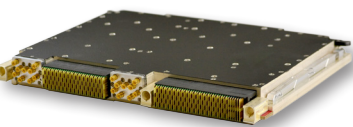
**HARRIER.** With the ability to continuously stare at the entire HF spectrum and to perform precision tuning in multiple sub-bands, Harrier meets challenges posted by a range of COMINT missions.



**POLARIS.** Polaris was designed to extract weak signals of interest from dense signal environments, and/or weak signals that are hidden in the shadow of strong signals.



**VESPER.** Highly modular to support multiple mission requirements while packing more features into a small, standard form factor than any other solution available today.



**SPARROW.** Ideal for surveillance and commercial monitoring operations, ELINT, electronic support measures, and electronic warfare missions.



**PICOFLEXOR.** State-of-the-art FPGA-based digital processing software-defined-radio with receive and transmit functions.



**RT-3030/SYS.** Portable spectral survey system for signal monitoring and integrated command and control.



**MODULAR SCOUT.** Low SWAP, tactical data recorder designed to capture up to 200 MByte of data per second streaming for 168 minutes.

**RDA2.** Record and playback library providing high-capacity and long-term storage.







# YOUR IDEAL PARTNER FOR RF SOLUTIONS

## EXPERTS IN RF DESIGN

### LOW COST SOLUTIONS

DRS AIS' proprietary technology and product designs enable more channels to be densely packaged in similar platforms allowing low cost per channel solutions.

### HIGH DYNAMIC RANGE RF FRONT-ENDS

High dynamic range increases the probability of identifying genuine signals of interest in the presence of large interferers. Our radios maximize dynamic range by using sophisticated architectures and a no-compromise design philosophy.

### SMALLER PROFILE PLATFORMS

Small profile platforms means equipment can be integrated into smaller systems, and will ultimately decrease the total weight of the system.

### OPEN STANDARD SOLUTIONS

Common interfaces allow for easy system integration, control, and data outputs, while also simplifying and extending a system's capability.

### MODULAR APPROACHES - RAPID TECHNOLOGY INSERTION

As new signal threats are constantly emerging, RF radios must be capable of handling today's threats, and tomorrow's unknown threats. A modular design means RF modules can be quickly customized to fit specific requirements, saving the customer time and money.

## WORLD CLASS MANUFACTURING ADVANTAGE

### HIGH VOLUME PRODUCTION MEETING FULL SPECIFICATIONS

Standard operating procedures and comprehensive testing enable ramping to high volume production in short periods of time while ensuring each product delivered meets its designed specifications.

### SUPERIOR QUALITY

Closed loop feedback system between customer, engineering, and manufacturing have created the highest quality levels resulting in a three-year standard warranty.

### RAPID RESPONSE

Enhanced flexibility allowing quick response on custom repackaging of existing technologies into new form factors to fulfill specific customer requirements.

### SHORT TRANSITION TO MANUFACTURING

On-site engineering and manufacturing enables early manufacturing engagement on new products while accelerating learning curves.

### ON-SITE CUSTOMER SERVICE

Personable on-site customer service with engineering engagement resulting in quick turnaround times, reliable repairs, and spare depot.

## CORE CAPABILITIES

- RF and microwave front ends with high dynamic range that intercept weak signals in dense signal environments
- Narrowband, wideband and ultra-wideband signal processing
- Digital signal processing
- Software-definable radios employing open frameworks
- Multi-channel, phase-coherent operations
- Low-SWAP design and packaging
- Open architecture designs with VITA standards
- Multi-function sensors and transceivers
- Custom design services

## CORE APPLICATIONS

- SIGINT: ELINT, FISINT, COMINT
- Real-time counter measures
- Cyber and electronic warfare
- Precision geolocation
- Beam forming and direction finding
- Spectrum monitoring
- High bandwidth signal recording and real-time processing



Cleared for Public Release DRS Signal Solutions, Inc. under approval number 2179 dated May 21, 2018. Export of DRS Signal Solutions Inc., products is subject to U.S. export controls. Licenses may be required. This material provides up-to-date general information on product performance and use. It is not contractual in nature, nor does it provide warranty of any kind. Information is subject to change at any time. Copyright © DRS Signal Solutions, Inc. 2019. All Rights Reserved.

REV 1.1 | May 2019



DRS Airborne & Intelligence Systems  
1 Milestone Center Court, Germantown, MD 20876 USA  
Tel: + 1.301.948.7550 | [SSsales@drs.com](mailto:SSsales@drs.com)

[leonardodrs.com/SignalSolutions](http://leonardodrs.com/SignalSolutions)