

Soldier Radio-Rifleman (SR-R)

The SR-R is a standalone radio designed to communicate sensitive but unclassified real-time intra-squad communications by the dismounted Soldier.



Soldier Radio-Rifleman (SR-R)

The Exelis Soldier Radio-Rifleman (SR-R) is designed for the Rifleman role. It provides the individual Soldier with reliable, low weight, high capacity intra-squad voice and data communication. With self-forming and self-healing networking, SR-R delivers the capabilities of the latest Soldier Radio Waveform (SRW®) plus position location.

SR-R allows the Soldier to participate in voice networks and automatically transmits position location information (PLI) with an embedded GPS.

The Exelis SR-R is a software defined radio programmed with the latest version of the Soldier Radio Waveform (SRW®) operating a wideband network in the UHF or L-band frequency range.

SR-R can operate for over eight hours using a standard U.S. Army issued battery.

Leveraging our significant investment in Highly Integrated Transceiver (HIT) technology and AARIS-457 cryptography; SR-R provides full SRW performance in a power efficient, light weight, low cost, small form factor.



SR-R delivers simple Push-To-Talk capability for intra-squad communications.



SPECIFICATIONS

System Characteristics

Frequency Range	UHF	225 – 450 MHz
	L-band	1250 – 1390 MHz and 1710 -1850 MHz
Transmit Power	UHF	2 watt
	L-band	2 watt
Bandwidth	Up to 1.2 MHz with Soldier Radio Waveform (SRW)	
Modulation	QBL-MSK, CPM	
Throughput	Supports all SRW modes	
Receiver Sensitivity	Waveform and mode dependent Up to -114 dBm	
Size	21.5 cm x 7.6 cm x 5.1 cm maximum dimensions, including battery (8.47 in x 2.99 in x 2.00 in including battery)	
Weight	Radio	0.56 kg (1.25 lbs)
	Radio & battery	0.93 kg (2.05 lbs)
Volume (displaced)	606 cubic cm (37 cubic in)	
Input Power	Primary Battery (rechargeable) DC 9.5 – 16.8 VDC	
Reliability	>5000 hr MTBF at +55°C (+131°F)	

Interfaces

RF Antenna	Single TNC connector, 50 ohm
GPS Antenna	Single SMA connector, 50 ohm
Audio	Custom 11-pin supports standard 6-pin audio/fill
Key fill	DS-101
Data	USB (IP over USB)
Control	USB (IP over USB), SNMP MIB

Features

Function Switch	Off/Zero/Fill/On/Standby
Preset switch	Ten position software programmable
Voice	Combat Net Radio (CNR) voice for SRW eliminating VoIP delay
Compliance	SCA 2.2.2
Operator Keypad	3-button
Internal Commercial GPS	L1 CA code
Automatic Position Reporting	Transmits own position, outputs receive position for Situational Awareness (SA)
Waveforms	SRW
Waveform Storage	At least 3 waveforms (based on SRW size)
Battery	Military standard AN/PRC-148 battery
Security	Embedded AARIS-457

Operating Environment

Temperature	-32°C to +55°C (-25.6°F to +131°F)
Humidity	95% non-condensing
Rain	1.8 inches per hour and 40 mph wind for 40 minutes
Immersion	2 meters for 30 minutes powered
Sand and dust	Method 510.5 procedure I and II
Vibration and Shock	Loose cargo vibration, transit drop

Exelis Inc.
7310 Innovation Blvd
Fort Wayne, IN 46818-1370
USA
Ph #: 260 451 4600
contact.nvcs@exelisinc.com

www.exelisinc.com

EXELIS

Exelis is a trademark of Exelis Inc.

Copyright © 2013 Exelis Inc.
SRR06, Approved for Public Release
01-11, CS-EX0173