

# SINGGARS RT-1702 VHF Radio Configurations

Software-programmable voice and data radio configurations providing integrated COMSEC, TRANSEC and Situational Awareness.

The Exelis SINGGARS RT-1702 radio provides the international customer access to the quality, durability and reliability of the most widely fielded Combat Net Radio in the world - Exelis SINGGARS. Built on the same production lines and using the same parts used for the U.S. Armed Forces, RT-1702 offers unparalleled operational availability and whole life support.

The RT-1702 is designed to provide network data services in both mounted and dismounted configurations. In the mounted role the radio works with the Internet Controller in the mount to provide robust mobile ad hoc network data services. As a manpack the radio provides the local host Command and Control Application a standard PPP interface to access the Tactical Internet.

A number of configurations are available to provide communications coverage for long and short ranges.



**RT-1702  
AN/PRC-119**  
5 W, 10 W Manpack



**AN/VRC-87**  
Vehicular 5 W short-range

**AN/VRC-88**  
Vehicular 5 W short-range  
dismountable includes man-  
pack accessories



**AN/VRC-89**  
Vehicular 50 W long-range/  
short-range

**AN/VRC-91**  
Vehicular 50 W long-range/  
dismountable short-range  
with manpack accessories



**AN/VRC-90**  
Vehicular 50 W long-range



**AN/VRC-92**  
Vehicular 50 W  
dual long-range  
(retransmit)- plus  
2nd power amp  
and retrans cable



**VEHICLE ADAPTER  
ASSEMBLY (VAA)**  
Standard U.S. mount



**TACTICAL RADIO  
MOUNT (TRM)**  
Slim mount for vehicles  
with space limitations

# SINCGARS RT-1702 VHF Radio Configurations

## SPECIFICATIONS

### System Characteristics

Frequency	Range 30-88 MHz
Modulation Type	Frequency modulation (digital or analog)
Channels	2320
Channel Spacing	25 kHz
Modes of Operation	Single channel and Frequency Hopping (FH)
Preset Channels	8 for single-channel operation
Frequency Hopping Preset Radio Nets	6 FH Presets
Frequency Entry	Through keyboard, including FH band limits
Battery Type	Primary-balanced lithium-sulphur dioxide or rechargeable Ni-Cad, Ni-mH, Li-ION
Frequency Stability	±2 PPM
Communications Security Capability	Internal encryption module, operation in plain text or cipher text
Data Capability	600 bps to 16 kbps digital plus FSK, including packet data
Self Test	Unit and module level built-in test Front panel display of status
Display	Gen III Night Vision Goggle compatibility
Built-In GPS	Optional

### Transmitter Characteristics

Power Output	100 mW, 5 W, 10 W dismounted, 50 W (with RFPA power amplifier)
--------------	---

### Input Power

Manpack	12-14 volt battery
Vehicular	+28 Vdc per MIL-STD-1275

### Environmental

Vehicular	-51°C to +71°C (-60°F to +160°F) including effects from sun loading Water immersible to 1 m (3 ft) Mechanical environment of military wheel and track vehicles per MIL-STD-810 procedures
-----------	---

### Physical Characteristics

Size	13.4 cm wide x 8.7 cm high x 25.8 cm deep (5.3 in wide x 3.4 in high x 10.15 in deep) including battery
Volume	2973 cm <sup>3</sup> (181.42 in <sup>3</sup> ) including battery
Weight	3.5 kg (7.8 lbs.) including BB-2590 battery

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

[www.exelisinc.com](http://www.exelisinc.com)

**EXELIS**

Exelis is a registered trademark of Exelis Inc.

Copyright © 2013 Exelis Inc.  
RT1702Config07, Approved for Public  
Release 01-08, EXPID1202