

RF-9820S

Compact Team Radio

The RF-9820S Compact Team Radio delivers robust voice and data capabilities for missions on the move. This multi-mission solution gives warfighters the flexibility of tactical MANET and legacy line-of-sight (LOS) capabilities in a Small Form Factor (SFF).

The RF-9820S features a simplified user interface, allowing radio operation with minimal training time. Secure, reliable communications in contested and congested environments are supported with in-field upgrades to emerging wideband and narrowband resilient waveforms.

The Compact Team Radio is compatible with L3Harris AN/PRC-163 Multichannel Handheld accessories and batteries, reducing logistical support needs and allowing easy kit swapping among radios. MIL-STD ruggedized to withstand harsh conditions, this handheld is also SWaP-optimized to reduce warfighter burden.

The RF-9820S ensures connectivity with ground-based tactical teams by supporting multiple modes of operation, including wideband MANET, narrowband voice and Position Location Information (PLI).



COMPACT, EASY-TO-USE, MULTI-MISSION SOLUTION

KEY BENEFITS

- > Robust voice and data for missions on the move
- > Resilient communications in contested and congested environments
- > Simplified operation and compatibility with AN/PRC-163 batteries and accessories
- > Versatile operational modes include tactical MANET and legacy LOS

GENERAL	
RF-Nomenclature	RF-9820S
Frequency Range	225 - 2600 MHz (waveform dependent)
Net Presets	99
Channel Spacing/Bandwidth	25 kHz - 20 MHz
GPS	Internal GPS
Management Tool	Windows®-based Communications Planning Application (CPA); WebMMI for network monitoring and management TrellisWare™ Management Tool*
Frequency Tuning	10 Hz

PHYSICAL	
Dimensions	3.8 H x 3.1 W x 1.7 D in (without battery) 9.6 H x 7.8 W x 4.3 D cm (without battery)
Volume (without battery)	18 in³ (295 cc)
Weight (without battery)	1 lbs (450 g)

TRANSMITTER	
Power Output	3.2 watts
Spurious Suppression	Per TIA-603D
Harmonic Suppression	Per TIA-603D

RECEIVER	
Sensitivity	-116 dBm, 12 dB SINAD
Adjacent Channel Rejection	Per TIA-603D
Squelch	Noise, Tone, CTCSS or CDCSS

POWER	
Power Input	9 V to 17 VDC
Battery Type	Rechargeable lithium-ion battery

OPTIONAL MODES AND WAVEFORMS	
Narrowband Waveforms	UHF line-of-sight (ULOS) Katana™
Wideband Waveforms	Wraith™ TSM™ 6.1* TSM 6.3 (HDR+)*
Voice and Data Modes	Voice Analog CVSD MELPe GSM-AMR 5.9 Data Wideband up to 50 Mbps

ENVIRONMENTAL	
Temperature	Operating: -22°F to 131°F (-30°C to +55°C) Storage: -40°F to 158°F (-40°C to 70°C)
Immersion	2 meters
Shock and Vibration	MIL-STD-810H
Sand/Dust/Salt/Fog/Rain	MIL-STD-810H
EMI/RFI	MIL-STD-461G

INTERFACES	
Data	USB 2.0, IP over USB and Ethernet
Audio	19-pin ADF, Audio, USB 2.0, fill
Antenna Port	50-ohm TNC
Programming	USB 2.0
Function Knob	OFF, 1-13 presets, F, Z
Remote Control	WebMMI, SoftKDU

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