

POWERFUL VEHICLE COMMUNICATION

Performance you need for mission success

The VRC-126 two-channel and VRC-127 four-channel ground vehicle networking communication system brings the most trusted tactical radios to your vehicles for powerful performance in a self-contained unit. The advanced design reduces component complexity and improves reliability.

Our vehicle installation kit supplies the power you need to deliver data and voice communications at equal or greater range than competing products – for a lower overall cost. With the increasing demand for electronics within vehicles, our VRC-126/127 ground vehicle radios ensure interoperability as well as superior versatility, legacy radio compatibility and support for future waveform advancements. It also offers enhanced co-site performance in a congested RF environment.

Collins VRC-126/127 delivers mission-critical capabilities. As part of the TruNet™ networked communications solution family – which includes airborne and ground radios, advanced networking waveforms, apps, ancillaries and services – secure connectivity across the entire battlespace is ensured. Using both narrowband and wideband waveforms, it offers high-speed mobile ad hoc networked communications, point-to-point data, voice and next-generation SATCOM.

The reliable, secure and advanced communication networking that VRC-126/127 offers is key to your success – not only in today's advanced battlespace but also for assurance in future conflicts and coalition operations.

KEY FEATURES AND BENEFITS

- Up to four channels and two amplifier/mission module slots for system flexibility and future growth
- 20W RT transmit power enables long range without external amplification
- RT embedded Cosite filters enables in band operation without external equipment
- Fits in legacy system footprint and able to utilize interfaces, supports low integration costs



GENERAL

- RT nomenclature: RT-2048(C)/U
- · Channel spacing/bandwidth:
 - Narrowband: 8.33 kHz, 12.5 kHz, 25 kHz, 50 kHz
 - Wideband: 1.2 MHz, 5MHz, 10MHz, 20MHz
- · Net presets: Up to 999 presets per mission plan
- · Internal GPS: SAASM receiver
- Management tool: Joint Enterprise Network Manager (JENM) compatible, ATOM
- Software environment: SCA v2.2.2

PHYSICAL

Dimensions 8.5" W x 3.4" H x 13" D (with battery)

21.6 cm W x 8.6 cm H x 33.02 cm D (with battery)

Weight 9.5 lbs (without battery)

4.3 kg (without battery)

FREQUENCY RANGE

- 30 MHz-1850 MHz
- Narrowband
 - VHF: 30-88 MHz, 118-137 MHz
 - UHF: 225-450 MHz
- SATCOM: 243-318 MHz
- MUOS: 300-380 MHz
- Wideband
 - UHF: 225-450 MHz
 - L-BAND: 1250 1450 MHz, 1755-1850 MHz

TUNING

1.25 kHz increments

TRANSMIT OUTPUT POWER

Narrowband: 20W

SATCOM: 20W

Wideband: 20W

POWER

- Power input: 10-17 VDC
- Power consumption: 25W Typical Dual Receive, 120W Max 10W Dual TX, 220W Max 20W Dual TX

SECURITY

- Encryption: Type I (Suite A/B), NSA Certified TOP SECRET and below
- Encryption modes: KY-57/58 (VINSON), KYV-5 (ANDVT), KG-84, FASCINATOR, HAIPE (PPK, FFV), ACCORDIAN, AES, TSV
- · Key storage: Up to 300 per channel
- Modes: DS101, USB

ENVIRONMENTAL

- Shock/Vibration: MIL-STD-810G
- Immersion: 2 meter salt water (MIL-STD-810G)
- Temperature
 - Operating: -40° F to 131° F (-40° C to 55° C)
 - Storage: -60° F to 160° F (-51° C to 71° C)
- EMI/RFI: MIL-STD-461G
- Sand/dust/salt/fog/rain: MIL-STD-810G

INTERFACES

- External data: USB, Ethernet,
 Serial (RS-232/RS-485 configurable)
- Audio: Standard 6-pin MIL-DTL-55116 and Vehicle Intercom interface per channel
- Antenna port: Single N-type connector per channel
- · Programming: USB (JENM/SKL compatible)
- Function knob: OFF. ON. Z (zeroize)
- Remote control: USB/Ethernet (SNMP),
 Remote Human-Machine Interface (HMI)

WAVEFORMS

- HAVEQUICK I/II
- SINCGARS/ESIP
- · Mobile User Objective System (MUOS)
- · Soldier Radio Waveform (SRW)
- WREN/TSM
- · AM/FM VULOS (including ATC)
- MIL-STD-188-181B Dedicated
- MIL-STD-188-182A 5K DAMA
- MIL-STD-188-183A 25K DAMA
- MIL-STD-188-181C/183B IW Phase 1
- · Ability to host future SCA waveforms

FUTURE GROWTH

- SATURN
- ESSOR
- TETRA
- Bowman
- APC025

Specifications subject to change without notice

