

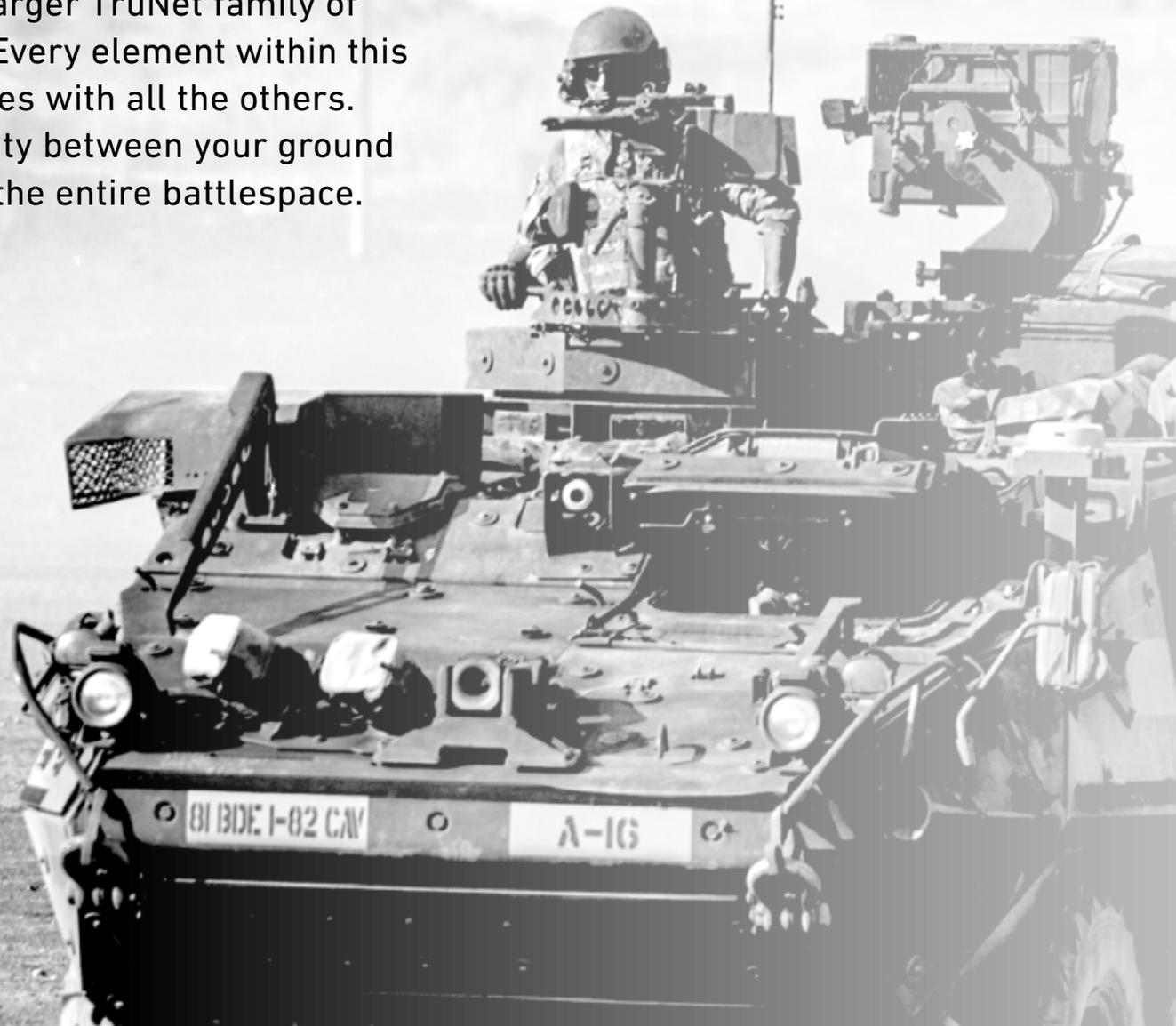
TRUNET™ AN/PRC-162(V)1 RT-2048
TWO-CHANNEL NETWORKING GROUND RADIO

TAKE RELIABLE
NETWORKED
COMMUNICATIONS
TO THE FIGHT



THE FAMILY THAT PLAYS TOGETHER

The TruNet™ RT-2048 two-channel networking ground radio is part of the larger TruNet family of communications solutions. Every element within this family smoothly interoperates with all the others. Designed for true connectivity between your ground and airborne forces across the entire battlespace.



A FAST-MOUNT RADIO FOR VEHICLES

Take reliable networked communications anywhere your vehicle goes with the RT-2048's flexible mounting solutions. Designed for simple installation and operation, the radio is rugged enough to withstand harsh combat environments. Its scalability enables integrators to outfit vehicles as operational requirements dictate: with a single, two-channel 20-watt radio (the AN/VRC-126) or a dual-radio configuration (the AN/VRC-127) that provides for high-power channels.



ONE-PERSON PORTABLE COMMUNICATIONS

A powerful, complete and secure global communications suite in a portable package. The AN/PRC-162(V)1 dismount kit provides the operator maximum flexibility to communicate anywhere, anytime.





Mounting solutions provide standard interfaces for intercom and power, both from the vehicle and to an accessory item. The mounts also enable remote powering of the radios when access to the radio power switch is unavailable.

SIZED AND POWERED FOR QUICK INSTALLATION

Flexibility runs through the RT-2048's design. The receiver/transmitter meets stringent size and weight requirements for dismounted operation while also providing a 20-watt, radio-frequency output power capability to support tactical operations center and vehicular installations. In some cases, this will alleviate the need for an external power amplifier.

When you do need an external power amplifier, the current VRC-126 and VRC-127 vehicle kits provide mounting for up to two co-located, 50-watt VHF power amplifiers for greater range in the legacy SINCGARS envelope.

A stand-alone external mount is available to remotely mount up to two additional power amplifiers for use with either the VRC-126 or VRC-127 systems.

Both mounting solutions – co-located vehicle or stand-alone external – can accommodate a variety of original equipment manufacturer power amplifiers for maximum flexibility.



VRC-126 with dual 50W power amplifiers



VRC-127 with dual 50W power amplifiers

EASY PORTABILITY AND OPERABILITY

The AN/PRC-162(V)1 dismount kit lightens the operator's load without sacrificing capability. We have engineered a powerful solution that can run up to 10 hours on a single battery while providing high power when the need arises (any band, any waveform).

Coupled with the most advanced antenna technology, the dismount kit optimizes operator maneuverability and maintains critical communications links in the most demanding environments.



PRC-162 dismounted
configuration



TRAINING THAT FLEXES WITH YOUR NEEDS

From instructor-led programs to self-directed study, we offer a wide range of training solutions for operators and maintenance personnel that improve job performance and reduce overall program life-cycle cost. Our instructional system design specialists develop comprehensive training solutions that include needs assessments, planning, development and ongoing reinforcement to meet your unique requirements.

Service plans to exceed your expectations

Whether you have a few radios or hundreds, FlexForceSM life cycle service solutions can guarantee the availability and maintainability of your systems and equipment.

The quality of all parts and repairs is backed by our OEM workmanship warranty. Collins Aerospace maintains direct access to the intellectual property, product engineering and manufacturing expertise to provide your best overall service solution.

Start by choosing one of the following programs or services and let us tailor it to your specific needs.

FlexForce Exchange – Includes an extensive inventory of rotatable spares ready for dispatch from our worldwide distribution network. By leveraging our strategically placed pool of parts, you will reduce the spares you need to purchase and minimize the overall part replacement turnaround time.

FlexForce Performance Based Logistics (PBL) – A fully integrated and customizable maintenance solution for your communications systems. This option combines proven, best commercial practices with Collins Aerospace expertise in supporting challenging military operational requirements to establish guaranteed availability and performance. Our PBLs offer scope flexibility to provide the best fit with your specific mission needs.

FlexForce Depot Partnerships – For your in-house maintenance capability requirements, Collins Aerospace can provide a solution that includes test equipment, technology transfer and training to establish local intermediate (I) or depot (D) level repair capability. We will assess your requirements based on your existing capabilities, initiate and support activation of your depot and continue with long-term sustainment assistance.



BASE EQUIPMENT AND ACCESSORIES



Collins P/N

TYPE-1 MULTIBAND MULTI-CHANNEL MANPACK

RT-2048 C/(U)

822-3358-004

Dismounted options

DISMOUNT ANTENNA KIT - LOS

987-0081-010

VHF antenna 30-88 MHz Blade with gooseneck base

UHF antenna 225-450 MHz with gooseneck base

L-Band antenna 1250-1850 MHz with gooseneck base

L1/L2 GPS antenna with gooseneck base

DISMOUNT ANTENNA KIT - LOS/BLOS

987-0081-011

VHF antenna 30-88 MHz Blade with gooseneck base

UHF antenna 225-450 MHz with gooseneck base

L-Band antenna 1250-1850 MHz with gooseneck base

L1/L2 GPS Antenna with gooseneck base

SATCOM/MUOS At-the-Pause antenna set

MUOS On-the-Move antenna with gooseneck base

Accessories (dismount)

ANTENNAS:

VHF antenna 30-88 MHz Blade with gooseneck base

013-2071-020

UHF antenna 225-450 MHz with gooseneck base

013-2071-030

L-Band antenna 1250-1850 MHz with gooseneck base

013-2071-040

VHF/UHF antenna 30-450 MHz Blade with gooseneck base

013-2071-060

U/L Wideband antenna 225-2000 MHz with gooseneck base

013-2071-070

L1/L2 GPS antenna with gooseneck base

013-2071-080

SATCOM/MUOS ATP antenna

013-2071-120

MUOS OTM antenna

013-2071-210

AUDIO PRODUCTS:

Lapel speaker-microphone with 2.5 mm jack – single channel

020-0268-010

*Contact us for additional audio options (H-250, single/dual channel, headsets, etc.)***BATTERIES AND CHARGERS:**

Battery bucket

987-0080-681

BB-2590/U rechargeable Li Ion battery, 10.3 Ah

221-0167-070

Two-bay charger kit

987-0081-012

Eight-bay charger kit

987-0082-689

Solar charging kit, BB-2590/U

987-0081-013

CABLES:

USB programming cable, 6 ft length

987-0021-164

CH1 Ethernet data cable, 6 ft length

987-0081-020

CH2 Ethernet data cable, 6 ft length

987-0081-021

CH1 Serial data cable, 6 ft length

987-0081-022

CH2 Serial data cable, 6 ft length

987-0081-023

Nett-Warrior Hub control cable, 4 ft length

987-0081-024

Nett-Warrior Hub Ch1 data cable, 4 ft length

987-0081-025

Nett-Warrior Hub Ch2 data cable, 4 ft length

987-0081-026

DAGR GPS cable, 6 ft length

987-0081-027

CH1 Lab/full breakout data cable, 6 ft length

987-0021-194

CH2 Lab/full breakout data cable, 6 ft length

987-0021-195

CH1 Unterminated breakout data cable, 16 ft length

987-0081-028

CH2 Unterminated breakout data cable, 16 ft length

987-0081-029

Collins P/N

POWER ADAPTERS:

| | |
|--|--------------|
| AC/DC battery eliminator, training/lab | 270-3583-010 |
| AC/DC power supply assembly, rugged | 270-3581-020 |

REMOTE CONTROL:

| | |
|---|---|
| Dismounted remote control system | 987-0081-014 |
| Remote HMI (Human Machine Interface) | 270-3544-010 |
| Dismounted HMI Cable - Straight exit, coiled, 6 ft extended | Cable used to connect Remote HMI to radio J5 port. Straight exit connectors and coiled section of cable (4 ft normal, 6 ft extended). 987-0021-162 |
| Accessory adapter plate with hardware | 987-0081-015 |
| Option 1 mount: Forearm strap | Forearm strap allows the user to mount the Remote HMI on the forearm. The mount employs a rapid cinch and quick-release function for flexible forearm fitment. Additionally, a quick-release tab can be used to disconnect the Remote HMI from the mount for two hand-held operation or rucksack removal. 987-0081-016 |
| Option 2 mount: Sternum PALS/MOLLE mount | The sternum mount provides the user with PALS/MOLLE compatible mounting of the Remote HMI 987-0081-017 |

CARRYING ACCESSORIES:

| | |
|-------------------------|--------------|
| Radio rucksack assembly | 987-0082-694 |
|-------------------------|--------------|

Mounted options:

SINGLE RADIO VEHICLE KIT: 987-0081-030

| |
|---|
| GVAM-1000 |
| USB programming cable |
| Handset H-250 Modified – single channel |
| Single VA ancillary and cable kit |
| Hardware Kit, GVAM attachment |
| Cable, mount power |
| AN/VRC-126/127 vehicle installation and maintenance guide |
| AN/PRC-162 Manpack pocket guide |
| AN/PRC-162 ePub CD |

DUAL RADIO VEHICLE KIT: 987-0081-031

| |
|---|
| GVAM-2000 |
| USB programming cable |
| Handset H-250 modified – single channel |

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Dual VA ancillary and cable kit

Hardware kit, GVAM attachment

Ground strap, mount

GPS antenna

013-1981-010

Cable, coaxial TNC-to-SMA (LMR-240), 25 ft length

Cable, mount power, 12 ft length

Cable, mount Daisy Chain power

AN/VRC-126/127 vehicle installation and maintenance guide

GR-2000 Manpack pocket guide

GR-2000 ePub CD

SINGGARS ADAPTER TRAY VEHICLE KIT:

987-0081-032

GVA-1000, shock mount

USB programming cable

Handset H-250 modified – single channel

Single VA ancillary and cable kit

Ground strap, mount

GPS antenna

Cable, GPS antenna, 25 ft length

Cable, mount power, 12 ft length

AN/VRC-126/127 vehicle installation and maintenance guide

GR-2000 Manpack pocket guide

GR-2000 ePub CD

MOUNTED ANTENNA KIT – DUAL MULTIBAND LOS: (TAN)

987-0081-037

Antenna, multiband (3-port VHF, UHF, L Band)

Cable, coaxial N-to-N (LMR-400), 25 ft length

Cable, coaxial N-to-BNC (LMR-400), 25 ft length

MOUNTED ANTENNA KIT – DUAL MULTIBAND LOS + BLOS: (TAN)

987-0081-038

Antenna, multiband (3-port VHF, UHF, L Band)

UHF SATCOM/MUOS Antenna

Cable, coaxial N-to-N (LMR-400), 25 ft length

Cable, coaxial N-to-BNC (LMR-400), 25 ft length

| | Collins P/N |
|---|---------------------|
| Accessories (mounted): | |
| ANTENNAS: | |
| Antenna, GPS Puck | 013-1981-010 |
| Antenna, multiband (3-port VHF, UHF, L Band) | 013-2071-220 |
| UHF SATCOM/MUOS antenna | 013-2071-230 |
| CABLES: | |
| Cable, mount power, 12 ft length | 987-0021-170 |
| Cable, mount Daisy Chain power | 987-0021-171 |
| Cable, coaxial N-to-N (LMR-400), 25 ft | 987-0021-184 |
| Cable, coaxial N-to-BNC (LMR-400), 25 ft | 987-0021-186 |
| Cable, coaxial TNC-to-SMA (LMR-240), 25 ft | 987-0021-180 |
| Cable, USB programming, 6 ft length | 987-0021-164 |
| CH1 Ethernet data cable, 6 ft length | 987-0081-020 |
| CH2 Ethernet data cable, 6 ft length | 987-0081-021 |
| CH1 unterminated breakout data cable, 16 ft length | 987-0081-028 |
| CH2 unterminated breakout data cable, 16 ft length | 987-0081-029 |
| REMOTE CONTROL: | |
| Single radio remote control kit | 987-0081-039 |
| Remote HMI | 270-3544-010 |
| Cable, remote HMI single radio, 20 ft length | 987-0081-019 |
| Dual radio remote control kit | 987-0080-683 |
| Remote HMI | 270-3544-010 |
| Cable, remote HMI dual radio, 20 ft length | 987-0021-175 |
| Mount, remote HMI gimbal | 987-0081-040 |
| Mount, remote HMI, SINCGARS C-11291/VRC replacement | 987-0081-041 |
| AUDIO PRODUCTS: | |
| Tactical amplified loudspeaker kit - dual channel | 987-0081-042 |
| Tactical amplified loudspeaker, dual channel | |
| 6-pin speaker to radio audio cable | |
| Speaker to mount power cable | |
| Speaker to pigtail leads power cable (alternate option) | |

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, 5 MHz, 10 MHz, 20 MHz
- Net presets: Up to 999 presets per mission plan
- Internal GPS: SAASM receiver
- Management tool: Joint Enterprise Network Manager (JENM) compatible
- Software environment: SCA v2.2.2

PHYSICAL

| | |
|------------|--|
| Dimensions | 8.5" W x 3.4" H x 7.8" D (without battery) 21.6 cm W x 8.6 cm H x 19.81 cm D (without battery) |
| | 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), 13.3 lbs (with battery) 4.3 kg (without battery), 6.03 kg (with battery) |

FREQUENCY RANGE

- 30-1850 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
- Battery types: x90 series batteries

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, HAIBE (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 HMI

WAVEFORMS

- HAVE QUICK I/II
- SINCGARS/ESIP
- Mobile User Objective System (MUOS)
- Soldier Radio Waveform (SRW)
- 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

- WREN NB
- WREN TSM
- SATURN
- ESSOR
- TETRA
- Bowman
- APC025

ANCILLARIES/KITS

- Two- and four-channel vehicle and transportable mounts
- 50W power amplifiers
- Co-site filters
- Antennas
- Cables and connectors

To learn more, go to
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