TRUNET™ AR-1500 NETWORKED COMMUNICATIONS AIRBORNE RADIO

ADVANCED, AIR-GROUND NETWORK CONNECTIVITY

Secure communications across the battlespace

Reliable, secure and advanced communication is key to your success – not only in today's advanced networking battlespace but also for assurance in future conflicts. The TruNet™ AR-1500 networked communications airborne radio (international version) is the latest and most capable fully exportable softwaredefined radio (SDR) receiver-transmitter.

The AR-1500 evolved from our proven AN/ARC-210/Talon advanced communication technologies. It is part of the TruNet networked communications solution family, which includes other TruNet radios, advanced networking waveforms, apps, ancillaries and services. TruNet is the first solution to ensure secure connectivity between ground and airborne elements across the entire battlespace.

Its adaptability enables the AR-1500 to offer country-unique capabilities while conforming to the latest SDR tenets and architectures. The AR-1500 is fully interoperable with earlier airborne V/UHF radio variants from Collins Aerospace. It also offers waveform interoperability with other airborne V/UHF radio systems.

Air, sea or land military forces depend on fully secure communications and interoperability, as do civil agencies supporting homeland security and disaster relief. The AR-1500 delivers this mission-critical capability through multiple waveforms and high-speed mobile ad hoc networked communications for data, voice and imagery.

The unit's SDR architecture provides customers with superior versatility and independence.

KEY FEATURES & BENEFITS

- Enables proven, fully secure communication

- Form, fit with ARC-210 family of products

- Interoperable with Collins Aerospace and non-Collins Aerospace V/UHF radio systems

- Delivers critical, high-speed, ad hoc networked communications between fast movers and mobile ground forces

- Enables software/network management

- Part of the TruNet networked communications solution family

- Fully software programmable to meet future needs

- SCA 2.2.2

Collins Aerospace

SPECIFICATIONS

Power	+28 VDC, 200 Watts (transmit), 50 Watts (receive)
Weight	5.5 kg (12.2 lbs)
Width	12.7 cm (5 in)
Height	14.2 cm (5.6 in)
Length	25 cm (9.85 in)
Test specifications	MIL-STD-461F, MIL-STD-810G, MIL-STD-704D/E/F

FREQUENCY RANGE

- Coverage: 30-1850 MHz
- VHF 30-88 MHz close air support
- VHF 108-118 MHz navigation
- VHF 118-137 MHz air traffic control
- VHF 137-156 MHz land mobile
- VHF 156-174 MHz maritime
- UHF 225-512 MHz military/networking
- UHF 764-805, 806-824, 851-869, 869-902, 935-941 MHz public safety bands
- L band 1250-1450, 1755-1850 MHz (networking)

CHANNEL BANDWIDTHS

- 5 kHz, 8.33 kHz, 12.5 kHz, 25 kHz, 1.2 MHz, 5 MHz, 10 MHz, 30 MHz and software definable

TUNING

- 1.25 kHz, 8.33 kHz increments

TRANSMIT OUTPUT POWER

- AM: 10 W-15 W (30-400 MHz)
- FM/PM: 15 W-23 W (30-450 MHz)
- FM: 5 W ± 1 dB (450-512, 764-805, 806-824, 851-869, 896-902, 935-941 MHz)
- FM/PM: 20 W (1250-1450, 1755-1850 MHz)
- External HPA 50 W Peak Envelope Power (PEP)

WAVEFORM OPTIONS

- HAVE QUICK I & II
- TALON™ I & II
- SATURN ED 4
- Scan (four channel)
- LOS: AM voice/data, FM voice/data
- ATC (8.33 kHz and 25 kHz channels) with embedded FM immunity
- Public Safety IAW TIA-603-C, including CTCSS and CDCSS
- Link 11/Link 22 fixed frequency and electronic protection measures
- Embedded encryption (AES-256)

EMBEDDED COMSEC FUNCTIONALITY

- Ability to host indigenous crypto

FUTURE GROWTH

- TSM™
- Sovereign encryption
- SEDR ED4
- ESSOR
- TETRA
- APCO 25
- Ability to host indigenous SCA waveforms

Specifications subject to change without notice.

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