

# TruNet™ AR-2000/2500 networked communications airborne radio



Advanced, air-ground network connectivity. Right information. Right place. Right time.

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-2000 (U.S. version)/2500 (international version) networked communications airborne radio is the latest and most capable fully exportable software defined radio (SDR) receiver-transmitter.

The AR-2000/2500 evolved from our proven AN/ARC-210/Talon advanced communication technologies. It is part of the TruNet networked communications solution family, which includes ground and handheld 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-2000/2500 to offer country-unique capabilities while conforming to the latest SDR tenets and architectures. The AR-2000/2500 is fully interoperable with earlier airborne V/UHF radio variants from Rockwell Collins. 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. AR-2000/2500 delivers this mission-critical capability through two channels, multiple waveforms, high-speed mobile ad hoc networked communications and beyond-line-of-sight connectivity for data, voice and imagery.

The unit's SDR architecture provides customers with superior versatility and independence. Using waveform development kits, your in-country programmers are able to independently develop and port country-unique, SCA-compliant waveforms.

## KEY FEATURES

- ▶ Enables proven, two channel, fully secure communication
- ▶ Interoperable with Rockwell Collins and non-Rockwell Collins V/UHF radio systems
- ▶ Delivers critical, high-speed, ad hoc networked communications between fast movers and mobile ground forces
- ▶ Provides beyond-line-of-sight connectivity for data, voice and imagery
- ▶ Enables software/network management
- ▶ Allows independent, SCA-compliant waveform development for customizability to customer- and country-specific requirements
- ▶ Part of the TruNet networked communications solution family

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## FREQUENCY RANGE

- › Coverage: 30-1850 MHz with growth to continuous 30-2500 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/homeland defense
- › UHF 764-805, 806-824, 851-869, 869-902, 935-941 MHz (public safety bands)
- › L band 1250-1450, 1755-1850 MHz (military 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  $\pm$  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)
- › AM-7642 125 W PEP/50 W average for SATCOM/Mobile User Objective System (MUOS)

## EMBEDDED COMSEC FUNCTIONALITY

- › KY-58
- › KYV-5 (ANDVT)
- › KY-100
- › KG-84A/C
- › KGV-11
- › Thornton Smart Fill
- › Fascinator (FED-STD-1023)
- › MEDLEY
- › HAIPE/SCIP
- › Fully software programmable to meet future needs
- › Indigenous encryption capable

## SATCOM

- › Dedicated: MIL-STD-188-181B
- › 5 kHz DAMA: MIL-STD-188-182A
- › 25 kHz DAMA: MIL-STD-188-183A
- › Integrated waveform: MIL-STD-188-181C/-182B/-183B
- › MUOS

## WAVEFORM OPTIONS

- › Link 11 (with external audio interface)
- › SINCGARS/SINCGARS ESIP
- › HaveQuick/HaveQuickII
- › Joint Networking Waveform (JNW) – international wideband

- › Joint Combat Waveform (JCW) – international narrowband
- › TALON I and II
- › SATURN
- › JPALS
- › MIL-STD-188-220 B/C/D w/change 1 Combat Net Radio
- › Scan (4 channel)
- › Ability to host indigenous SCA waveforms
- › Legacy waveforms (U.S. and NATO)
- › Advanced networking waveforms (U.S. and NATO)
- › LOS: AM voice/data, FM voice/data
- › VULOS
- › ATC (8.33 kHz and 25 kHz channels) with embedded FM immunity
- › Public Safety IAW TIA-603-C, including CTCSS and CDCSS
- › Wideband Networking Waveform (WNN)
- › Soldier Radio Waveform (SRW)

## FUTURE GROWTH

- › SEDR ED4
- › ESSOR
- › COALWNN
- › TETRA
- › Bowman
- › Citadel
- › APCO 25

## Building trust every day.

Rockwell Collins delivers innovative aviation and high-integrity solutions to commercial and government customers worldwide. Backed by a global network of service and support, we stand committed to putting technology and practical innovation to work for you whenever and wherever you need us. In this way, working together, we build trust. Every day.

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