

 **RADIUS**

RADIUS TDIS

Tactical Digital Intercom System

The SyTech RADIUS Tactical Digital Intercom Systems (R-TDIS) provides in-vehicle intercom and radio communications within a ruggedized, purpose-built configuration.

Available for maritime or land-based vehicular environments, the R-TDIS enables voice communications via the local intercom system and/or through two-way radios connected to the R-TDIS distribution system gateway. Operators communicate through the system via R-TDIS crewstations feature two-way toggle push-to-talk. Additional crewstation features include an illuminated keypad and the ability to select the desired radio channels for which to communicate on a full-color, night vision LCD screen. Add the RADIUS Client application for simplified, high-performance command and control featuring enterprise-grade administrative functionality.



GATEWAY:

Interconnects all types of two-way radios including HF, VHF, UHF, and 700/800 MHz. Connects radios, personal computer, smartphones and crewstations.



CLIENT:

Monitor and transmit to dynamic talkgroups created within a simple-to-use graphical user interface.



OPERATING SYSTEM:

The software-defined R-TDIS gateway and crewstations utilize the Linux operating system with a customized distribution built for Radius.



CREWSTATION:

Intercom among locally connected crewstations using military-type two-way toggle ICS and selectable radio channel push-to-talk microphone headsets.



SMARTPHONE:

Connect with smartphones for remote system access, enabling two-way radio communications from anywhere with cellular, WiFi, or MANET access.



SITE to SITE:

Connect multiple RADIUS gateways for communications among distant locations connected by MANET or other IP networks.



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Tactical Digital Intercom System (R-TDIS)



The R-TDIS Distribution System (DS) Gateway

- Dimensions: 13"W x 10"D x 4.2"H
- Weight: 14.8 lbs, 6.8 Kg
- Input Power: 20 - 36 Volts DC
- Power Requirements: 25 Watts nominal, 45 max
- Radio Interface Capacity: 8
- Communication Interfaces: Ethernet (1)
- Connector Type: Standard Military Type Connectors
- Remote Radio Sharing with IP MANET
- Operating System: Linux Kernel 4.19+
- Custom Distribution with Arago and Yocto
- Processor: TI Sitara ARM Cortex 1GHz Microprocessor
- Temperature Range: -40 C to +50 C operational, -40 C to +85 C stored (designed to)
- Crew Station Capacity: 0 - 8 Crewstation (Physical) Additional Crewstations with Ethernet Interface
- Site-to-Site Communications with RADIUS Multisite



The R-TDIS Crewstation (CS)

- Dimensions: 7.5"W x 5"D x 2.5"H
- Weight: 4.2 lbs, 1.9 Kg
- Power Requirements: 10 Watts nominal, 25 max
All Crewstations are powered by the DS
- Full Color, Night Vision Compatible LCD Display
- Illuminated Keypad with selectable settings
- Select up to fifteen on-screen radio nets for selectable transmit and monitor capability
- Selectable left ear/right ear/mute controls
- Compatible with two-way toggle PTT adaptors
- Virtual CS Application for Android available
- Options for ATAK Plugin for Android

