



Product Specification

Interoperable Communications Extension System (ICE-S)

Public Safety Wireless Communications for the 21st Century



The Rivada Networks Interoperable Communications Extension System (ICE-S) enables full featured voice, video and data capabilities for deployed personnel. It features advanced Cisco and leading edge Commercial Off The Shelf (COTS) components with a simple user interface that allow seamless interoperability between disparate communication mediums (Land Mobile Radio, Cellular, WiFi, Landline, etc.). This ruggedized and portable system allows any unit to quickly and effectively establish up to a 10 mile* communications "bubble" over an area. Further, this system enables the user to establish a private, enterprise communications network on-the-fly which is vital during major disasters, deployed operations and any event which requires discrete and robust communications. The key to this system lies in radio frequency spectrum management. Rivada has extensive agreements in place with major wireless carriers and has fully coordinated its system with the Federal Communications Commission (FCC) that allows Rivada to provide the right spectrum when and where needed.

*range is dependent on altitude of the antenna

Standard Features

Capacity

- Up to 2.5M Subscriber Support Base
- 96 Simultaneous Cellular Calls
- CAC Email Authentication & Roaming
- 4 LMR Channels
- 20 Data Subscribers
- 1.2 Meter KU Band Satellite Dish
- OPTION: Satellite On the Move Roof Mounted Antenna

Setup Time

- Less Than 1 Hour

Spectrum Requirements

- Ku Band Satellite Bandwidth
- Cellular Spectrum from local carrier (coordinated by Rivada)

Power Requirements

- 25 amp single phase AC
- Equipped with one Diesel 120VAC/20.8A/60Hz/2.5kVA Generator
- OPTION: Solar Powered Lithium Battery Power Source (3KW Sustained Power)

Physical Specifications

- Weight: 55 lbs
- Size: (2) 8RU Transit Cases
- Rack Mountable
- Vehicle Mountable

Certifications

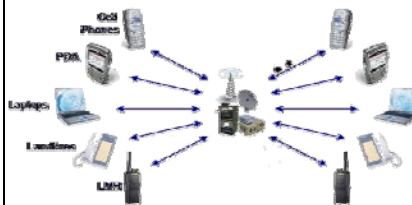
- Joint Interoperability Test Command (JITC) Certified
- MIL STD 810F Compliant
- DISA Compliant/Certified
- DISA Teleport Configured
- DIACAP Certified and Accredited
- HIPAA Compliant
- 256 AES NSA Type 1 Data Encryption

General Equipment

- ACU-2000 IP Interoperability Gateway
- Cisco-based Internal Routing
- Satellite IP Modem
- Intelligent Power Supply
- Antenna Control Unit (ACU)
- Cellular Base Station
- Portable, collapsible Cellular Antenna
- GPS Antenna

Training

- Online and CD-ROM
- OPTIONAL: Onsite training



DISN Services Provided

- SIPRNET (Via KG-250 Connection)
- INTERNET
- NIPRNET (Via Client VPN)
- PHONES (PSTN/DSN/STE/FAX)

Concept of Operations (CONOPS)

- Fully developed State-oriented CONOPS available
- Fully compliant and directed in:
 - U.S. Northern Command (Department of Defense) Publication 6-01.1, Deployable Communications Standards Guidance, 7 Oct 2008
 - U.S. Northern Command (Department of Defense) Concept of Operations For Interoperable Communications Extension Systems (ICE-S), 20 Sep 06
 - National Guard Bureau Joint CONUS Communications Support Environment (JCCSE) Concept Of Operations (CONOPS), Jan 05

Operational Uses

- Public Safety Interoperability
- Disaster Communications Restoral
- Infrastructure Independent Emergency Communications
- Secure, Private Cellular Voice and Data Service
- Land Mobile Radio Bridge