

Ultra ORION BVCS

Robust and Secure Access to the Tactical Cloud



Features & Benefits

- Wide-area networking
- SIP interoperability
- Programmable mission configurations
- Unlimited scalability
- Optional touch screen VoIP operator console
- Two channel vehicular SDR with mesh or PMP
- High speed on-the-move
- Intuitive ORION GUI allows quick radio setup
- Multiple frequency bands
- AES-256 level 2 encryption
- Advanced ECCM features
- Easy installation
- MIL-STD-810, 461F & 1275

High-Capacity OTM Networking

The Ultra ORION Broadband Vehicular Communications System (BVCS) offers high speed on-the-move (OTM) vehicular communications with multi-node VoIP vehicle intercom functions. It allows bi-directional exchange of full motion video and all the ISR data needed for modern tactical missions. BVCS also provides interoperability with vehicle-mounted combat net radios. It combines the compact X510-V radio with a custom vehicle shockmount, along with a power adapter, a radio over IP gateway and dual operator intercom crew stations.

Intercom System

BVCS provides a fully integrated and scalable VoIP intercom and conferencing solution for tactical vehicles. It supports multiple simultaneous user talk groups and is fully scalable.

Networking Equipment

BVCS allows creation of a fully integrated OTM network. The RadioBridge provides next-generation radio and intercom communications capabilities and integrates mobile radios, SATCOM/TETRA/GSM terminals, IP & analog telephone systems, user headsets and networked communication terminals on the IP network. Also part of the BVCS are dual operator VoIP intercom crew stations, made for OTM vehicles. With its embedded audio processing engine and conference bridge, it allows enhanced vehicular communications.

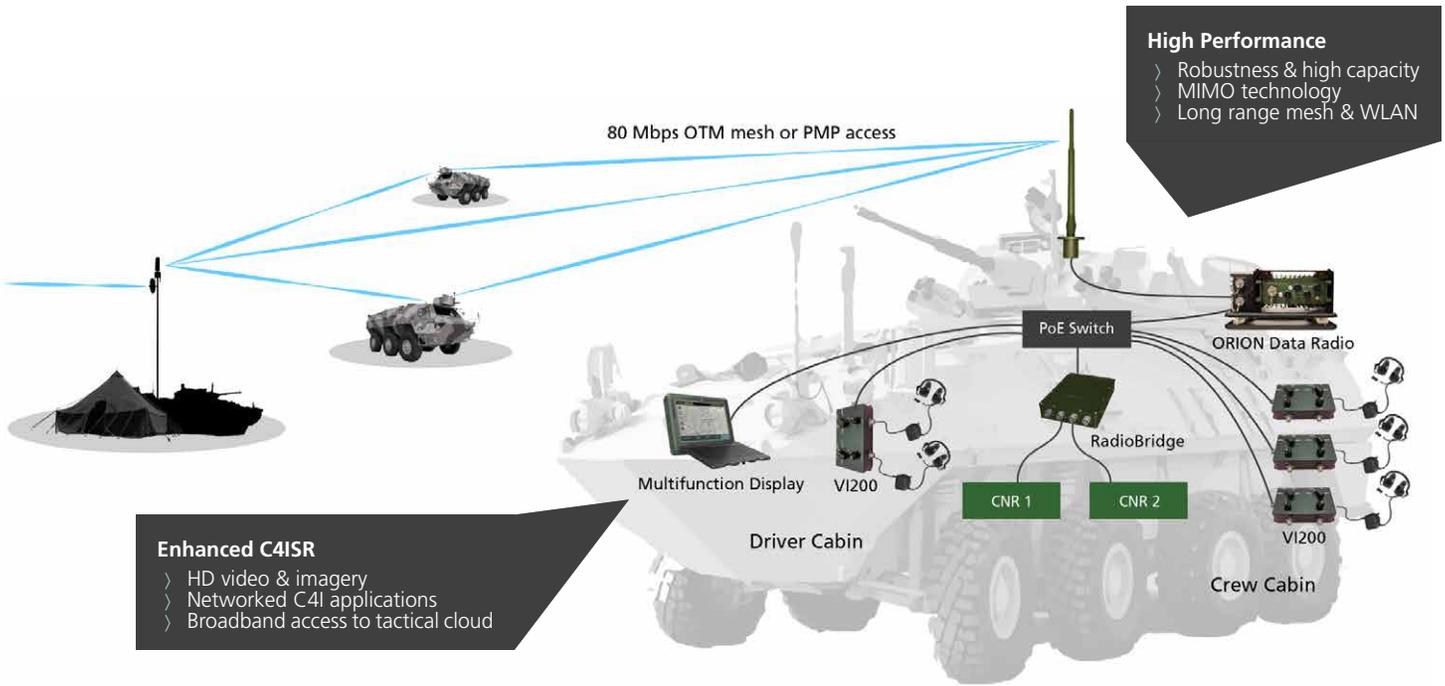


High-Capacity Radio

Ultra ORION X510-V is a multiband, mesh, point-to-multipoint (PMP) and point-to-point (PTP) capable radio. It provides OTM high throughput communications as well as ISM access for use by crew members. The radio can be quickly removed from the vehicle mount and put on a mast for at-the-quick-halt (ATQH) communications. ORION brings 4G multiple-input, multiple-output (MIMO) technology to the field, bridging deployed units to the tactical cloud.

Software & Security

Ultra ORION's graphical user interface is highly intuitive. It allows quick and easy setup of both channels of the X510-V radio. The system and all desired software features are activated in a few clicks. With its multiple security features and highly rugged enclosure, the Ultra ORION BVCS can be used in the harshest and most hostile environments.



IP ENABLED COMMUNICATIONS



Specifications

Parameter	Specification
Intercom CNR Ports	4 or 8
Operators per Crew Station	2
Frequency	Band 3, Band 3+, Band 4, ISM
Throughput	Up to 200 Mbps for SDR channel, 350 Mbps for system
Number of Channels	2 (1 SDR + 1 ISM)
RF Techniques	Adaptive MIMO 2x2 (Transmit Diversity, Spatial Multiplexing, MRC)
Channel Size	From 3.5 to 40 MHz
Waveforms	Library of waveforms including point-to-point, point-to-multipoint and high-capacity mesh. Optional frequency hopping waveforms.
Traffic Security	Layer 2 AES-256 - FIPS 140-2 Level 2, optional ECCM features
Networking	100/1000 BaseT Ethernet, SIP, H.323 VoIP
Temperature	-40 to +55°C (operating), -40 to +70°C (storage)
Environmental	MIL-STD-810G & 461F, IP67, MIL-STD-1275



making a difference

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