

BITTIUM MISSIONNET™



Bringing  
tactical vehicle  
communications  
into the IP era

**Bittium**  
■ DEFENCE & SECURITY

**Bittium Tough PTT™**, a rugged push-to-talk device, serves as a networked endpoint delivering both voice and data connectivity as part of the solution.



**Bittium MissionNet** is a next-generation vehicle intercom and tactical voice communication system designed for modern armored and support vehicle platforms. Built on a secure IP-based architecture, MissionNet seamlessly integrates vehicle crews, tactical radio networks, mission systems, and IP-enabled battlefield applications into a unified communication environment.

The system enables reliable internal crew communication, VoIP services, and interoperability with existing tactical radio assets while supporting fully standalone operation when required. Its modular and scalable architecture allows deployment across a wide range of vehicle types – from main battle tanks and infantry fighting vehicles to logistics and support platforms.

### **Benefits**

- Simplified integration and reduced system complexity
- Scalable across multiple vehicle platforms and mission profiles
- Continuous connectivity across radios, IP networks, and onboard systems
- Reduced installation effort through minimal hardware footprint
- Reduced crew workload through intuitive and consistent operation
- Distributed architecture eliminates single points of failure

For more information, please contact:

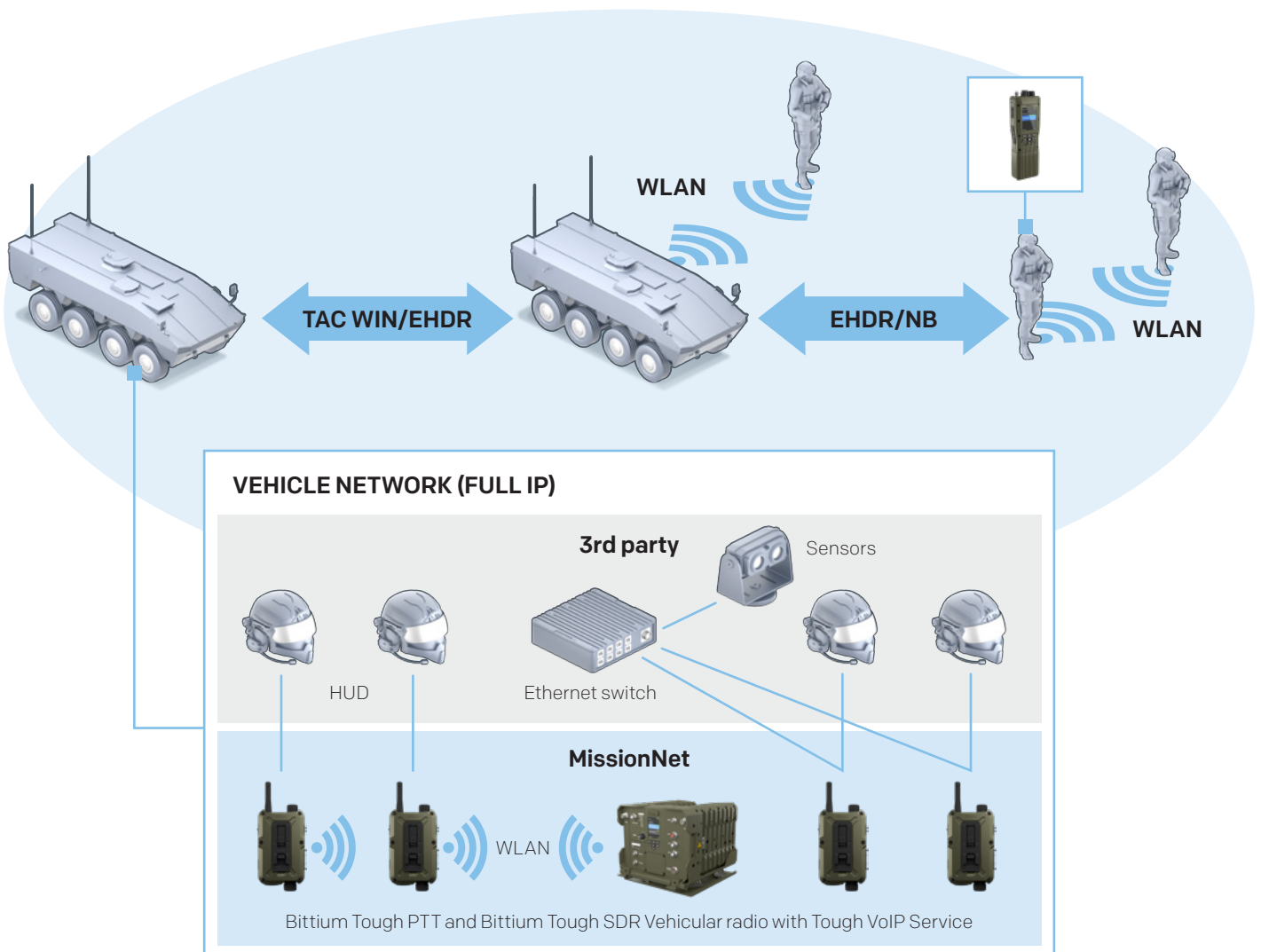
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**With minimal hardware** footprint and seamless integration into existing vehicle infrastructure, MissionNet delivers a future-ready communication capability for modern tactical formations.

**Designed for** demanding operational environments, it provides secure connectivity for headsets, sensors, cameras, heads-up displays (HUDs), and other mission-critical systems through standardized interfaces and high-security network architecture. Consistent user experience across wired and wireless configurations minimizes training requirements and simplifies operational deployment.

**Built for the crew. Ready for the network.** The IP-native intercom provides voice and data communications without boundaries.

Gain operational advantage through seamless integration with Bittium's TAC WIN and Tough SDR networks, or 3rd party IP networks.



## Features

- IP-based topology enables seamless integration between IP-based tactical network and the vehicle intercom system
- Provides network connectivity for devices such as headsets, cameras, sensors, and heads-up displays (HUDs)
- High-security network architecture designed for demanding tactical environments
- Consistent user experience in both wired and wireless configurations
- One intercom platform for every mission – from frontline battle tanks to support and transport vehicles

## Voice services

- Internal Voice Channels between vehicle crew
- Global Voice Channels across Tough SDR and VoIP networks
- Distributed Tough VoIP service without single point of failure
- Non-IP waveform connectivity via SDR VoIP Gateway
- Connectivity to legacy CNR radios

## System integration

- Integration with Bittium TAC WIN and Tough SDR IP networks
- Integration with 3rd party IP networks
- Field wire connectivity with Bittium Tough Comnode or 3rd party routers

## Other

- Standardized interfaces enabling easy integration with existing vehicle systems and 3rd party equipment
- Compatible with legacy tactical radios with Bittium Tough Comnode while also capable of fully standalone operation
- Designed to operate with minimal hardware installation

## BITTIUM TOUGH PTT™

### Physical interfaces

- **External antenna**
- **Head-mounted system**  
USB2.0 Hi-Speed or USB3.0 SuperSpeed  
5 Gbit/s with DisplayPort alt mode support
- **DATA**  
IEEE 802.3u 100BASE-TX  
USB2.0 Host/Device HS/FS  
PoE PD class 3  
USB PD (Power Delivery)

### Technical details

- Internal and external antennas
- **Power Supply**  
18650 Li-Ion Battery (user replaceable), charging via DATA interface  
PoE PD class 3  
USB PD (Power Delivery) 15W
- **Environmental and EMC standards**  
MIL-STD-810H/CHG1  
MIL-STD-461H
- **Temperature range**  
Operating -40 – +55 °C
- **Ingress Protection class**  
IP67

- **Dimensions without external antenna**  
137 x 74 x 41mm
- **Material**  
Surface treated aluminum alloy/plastic
- **Declaration of Conformity**  
CE

### HMI

- **Display**  
PMOLED
- **Two PTT buttons**  
3 PTT combinations + VOX
- Volume switch
- Preset switch (1–9 presets)
- Radio silence switch
- ON/OFF button
- MOLLE clip

### Wireless interfaces

- 2.4 GHz 802.11b/g/n/ax (WLAN mesh capable)
- 866MHz IEEE 802.11ah (HaLow)
- Bluetooth®

### Accessories

- Antennas
- USB Headsets
- USB charging cable

Bittium product code S0000035914.