# **IISR-500**

Full duplex voice and data radio conferencing is now a reality!



### Integrated Intra Squad Radio

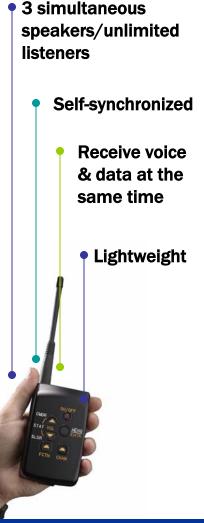
Integrated Intra Squad level tactical conference communications for improved mission coordination

Talla-Com's Integrated Intra Squad Radio (IISR) provides self-synchronized, wireless conferencing communications as well as inter-connectivity to long-range VHF/HF networks. The IISR is designed to specifically improve the coordination and mission effectiveness of ground, air, and naval forces operating in demanding operational environments—e.g. urban warfare, field ambushes, combat ships, etc.—where every bit of information can mean the difference between mission success or failure. Packing powerful voice and data communication capabilities into a compact personal unit, the IISR is an essential building block for any military or homeland defense modernization program.

## Features

- · Full duplex/3 simultaneous speakers/unlimited receivers
- · Immediate, more effective operational communications
- Encryption available
- · Soft controlled radio (SCR)
- · No single-point of failure ensures reliability
- · Communication range: 800M open area; 300M urban & dense vegetation areas
- · Whisper function for covert operations
- 15 network channels
- · Voice activated messages and alerts
- · Sophisticated data communication protocols
- Full compliance with MIL-STD requirements
- Wireless PTT
- Size: 4.3"H x 2.6"W x 1.6"D
- Weight: <1 lbs.

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## **IISR-500**

### Immediate, more effective operational communications

The IISR's unique full-duplex conference communication capability enables up to three IISR speakers to simultaneously confer and coordinate operations, with an unlimited number of IISR stations able to listen. As a result, crucial operational decisions can be made according to realtime information, improving coordination and helping prevent fatal errors such as friendly-fire incidents.

## Avoiding a single-point of-failure ensures highly reliable radio communications

Based on Talla-Com advanced and proven self-synchronizing technology, the IISR features dynamic network architecture that eliminates the need for a central control unit or master station, thereby reducing communication vulnerability to a minimum.

#### Intra-team and inter-team communications

The IISR radio's headset includes two PTT buttons which enable the operator to: 1. immediately access the local IISR network to pass instructions and information to other team-members; 2. connect to external long-range tactical VHF/UHF/HF radio networks.

#### The leading communication choice for soldier modernization programs

The IISR is the ideal solution for armed forces looking to provide their dismounted soldiers with the most advanced voice and data communication technology in order to ensure superior operational mobility and capability.

#### **Technical Specifications**

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Frequency	400 to 450 MHz*
Channel Spacing	100 kHz
Modulation	Data: π/4 DQPSK Voice: CVSD
Preset Channels	15
Frequency Stability	<u>+</u> 3 ppm
Built-In Test (BIT)	On-line and operator initiated
Power	3.6V nominal Li-ion rechargeable battery or AA Batteries
Operation Hours	At 1:2:17 Tx: Rx: Stby: 12 hours
HxWxD	4.3" x 2.6" x 1.6"
Weight (with battery)	<1 lbs.
Dynamic & Mechanical	Per MIL-STD-810E
Special features	Full duplex and conference Up to 3 simultaneous speakers, unlimited number of listeners

Technical	<b>Specifications</b>	Continued
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Communication range	800M typical in open area; 300M urban & dense vegetation areas
Synchronization	Self and seamless (no master station); Auto resynchronization capability
Late entry	No special procedures required
Programming	Using a PC
Environmental	
Operating Temperature	-20°C to +55°C
Relative Humidity	95%
Immersion	0.2M of water for 2 hours
Receiver	
BER	10 <sup>-1</sup> @-107dBm
SINAD	10db@-107dBm
Transmitter	
Power Output	250mW min.
<b>Optional Features</b>	
FFS (Free Frequency Search)	A special module which automatically scans and selects the optimal communications frequency in order to minimize interference.
Encryption	As per customer specifications
Radio software	Can be configured to meet customer's specific operational requirements.
Data Communications	
Туре	Asynchronous
Rate	9.6 kbps**
Interface	RS-232

\*Customer defined frequency bands

\*\*Other data communication rates available upon customer's request

All specifications are subject to change without notice 4.18.05



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