

**Hycomms**



# PRODUCT CATALOGUE

[www.hycomms.com](http://www.hycomms.com)



## Hycomms Overview

Hycomms is a leading provider of professional radio system and communication command vehicle and shelter solutions, headquartered in Shenzhen, China, with four major research and development bases. Our products are widely used across various industries, including civilian safety, guard, and public safety.

We prioritize quality, reliability, and innovation, making Hycomms the preferred choice for customers seeking robust and secure communication solutions for their security, peacekeeping, and disaster relief efforts.

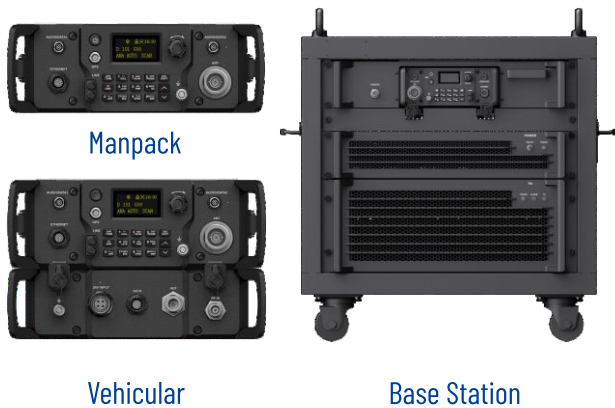
As a technology-driven company, we are committed to delivering high-quality products and services to our customers. We continuously invest in research and development to stay ahead of the curve and explore new technologies that meet the highest industry standards. We believe in close cooperation with our customers, and strive for continuous innovation as the key to mutual success. Therefore, we work closely with our customers to understand their specific needs and offer tailor-made solutions that meet their unique requirements.



# Tactical Communication System

## HF Radio

1.6~30MHz



## Overview

The tactical HF SDR provide reliable and secure long range voice and data services under harsh environment conditions. The radio adopts Direct RF Sampling in broadband spectrum technology to automatically and quickly select the best communication frequency.

## Highlights

- Fast and intelligent frequency selection
- Up to 51.2kbps data transmission
- Voice Message Service
- Remote control through Ethernet or field-cable
- AES-256 and customized encryption

Item	Specification
Frequency Range	1.6~30MHz
Channel Number	1000
Modulation Type	USB,LSB,CW,AM
ALE	2G/3G/FFS
Data Interface	K/RS232/Ethernet/USB
COMSEC	AES-256 Customized encryption
Output Power	Manpack:5/10/20W Vehicular:20/50/125W Base Station:1000W
Sensitivity	Manpack/Vehicular:-116dBm Base Station:-115dBm (SINAD=10dB)

Item	Specification
ECCM	FH
Hopping Rate	5/10/20hops/s
Dimension (HxWxD,mm)	Manpack:75x190x367 (with battery) Vehicular:135x190x367 Base Station:19" 9U
Weight	Manpack:≤6kg(with battery) Vehicular:≤11kg Base Station:≤100kg
Operation Temperature	-40°C to +65°C (Dedicated Battery)
Immersion	Manpack:2m,4h
Environmental	MIL-STD-810G; MIL-STD-461F

# VHF Radio

30~88MHz



## Overview

The tactical VHF SDR family provides reliable and secure critical voice and data services under harsh environment conditions. Based on advanced waveforms, the radio offers flexible combat network, Line-Of-Sight (LOS) voice relay and Ad-hoc Networking that enable users to communicate more critical information.

## Highlights

- Increased communication range by 30% through FCS
- 1000 hops/s high speed frequency hopping
- 6-hop voice relay and Ad-hoc networking
- Excellent SWaP (Size Weight and Power) design
- AES-256 and customized encryption

Item	Specification
Frequency Range	30~88MHz
Channel Number	2320
COMSEC	AES-256 Customized encryption
Output Power	Handheld: 0.5/2/4W Vehicular PA *(Handheld): 5/20/50W Manpack: 0.5/5/10W Vehicular PA*(Manpack): 0.5/5/50W
Sensitivity	Handheld/Manpack: ≤-118dBm (SINAD=12 dB,FM) Vehicular PA ≤-116dBm (SINAD=12 dB,FM)
ECCM	FCS/FH, 1000hops/s Max

Item	Specification
Dimension (HxWxD,mm)	Handheld: 220x72.5x36.5 Vehicular PA (Handheld): 295x278x118 Manpack: 75x190x325 Vehicular PA (Manpack): 161x190x337
Weight	Handheld: ≤0.58kg (with battery) Vehicular PA (Handheld): ≤6.5kg Manpack: ≤4.4kg (with battery) Vehicular PA (Manpack): ≤7.5kg
Operation Temperature	-40°C to +65°C (Dedicated Battery)
Immersion	Handheld/Manpack: 2m, 4h Vehicular PA: 1m, 30min
Environmental	MIL-STD-810G; MIL-STD-461F
Networking Capability	32-node, 6-hop

\* PA: Power Amplifier

# Dual-band Radio

108~174MHz / 225~400MHz



Handheld

Vehicular

## Overview

Based on the SDR architecture design, the radio integrate the excellent tactical features, such as voice relay, Ad-hoc networking and Frequency Hopping (FH), it can provide a stable communication in complex terrain. The radio also can be used in ground-to-air communication with AM mode.

## Highlights

- V/UHF covering 108MHz to 174MHz and 225MHz to 400MHz
- Small,compact and usable design
- Increased communication range by 30% through FCS
- 6-hop voice relay and Ad-hoc networking
- AES-256 and customized encryption

Item	Specification
Frequency Range	108~174MHz; 225~400MHz
Channel Spacing	25KHz
COMSEC	AES-256 Customized encryption
Output Power	Handheld: 0.5/2/3W (FM), 1.5W (AM) Vehicular: 5/50/100W (FM), 50W (AM)
Sensitivity	≤-118dBm (SINAD=12dB,FM) ≤-106dBm (SINAD=10dB,AM)

Item	Specification
ECCM	FCS/FH, 1000hops/s Max
Dimension (HxWxD,mm)	Handheld: 152x61x36.5 (with battery); Fixed Vehicular: 19",2U
Weight	Handheld: ≤0.34kg (with battery); Vehicular: ≤18kg
Operation Temperature	-30°C to +60°C
Immersion	Handheld Radio: 2m,4h
Environmental	MIL-STD-810G; MIL-STD-461F
Networking Capability	32-node , 6-hop

# Team Radio

350~450MHz



Handheld

## Overview

The team radio provides secure voice and data communication to each member of the team. Full duplex, priority-based voice conference allows several simultaneous talkers. The radio is based on the Ad-hoc networking, supports multi-hops voice and data.

## Highlights

- Hands free full-duplex conference mode
- Self-forming, self-healing networking
- Up to 4 groups divided in a squad team network
- Dual PTT design for group call and all call
- Build-in BT,WiFi and GPS
- Situational Awareness

Item	Specification
Frequency Range	350~450Mhz Customizable
Channel Spacing	25KHz
COMSEC	AES-256
Output Power	1/2/4W
Sensitivity	-118 dBm@BW=20kHz -110 dBm@BW=75kHz
Bandwidth	20kHz, 75kHz

Item	Specification
Dimension (HxWxD,mm)	152x60x37 (without antenna);
Weight	≤0.37kg (with battery)
Operation Temperature	-30°C to +60°C
Immersion	2m,4h
Environmental	MIL-STD-810G;MIL-STD-461F
Networking Capability	24-node,3-hop

# Multi-band Radio

30~512MHz



Handheld

Vehicular

## Overview

The new generation SDR Multi-band family for advanced multi-domain networking solution is designed to meet the complex communication and connectivity needs of the modern battlefield scenarios.

## Highlights

- Multi-band, Multi-waveform, Multi-mission
- Up to 8Mbps data transmission MANET
- 2000hops/s high speed frequency hopping
- Situational Awareness
- AES-256 and customized encryption

Item	Specification
Frequency Range	Narrowband: 30~512MHz Wideband: 225~512MHz
Channel Spacing	Narrowband: 25kHz, 75kHz Wideband: 5MHz (Handheld), 10MHz (Manpack/Vehicular)
Waveforms	CNR/PRN/LINK/TCN <sup>①</sup> /WGN <sup>②</sup> /VRN
Date Rate	Handheld: ≤4Mbps Manpack/Vehicular: ≤8Mbps
COMSEC	AES-256 Customized encryption
Sensitivity	Handheld/Manpack: -118dBm (SINAD=12dB) Vehicular: FM-116dBm (SINAD=12dB)

Item	Specification
Output Power	Handheld: 0.5/2/5W Manpack: 1/5/10W Vehicular: 1/25/50W
Dimension (HxWxD,mm)	Handheld: 220x73x37 (with battery) Manpack: 85x240x292 (with battery) Vehicular: 145x289x265
Weight	Handheld: ≤0.7kg (with battery) Manpack: ≤6.5kg (with battery) Vehicular: ≤15kg
ECCM	FCS/FH, 2000hops/s Max
Operation Temperature	-40°C to +65°C
Immersion	Handheld/Manpack: 2m, 4h Vehicular: 1m, 30min
Environmental	MIL-STD-810G; MIL-STD-461F

①TCN: Team Conference Network    ②WGN: Wideband Group Network

# Vehicle Intercom System



Communication Controller



Control Box



Speaker

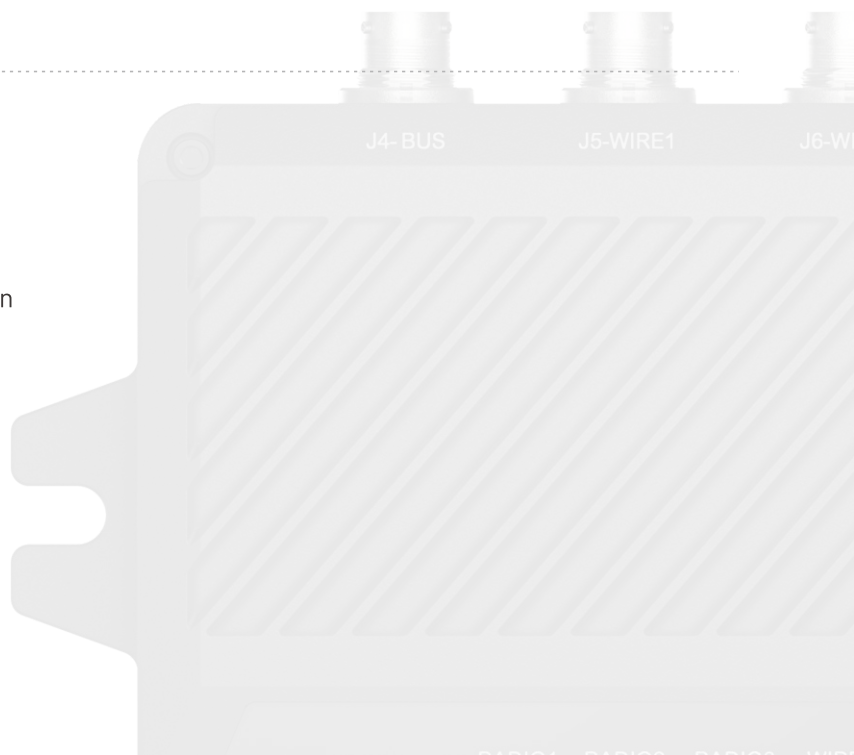
## Overview

Vehicle Intercom System (VIS) provide enhanced communications and network capabilities for mobile platforms, The Vehicular Intercom & Networking System utilizes the VIS products to deliver fully integrated system solutions. The VIS is fully interoperable with most existing tactical and emergency services radio and radio networks.

The VIS supports communication networking, telephone, VoIP function, telephone bridging and retransmission function. Capable of making data communication with data terminal via Ethernet interface, provides manager interface for communication parameters configuration management, self-test status indication and fault inquiry.

## Highlights

- Flexible configuration and expandable
- Friendly man-machine interaction, easy system operation
- Multiple communication methods
- High reliability and good environmental adaptability





# ACCESSORIES

## COMMUNICATION HEADSET



- **Situational Awareness**

Restores and enhances “natural hearing” of outside environments for improved situational awareness

- **Advance Designing**

Earcups designed to accommodate a wide variety of helmet profiles. Configurable mounting options to easily convert from a headband to helmet mounted

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## DUAL COM CONTROL UNIT



- **Volume Control Adapted to the Surroundings**

Volume from received audio is automatically adjusted to surrounding sound level to secure uninterrupted and clear communication.

- **Improved Auditory Situational Awareness**

Advanced algorithms to enhance transition from noisy to quiet environments and vice versa.

- **Voice Prompts**

Voice prompts to guide the user on enabling or disabling advanced features or when pairing with remote PTTs.

# ACCESSORIES

## 1000W POWER SUPPLY MODULE



- The emergency power supply is matched with DC power supply with UPS function.
- It is mainly used for radio in fixed and vehicle-mounted scenarios.

	Item	Specification
Output	Voltage range	21-27.6VDC
	Rated current	42A
	Rated power	1008W
Input	Charging voltage	90-262VAC
	Recharging current	8A
Environment	Operating temperature	-10°C to +60°C
	Vibration	MIL-STD-810G
Safety	Safety regulations	UL/CE
	EMI	CE/3C

## TACTICAL COMMAND AND CONTROL KIT



- Map operation
- Command on the map
- Situation sharing
- Position tracking
- Intelligence transmission

## RADIO REMOTE CONTROL SOFTWARE



- Interconnect with radio stations via local network.
- Remotely set radio parameters.
- Send voice, short message and data to other radio.

### Audio



Handset



Palm microphone with display



Single-muff lightweight tactical headset



Noise reduction earphone



Bone-conduction headset

### Antenna



HF whip antenna



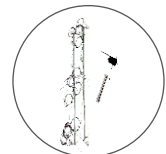
HF slant antenna



HF dipole antenna



HF NVIS antenna



HF broadband antenna

### Other



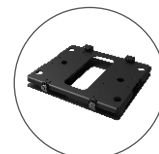
Fill gun



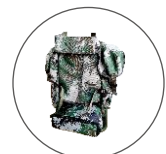
Hand crank generator



Solar generator



Shock absorber



Back frame

# Hycomms

Become a reliable communication solutions  
partner for critical missions