



A Quick Guide to Belfone Communication MEA Systems

Belfone Communications MEA

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Dedicated to increasing the efficiency and reliability of missioncritical communications, Belfone MEA is always on the way to offer responsive, flexible and reliable products. For more information about our products and solutions, contact us or visit us at www.belfone.ae

Catalog | Quick Guide



PREFACE

DMR, A SAFETY NETWORK FOR MISSION CRITICAL FORCES

Digital Mobile Radio (DMR) as an ETSI open standard has been evolving since 2005, along the way, over 12 million users across the world chose and relay on this technology for their daily work and emergency handling. The users are from a wide spectrum of sectors, including enterprise, industrial, governmental, and public safety professionals.

The reason why this particular private network protocol can be swiftly and widely adopted is quite obvious, if we look at it retrospectively. DMR offers key benefits such as doubling of capacity in existing licensed channels, backwards spectrum compatibility with legacy systems, efficient use of infrastructure equipment, system flexibility through simultaneous use of TDMA channels, advanced control features, etc.

Looking forward into the future, stakeholders of the industry, including manufacturers such as BelFone, regard DMR as a viable solution for mission critical voice even in the trend of going broadband. Firstly, the voice call remains the fundamental and paramount requirement for emergency communications, while data capacity brought by LTE cellular or private LTE is intensively sought to increase daily efficiency and productivity. Secondly, DMR technology's powerful AIS enables unified data and voice applications across protocols, which is precious for those choose to run a hybrid communications system with both private and public networks. Thirdly, DMR, especially DMR Tier III trunking, is a very competitive and affordable technology to cover a wide region; it is more so, if we look at the population density and distribution, as different economic development phases, in a global perspective.

Therefore, DMR Tier III trunking systems remain a safety net for public safety users for years to come, while manufacturers, such as BelFone, goes extra miles to keep innovating the solutions. As a leading technology and solution provider of mission and business critical communications, BelFone is dedicated to bringing the best out of the evolvement of different communications technologies, including DMR, and presenting customer-oriented solutions that empower users to work with higher efficiency and safety.

This catalog is to give a complete introduction of BelFone's DMR portfolio, from infrastructure to terminals and software, from Tier II conventional to Tier III trunking, from IP connection to Ad-Hoc solutions. It is a product catalog, at the same time, an updated source of latest development of DMR radio features.



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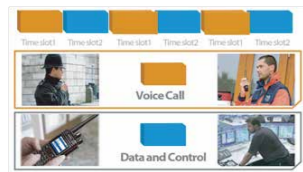
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SYSTEM OVERVIEW

As the fastest growing digital standard with a large user base, DMR (Digital Mobile Radio) has occupied over 70% of global market share in the category of cost optimized radio, according to IHS Report. It is widely adopted to serve professionals from different industries. DMR Tier I is license-free for the consumer market. DMR Tier II direct and repeater mode is able to satisfy most professional requirements from enterprises and industrial users. DMR Tier III trunking mode is designed for wide coverage and large capacity networks with flexible priority management and advanced control features.

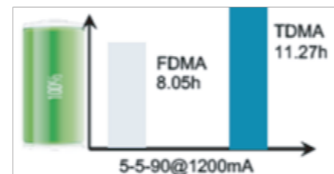
DMR Advantages over Analog



▲ Double channel capacity with 2-slot TDMA



▲ Better audio quality



▲ 40% Battery life improvement



▲ Abundant data applications



▲ Advanced encryption to secure voice & data



▲ Analog & digital compatible

DMR Systems

DMR Tier II				DMR Tier III	
DMR Conventional		Virtual Trunk		DMR Trunking	
BDC (Basic Digital Connect) System	BDS (Basic Digital Simulcast) System	SDC (Smart Digital Connect) System	SVT (Smart Virtual Trunking) System	BTX (Basic-built Trunking) System	ETX (Enhanced Trunking) System
Max. 128 Sites	Max. 128 Sites	Max. 1024 Sites	Max. 16 CH/Site Max. 128 Sites	Max. 4 CH /Site Max. 256 Sites/MSC	Max. 24 CH /Site Max. 500 Sites/MSC
Max. 8000 Subscribers	Max. 524287 Subscribers	Max. 524287 Subscribers	Max. 524287 Subscribers	Max. 50000 Subscribers	Max. 50000 Subscribers

TRUNKING SYSTEM

BelFone DMR Trunking System, a new generation of integrated digital trunking system based on DMR Tier III open standard, is designed for public safety, utilities, transportation, energy industry and other professional users to provide safe and reliable radio communications as well as command and control solutions. Enhanced by information technologies, BelFone DMR Trunking System is highly versatile in improving team collaboration efficiency and enhancing safety of front-line personnels.

Highlights & Features

Increased Spectrum Efficiency

Trunking systems increase channels usage efficiency by dynamically managing their allocation based on radio terminals distribution. BelFone DMR Trunking System also supports simulcast mode to use the same frequency for whole network.

Open API

BelFone DMR Trunking System supports open API for further development based on different customer needs, such as billing systems, e-mail, gateways, etc.

Versatile Services

Various voice calls, data services, priority control, late entry, full duplex service, recording, PSTN call, authentication, E2EE, stun, revive and kill, GPS, emergency alarm, etc.

Powerful Applications

Network management software, as well as the dispatch and voice recording systems, ensures BelFone DMR Trunking System is a comprehensive and professional solution. It provides centralized management of the radio system and supports remote maintenance.

High System Reliability

Due to the redundant design of the key hardware components, the availability of the overall system is ensured, even when some components fail.

IP Based Architecture

All network elements are based on IP architecture to ensure flexible networking and system expansion.



Voice Service

- Individual Call
- Group Call
- Broadcast Call
- All Call
- Emergency Call
- PSTN Call
- Full Duplex Call



Data Service

- Status Message
- Short/Long Message
- Emergency Alarm
- GPS
- Enhanced GPS Pulling
- Packet Data



Security Service

- ESN Check
- Mutual Authentication
- E2E Encryption
- Override/Interrupt
- Ambient Listening
- Discreet Listening
- Stun/Revive/Kill



Other Service

- Roaming
- Handover
- OTAP
- DGNA
- Group Patch
- Call Forwarding
- Simulcast
- Scan Group
- Jamming Detection

Jamming Detection, 干扰检测我们一般使用 interference detection

ETX (Enhanced Trunking System)

Following ETSI open standards, Belfone ETX DMR Tier III trunking system is designed for mission critical organizations to empower reliable and secure communications and ensure interoperability across departments and systems. ETX provides reliable wireless communication and dispatching solution for public safety users. Taking advantages of full digitization and IP soft switch, the ETX system has good scalability to meet various network scale requirements. Designed with full redundancy for all critical modules, ETX delivers high efficient and reliable communications in any conditions to mission critical users.

DMR ETX Base Station



**NATIONWIDE NETWORK,
LARGE CAPACITY
IN CARRIER GRADE**

The system is able to roll out nationwide support for national management like hige way patrol, police, fire fighting. Its max capacity is more than 50,000 subscribers.



MULTIPLE FALL-BACK MODES

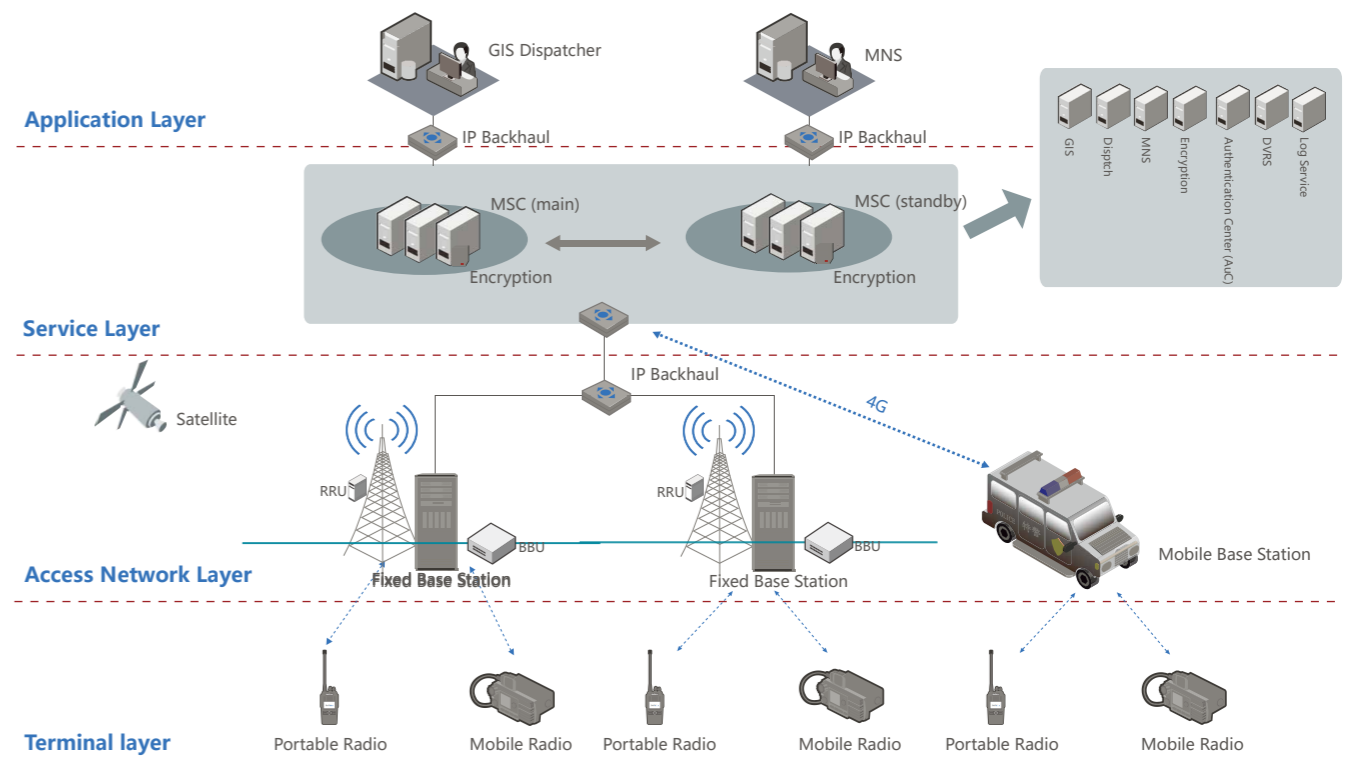
The system core network comes with a backup network, which will automatically and immediately come into play when the core network is down. It ensures the terminals stay connected in operation mode.



MULT-LAYER ENCRYPTIONS

With built-in multi-layer encryption technologies such as ARC4, AES256, software-based encryption and hardware-based encryption, ETX system can effectively ward off interception, and thus greatly increase system security and efficiency.

Topology



Specification

Max BS Capacity	500
Max Carrier Capacity	500*24
Dispatch Capacity	128
PSTN/PABX Gateway Capacity	60(2×E1)/30(1×E1)
Subscriber Capacity per BS	2000
Subscriber Capacity per System (Single MSC)	50,000

Application



Police

Traffic Police

Armed Force

Private Trunking Operator

Fire Brigade

ETX (Enhanced Trunking System)

ETX Base Station

● BF-TR950 Trunking Station UHF

BF-TR950 is a carrier level DMR Trunking base station designed with unit module, featured enhanced extensibility and rich functions. Featured failure fallback mode, inter-site call handling, whole site backup, and allows backup station to automatically take over to deliver enhanced reliability. BF-TR-950 incorporates a perfect backup mechanism for key components of base station-controller, carrier, power supply, etc. Besides, it can also allow an online main module change to sustain long time operation and safeguarding smooth communication.

- Carrier Failure Isolation
- Blade Mounted Structure
- Key Components Backup
- Maximum 8 Carrier Per Site **单站点可扩容到24载波**
- Base Station Failure Fallback
- Intelligent Fan Speed and Temperature Control



● BF-TR951 Trunking Base Station UHF VHF

BF-TR951 is designed with independent carrier and power supply to enhance reliability. With comprehensive functions to support failure fallback and inter-site call handling. Compliance with military level, BF-TR951 incorporates high performance channel unit and power module to provide reliable, stable services.

- Military Level Structure
- Distributed Carrier Solution
- Base Station Failure Fallback
- Special Power Supply for Carrier
- Carrier With Superior Heat Dissipation



● BF-TR955 Mobile Base Station UHF

BF-TR955 is an integrated mobile base station that designed compact structure, featured flexible deployment and wide applications. It is the best choice for emergency rescues, patrolling, and other emergency scenarios to establish Trunking communication network and achieve unified dispatching.

- High Reliability
- IP67 Protection
- High Integration
- 2.8-Inch Display
- Flexible Deployment
- 5-Lines Transmission **4载波和8载波**
- 8-Lines Transmission(optional)
- DPD Technology to ensure RF efficiency



● BF-TR952 Distributed Trunking Base Station

BF-TR 952 is a cost-effective Trunking base station for fast network establishment. Functioned as network access device, BF-TR952 is used to manage wireless access including air interface, access control, mobility control, user resources assignment, etc.

BF-TR952 consists of base station controller BBU952 and remote radio unit RRU952. Its flexible distributed design satisfies different networking requirements and brings better covering performance.



ETX (Enhanced Trunking System)

● BF-BBU952 Base Station Controller

BF-RRU952 is the RF section of the distributed base station designed to meet user expectations in service, capacity, transmission, power supply, installation, and maintenance. Rated IP67 protection, BF-RRU952 delivers enhanced reliability. Adopts an integrated structure it can support pole mounting, wall mounting, and vertical mounting for improved covering capacity and saving feeders.

- Aviation Plug
 - IP67 Protection
 - Wide Applicability
 - Maximum 4*20W Output Power
 - Specialized Power Supply for Carrier
- 这里应该讲解BBU，看描述都是RRU的



● BF-RRU952 Remote Radio Unit UHF

BF-RRU952 is the RF section of the distributed base station designed to meet user expectations in service, capacity, transmission, power supply, installation, and maintenance. Adopts an integrated structure to support pole mounting, wall mounting, and vertical mounting for improved covering capacity and saving feeders.

- IP67 Protection
- Aviation Plug
- Wide Applicability
- Maximum 4*20W Output Power
- Special Power Supply for Channel Machine



DMR ETX MSC(Mobile Switch Center)



- IP based architecture
- Central Control & Soft switch
- Network Management
- Authentication center
- System API
- Full redundancy
- Log Service

Max. Base Station (pcs)	500
Max. CHU	12000
Max. Carrier per Site	24
Max. Subscriber per MSC	50,000
Dispatcher Capacity	128
NMS Capacity	128
Call Set-up Time(ms)	< 300 within MSC
Max. Concurrent Call (line)	2800

ETX DMR Dispatcher



- Individual Call/ Group Call/Emergency Call/All Call
- Ambience listening/Discreet listening
- Interrupt/Override/ Kill/Stun/Revive
- DGNA/Group patch
- Short message/Status message
- AVL
- Online/Offline Map/ GPS Polling/Geo-fencing
- Long message
- Event Log/Call Log

ETX DMR NMS(Network Management System)



- Device management
- Subscriber management
- System configuration
- Alarm management
- Security management
- OTAP
- Software upgrade
- Channel monitor

ETX DMR VRS(Voice Recording System)

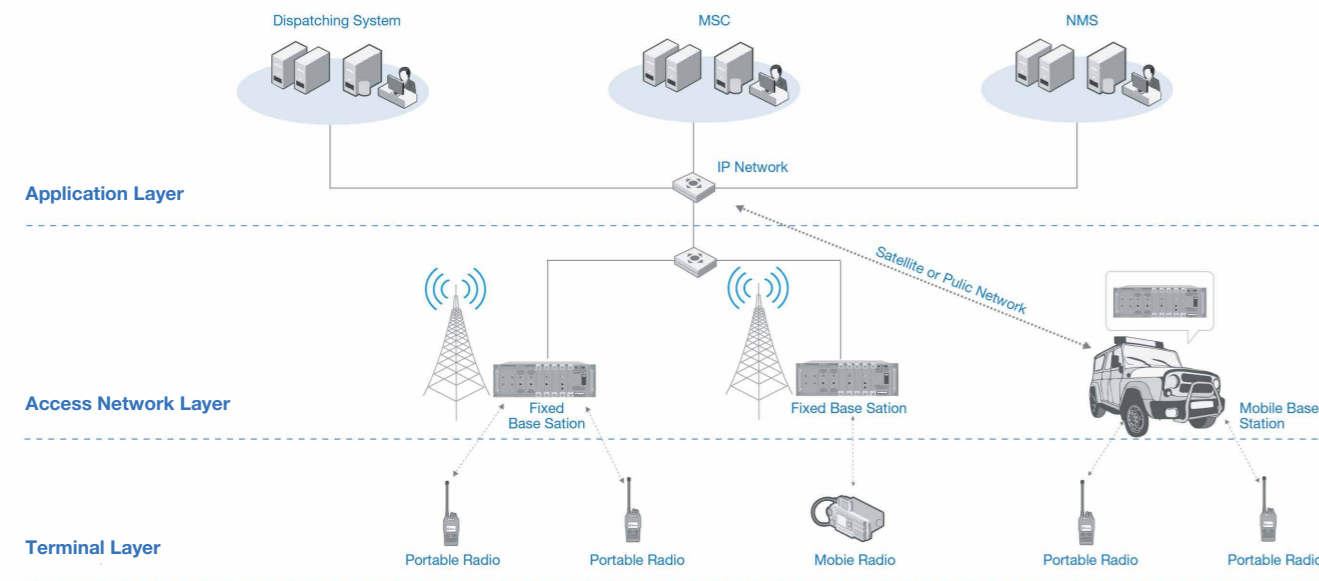


- Whole network voice recording
- Flexible recording
- Multi-level authority

BTX (Basic-built Trunking System)

BTX is a digital trunking system, which is based on ETSI open standard and focuses on customers from public utilities, transportation, energy resources, commercial industry, etc. BTX provides a powerful combination of flexibility, control and resiliency. It delivers workforce efficiencies and operational benefits for business-critical users.

Topology



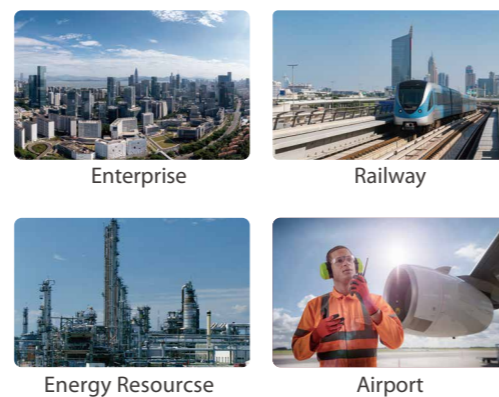
Elements



Specification

Max BS Capacity	256
Max Carrier Capacity	256*4
Max Carrier per Site	4
Dispatch Capacity	30
PSTN/PABX Gateway Capacity	60(2x E1)/30(1x E1)
Terminal Capacity per System	30,000
Max. Base Station (pcs)	256
Max. CHU	1024

Application



BTX DMR Base Station



- 19" rack structure based on ATCA
- Highly integrated modular design, easy for expansion
- Support hot plug.

Capacity	Up to 4 carriers/BS
Frequency	350-400MHz; 400-470MHz
Receiving Sensitivity	-118 dBm@BER5%
Power Consumption	2-carrier: ≤500W; 4-carrier: ≤1,000W
Voltage	AC 110 V/220 V
MTBF	100,000 hours
Operating Temperature	-30 to +60 C

BTX DMR MSC (Mobile Switch Center)



- IP based architecture
- Central Control & Soft switch
- Network Management
- Authentication center
- System API
- Full redundancy
- Log Service

Max. Carrier per Site	4
Max. Subscriber per MSC	50,000
Dispatcher Capacity	30
NMS Capacity	16
Call Set-up Time(ms)	< 300/MSC
Max. Concurrent Call (line)	512

BTX DMR Dispatcher



图片是ETX的调度和网管

- Individual Call/ Group Call/Emergency Call/All Call
- Ambience listening/discreet listening
- Interrupt/Override Kill/Stun/Revive
- DGNA/Group patch
- Short message/Status message
- Online/Offline Map GPS Polling/Geo-fencing
- Voice recording
- Video monitoring for CCTV system

BTX DMR NMS



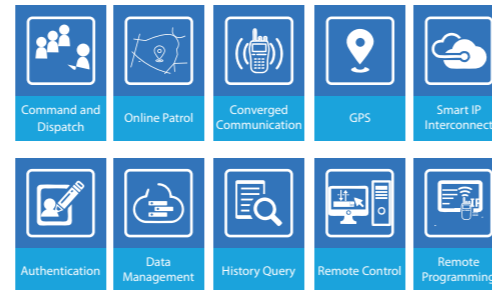
- Device management/monitoring
- Configuration management
- Subscriber management
- Fault management
- Security management
- Remote upgrading

SDC (Smart Digital IP Connect System)

SDC, an intelligent IP repeater interconnection solution, is widely used in commercial and industrial markets. It offers flexible networking to meet users' various coverage requirements. It is also integrated with comprehensive dispatching platform to deliver versatile service like voice, short message, GPS location, patrol management, radio monitor and control, etc.

Highlights & Features

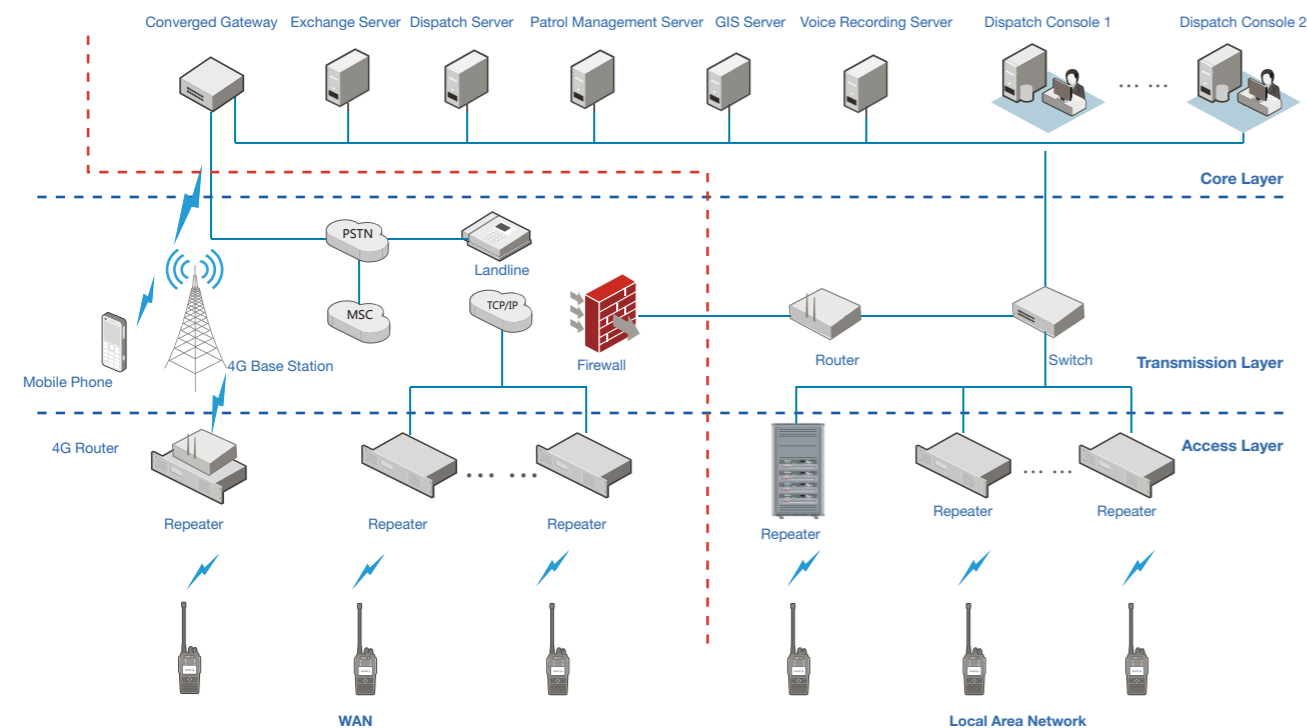
- Flexible networking with IP based architecture Realtime radio status monitoring
- Cloud deployment for the system server
- Patrol solution with RFID technology
- Intelligent Management and Dispatch Platform



Elements



Topology



SDC Server

As the switch and control center, SDC server not only manages the repeaters, but also provides the foundation for network management and radio terminal dispatching.



SDC Repeater BF-TR8500



- Large coverage with 50W RF power
- Support GPS+BDS satellite positioning(optional)
- Built-in AC/DC power converter, battery charger
- Standard 2U height rack mount, built-in power and duplexer(optional)

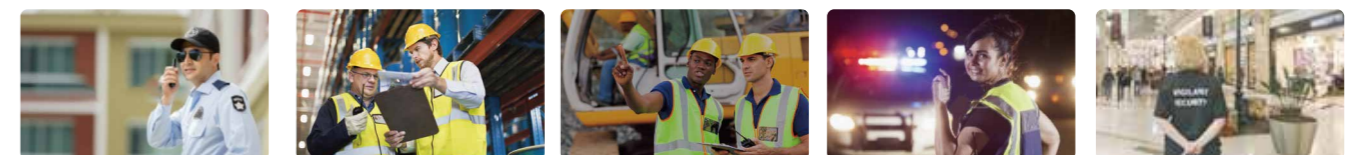
Dispatch System

SDC dispatch system adopts B/S structure, integrated with multi-platform to provide intelligent and visualized dispatching for high efficiency communication.



- Multi-level user dispatch management
- GIS information management
- Patrol management (optional)
- Personnel information management
- Integrated voice/SDS dispatching
- Voice recording
- Data query and statistics
- Equipment management

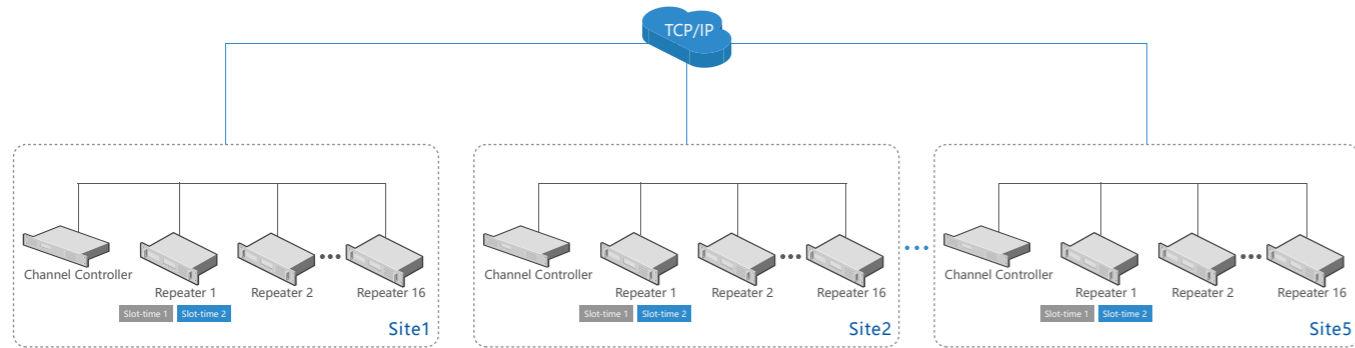
Application



Large-scale Security Large-scale Manufacturing Energy Municipal Services Shopping Mall

SVT (Smart Virtual Trunk System)

Smart Virtual Trunking is a customized system built on the basis of DMR digital protocol. Through the combined application of base station controller and digital repeater, a wireless communication network with dynamic distribution of channel resources can be built to effectively solve the problems of high-density traffic and concurrent multi-service, in order to ensure smooth communication. It allows the repeaters to manage the available frequencies across multiple slots to fully utilize the available spectrum resource. SVT is available as single or multi-site. This scalable solution enables enterprises with DMR conventional systems to have extra system capacity without extra investment in frequency easing; it expands both system coverage and capacity, resulting in enhanced efficiency and productivity.



Elements

SVT Controller BF-TS909



BF-TS909 base station controller with high-performance industrial computer as the carrier, multi-network port design, equipped with Belfone's independent R&D of multi-carrier frequency channel sharing system application, which provides a guarantee for enlarging the number of equipment interconnection and expanding the business functions, and meeting the user's needs for system expansion and upgrade.



Highlights & Features

Extra Large Capacity

Support 16 repeaters per single station .
Max 32 channels, 1200 subscribers.

Strong Fault-Tolerance

With features of proactive fault weakening and interference detection, ensure seamless communication in case of failures.

Cost Effective

Improve system capacity without increasing additional hardware costs, and effectively utilize existing channel resources.
Upgrade via software based on original digital conventional system.

Extended Application

It is flexibly work with telephone system, dispatching system, and network management system.

Traffic Balance And Call Conflicts Decreasement

Evenly distribute different call groups to different repeaters.
Use "request and grant" to allocate channels in case of call conflicts.

Application



Large Enterprise



Transportation



Prison Management



Manufacturing

BDC/BDS System

Based on the most common IP repeater connect system, BDC system is a non-centralized IP multi-site system. It utilizes multiple repeaters to realize cross-region networking, large-scale coverage.

Elements

Terminals



BF-TD515 BF-TD516 BF-TM8500

Repeater



BF-TR8500

IP Controller(Optional)



BF-TS908

IP Controller (BF-TS908)

When more than 4 repeaters are required to increase capacity, the IP controller links more repeaters and expand communication coverage based on actual conditions.



BDS (Basic Digital Simulcast) System

Based on BDC system architecture, BDS system is specially designed to overcome challenge of frequency limitation with the simulcast technology. All repeaters in the network share a same pair of frequency in simulcast system. Thus, it extends radio coverage and save frequency resources as well.

Elements

Terminals



BF-TD515 BF-TD516 BF-TM8500

Repeater



BF-TR8500

Simulcast Controller (Optional)



BF-TS908

Simulcast Controller

Simulcast controller uses the same hardware as Belfone IP controller to expand network capacity and realize simulcast functions.

Remark:

- All Belfone DMR radios support the BDS system.
- Max 4 repeaters supported without IP controller
- Up to 128 repeaters with simulcast controller

TERMINAL OVERVIEW

Multi-Mode Portable Series



BF-SCP860

Hybrid Portable Radio

BF-SCP860 is an all-in-one multimode radio that embraces broadband & narrowband communication and smartphone functionality. Allowing conventional communication, DMR Trunking, and PoC, this radio provides a reliable communication guarantee for critical voice communication. With audio, video, multi-media dispatch, and other rich applications, it helps to improve response efficiency and enhance visual management capabilities.



BF-SCP810

Hybrid Portable Radio

BF-SCP810 is a smart radio that combines public network PoC (Push-to-Talk over Cellular) and private network digital radio into one device. It has many features including voice, data, image, video, satellite positioning, and one-key emergency alarm. This radio is designed to improve communication efficiency during critical missions and meet the needs of a variety of industry users such as law enforcement, factories, and scenic spots.



BF-TP800

Commercial Hybrid Portable Radio

TP800 is a new advanced multi-mode radio which integrates Public broadband and narrowband PMR technology to provide critical voice and data services. It brings flexible usability of public, private & mixed network, gateway mode, and performance a variety of advancements

Professional DMR Tier III Trunking Series



BF-BP860

2nd Generation DMR Professional Radio

The BP860 is a next-gen DMR radio offering extended range, superior audio quality, and faster response. It combines user-friendly design with high security for efficient, reliable communication. Features include crystal-clear sound, advanced data capabilities, and outstanding portability and durability for various industries.



BF-BP750

Mission Critical DMR Portable Radio

BP750 is a new enhanced two-way radio with rich functions, full application scenarios, and different versions (Conventional /Trunking /Smart Virtual Trunking/Ad Hoc) to meet the communication needs of different industries.



BF-TM950

DMR Tier III Trunking Mobile Radio

With strong anti-interference ability, it is an ideal radio for public security, rescue, utilities, etc. Its flexible design enables great performance through its simple operation via the handheld microphone. It can be mounted flexibly in different vehicles, or simply be fixed on a desk.

Enhanced Professional Series



BF-TD511/BF-TD512

Enhanced Conventional Portable Radio

An IP67 portable DMR radio with superior audio quality, outstanding coverage, and long-lasting battery. Its virtual trunking and DMO two time-slots features increase spectrum efficiency.



BF-TD510

Enhanced Conventional Portable Radio

With features such as IP67 protection, CNEX/IECEX explosion proof and auto roaming, this radio is superb in performance, reliability, and scalability. It is the right choice to ensure reliable team communications.



BF-TM8250

Enhanced Conventional Mobile Radio

Working with BelFone SDC and SVT system, this 50w mobile radio provides versatile voice & data services, remote kill/ revive, priority-based interruption, etc. It is equipped with a HD screen readable even in dim light. The best of LMR technologies empower you to fulfil your duties.

Commercial Conventional Series



BF-TD515

Commercial Conventional Portable Radio

It is a great model for users to migrate their analog two-way radios in sectors such as hotels, restaurants, supermarkets, etc. Excepting conventional analog functions, it also brings digital features.



BF-TD516/BF-TD872

Commercial Conventional Portable Radio

A high-power DMR radio that consistently delivers clear voice even at the edge of coverage. With rugged, compact and anti-slip ergonomic design, it is ideal for security company, construction sites, shopping mall, etc.



BF-TM8500

Commercial Conventional Mobile Radio

It is a 50W powerful radio with all different call types. Easy to operate, it supports optional Bluetooth and GPS positioning features. Crystal clear voice calls obtained with a cost-effective choice for fleet owners.

BF-SCP860 (Hybrid Portable Radio)

The BF-SCP860 is an all-in-one multimode radio that embraces broadband & narrowband communication and smartphone functionality. Allowing conventional communication, DMR Trunking, and PoC, this radio provides a reliable communication guarantee for critical voice communication. With audio, video, multi-media dispatch, and other rich applications, it helps to improve response efficiency and enhance visual management capabilities.

Highlights and Benefits



Multi-mode Hybrid, Flexibel Communications

The BF-SCP860 featured an automatic public-private network switching. In private network mode, it can interconnect with DMR, Analog, and other narrowband terminals. In public network mode, it works with the BelFone ProChat IoT system and enables unlimited audio and video communication, which can extend narrowband coverage, and guarantee rapid network establishment.



Trunking Communication

BF-SCP860 multi-mode radio featured enhanced Trunking performance and wide system/terminal compatibility, providing reliable critical services for transportation, communication, Broadband-Narrowband Communication power cut-off and other disconnecting areas.



Front and Rear Dual Camera

Equipped with 13MP and 8MP dual HD cameras, the BF-SCP860 delivers 1080P clear images, capturing every critical moment. Its VoLTE feature provides high-definition audio/video call services for better audio and video integration.



Double Screen Display

BF-SCP860 incorporates a unique dual-screen interactive design. With a 4.0-inch 1080P screen, it brings a more intuitive visual effect and remains clear visibility even when operating in strong light. Its glove operation and wet-hand operation, made it more convenient for outdoor operations.



Comprehensive Positioning

BF-SCP860 supports GPS/GLONASS/Galileo, cellular-based positioning, and WIFI assisted positioning, catering positioning demands in outdoor, indoor, underground, and tunnel environments. Note: Factory default GPS.



Rugged and Durable

Designed with durable industrial-grade plastic material and certificate IP68 protection, the BF-SCP860 is a rugged radio with all-round protection that can withstand a 1.5m drop without damage and endures operating environments ranging from -30 C -60 C. It provides stable and seamless communications even in complex environments such as rain, snow, heat, and humidity.



BF-SCP860



BF-SCP810 (Hybrid Portable Radio)

BF-SCP810 is a smart radio that combines public network PoC (Push-to-Talk over Cellular) and private network digital radio into one device. It has many features including voice, data, image, video, satellite positioning, and one-key emergency alarm. This radio is designed to improve communication efficiency during critical missions and meet the needs of a variety of industry users such as law enforcement, factories, and scenic spots.

Highlights and Benefits



Multi-mode Hybrid, Flexible Communications

A multi-mode radio works in DMR, analog and PoC (public 4G/3G/2G) mode, which could always be in connect, to communicate whenever and wherever.



Open Third-Party App platform

BF-SCP810 public and private network integration smart radio open the third-party APP platform is compatible with the development of smart data services and smoothly running the exclusive traffic application in various industries.



Double PTT

BF-SCP810 fully considers the operation habits of users in public and private network hybrid scenarios, and is designed with two distinctive PTT(Push To Talk) blue-framed side keys, which allows users to customize the priority of public network or private network.



Long Battery Life

With a 4000mAh battery, the radio is able to work through your longest working day.



BF-SCP810



BF-TP800 (COMMERCIAL HYBRID RADIO)

TP800 is a new advanced multi-mode radio which integrates public broadband and narrowband PMR technology to provide critical voice and data services. It brings flexible usability of public network, private network, mixed network and gateway mode, and performance advancements like split-screen, dual PTT, GPS, recording, Bluetooth, etc., to be convenient and benefit for every aspect of radio experience. Designed to meet diversified requirements, it ensures mission-critical reliability, accelerates workflows and keeps responders safe and effective.

Highlights and Benefits



Multi-mode Hybrid, Flexible Communications

A multi-mode radio works in DMR, analog and PoC (public 4G/3G/2G) mode, which could always be in connect, to communicate whenever and wherever.



Intuitive Multi-Active Split-screen

Designed with full keypad, 1.77 transfective LCD, it offers you the choice of narrowband and broadband display up and down.



Intelligent Gateway Mode

This smart radio provides outstanding connectivity of PMR(DMR OR analog) and PoC, brings all the advantages of narrowband and broadband technologies, bridging the voice communication over different networks.



5000Ah Extended Battery Life

It comes with a 14-hour smart lithium battery and built-in PTC protection to take your communication even further.



BF-TP800

Features and Details

Support 4G/3G/2G, national limitless communication.

WEB-based public network dispatch to provide multi-functions like private/group call, GPS, query, RFID, data, messages, etc.

Dual PTT of PMR and PoC to call at ease and high efficiency.

Flexible Multi-Optional Functions

- > GPS positioning
- > Bluetooth
- > Recording
- > Low battery voice alert



BF-BP860(New Generation DMR Professional Radio)

BP860 is a new generation DMR radio with breakthrough advancements to cover a wider communication range, better audio effect, and quicker response. With intuitive interactive design and excellent secure performance, BP860 provides more efficient and reliable communication with loud and clear audio, rich data features, and remarkable portability and ruggedness for ease of use across industries.

Highlights and Benefits



Single Frequency Repeater

BP860 can work as an SFR (Single Frequency Repeater) which perfectly solved the deficiencies of short-distance coverage and crosstalk. Its SFR features significantly reduced the maintenance costs and improved efficiency.



AI Noise Cancellation

It can accurately eliminate the background and feedback noise through its AI noise cancellation and acoustic model technology.



Superior Quality in Challenging Environments

The IP68 level ruggedness ensures the quality voice calls in toughest conditions like dropping on the concrete, temperature ture shocks, blowing dust, wind driven rain, etc.

Ergonomic Design: 2.4" high definition IPS display, readable in all lighting conditions.



Long Battery Life

With a 3350mAh (optional) battery, the radio is able to work through your longest working day.



Features and Details

General Performance

- Frequency bands: VHF:136-174MHz
UHF:350-400/400-480MHz/450-520MHz
- 1024 channels/ 128 zones
- Display: 2.4" IPS
- IP68 protection
- 5W power, 2400mAh battery

Applications

- Automatic roaming
- GPS
- Built-in Bluetooth (optional)

Safety Services

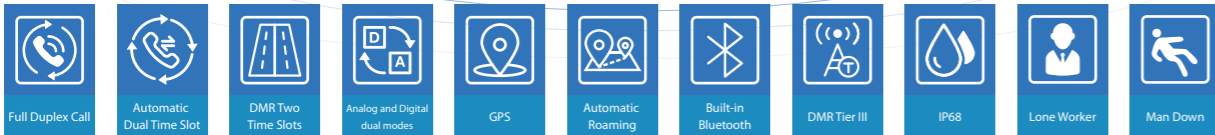
- Emergency alarm
- Man Down alarm
- Lone Worker
- Covert mode

Data Services

- Status/SDS messaging (in TMO & DMO)
- Group data

Voice Services

- Full Duplex Call
- Digital/Analog mixed mode



BF-BP750 (Mission Critical DMR Portable Radio)

BP750 is a new enhanced two-way radio with rich functions, full application scenarios, and different versions (Conventional / Trunking /Smart Virtual Trunking/Ad Hoc) to meet the communication needs of different industries.

Highlights and Benefits

- Cost-effective Trunking Radio**
This radio is designed to bring DMR Tier III trunking advantages and versatile features of call, dispatching and management to users at a lower price points.
- Advanced Encryption**
It has ARC4 and AES256 encryption, and dynamic key to secure communication privacy and optimize information safety.
- Indoor and Outdoor Positioning**
With accuracy and precision, built-in GPS and wireless modules such as Bluetooth enable supervisor to locate and track team members, which contributes a lot to personnel management. and dispatching.
- Multiple Working Modes**
· DMR Tier III Trunking · DMR Conventional · Analog Conventional



Features and Details

General Performance

- Frequency bands: VHF:136-174MHz
UHF:350-400/400-480/450-520MHz
- 1024 channels/ 128 zones
- Display: 1.77" TFT
- IP68 Protection
- 5W output power, 2300mAh battery, 3350mAh(optional)

Applications

- Automatic roaming
- GPS (optional)
- Vibration

Voice Services

- DMR Virtual Trunking
- Digital/Analog mixed mode

Safety Service

- Emergency alarm
- Man Down alarm(optional)
- Lone Worker(optional)
- Covert mode

Data Services

- SMS
- Groups data
- ARC4& AES256 encryption



BF-TD511/TD512 (Enhanced Conventional Portable Radio)

BelFone DMR portable radio TD511/512 bring the advantages of superior audio quality, outstanding coverage and long-lasting battery life. The virtual trunking technology greatly increases spectrum efficiency without adding extra costs. It works with BelFone DMR conventional IP Connect system-SDC to deliver more powerful features. It IP68 rated water and dust and water proof.

Highlights and Benefits

- Maximizing Spectrum Efficiency**
DMO virtual trunking and two time-slots technologies enable two calls at one frequency and automatic switch, which saves frequency license and increases efficiency greatly.
- Facilitate Application**
Color LCD and keypad facilitate more functions like receiving and sending messages, address book, battery status, set up, etc.Support BelFone Smart IP Connect system SDC and Virtual Trunking System SVT to fulfil versatile dispatch functions.
- Essential Safety & Security**
Versatile safety features such as alarm button, lone worker and man-down improve work place safety.
- Voice Recording**
It supports recording and storage of calls across the system, radio ID, channel, record time and receive/send frequency in PC for more than 400 hours. Record inquiry, evidence retention and searching are made easy.



BF-TD512 BF-TD511

Features and Details

General Performance

- Frequency bands: VHF:136-174MHz
UHF:350-400/400-470/450-520MHz
- 512 channels/ 32 zones
- Display: 1.77" TFT
- IP68 Protection
- 5W output power, 2000mAh battery

Data Services

- SMS
- ARC4& AES256 encryption

Voice Services

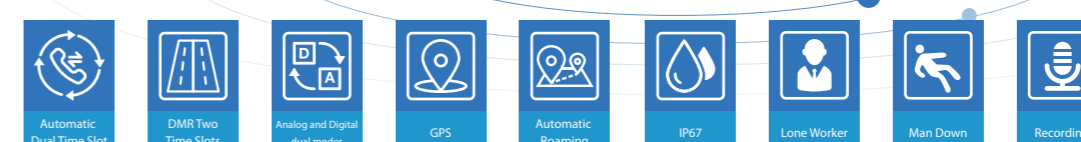
- DMR Virtual Trunk
- Digital/Analog mixed mode

Safety Services

- Emergency alarm
- Man-Down alarm(optional)
- Lone-Worker(optional)

Applications

- Automatic roaming (optional)
- GPS (optional)
- Recording (optional)
- Built-in Bluetooth(optional)



BF-TD510 (Enhanced Conventional Portable Radio)

With outstanding range, long battery life and responsive communications, this ultra-thin extra-tough portable radio is equipped with the highest specifications both inside outside delivering cutting-edge data applications and expanding system scalability when accessing to BelFone SDC IP Connect and SVT Virtual Trunk systems. It enhances the safety of personnel and communities and enables more effective collaboration.

Highlights and Benefits



Increased Capacity

Two time-slot TDMA, the best multiple-access technology, doubles per-channel communications capacity, satisfying analog-to-digital migration regulatory requirements.



Reliable in Extreme Conditions

Submersible in 1m deep water for up to 30 minutes. IP68 rated, excellent water protection, dust resistance, strong and sturdy in harsh conditions.



Voice Recording

It supports recording and storage of calls across the system, radio ID, channel, record time and receive/send frequency in PC for more than 400 hours. Record inquiry, evidence retention and searching are made easy.



Economical Radio Access to System

Support BelFone Smart IP Connect system SDC and Virtual Trunking System SVT to fulfil versatile dispatching functions with lower investment.



Features and Details

Applications

- Automatic roaming (optional)
- GPS (optional)
- Recording (optional)

General Performance

- Frequency bands: VHF:136-174MHz UHF:350-400/400-470/450-520MHz
- 512 channels/ 32 zones
- 160 channels/ 32 zones
- IP68 Protection
- 5W output power, 2000mAh battery



Data Services

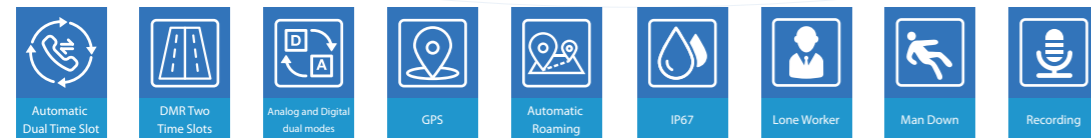
- SMS
- ARC4& AES256 encryption

Voice Services

- DMR Virtual Trunk
- Digital/Analog mixed mode

Safety Services

- Emergency alarm
- Man-Down alarm(optional)
- Lone-Worker(optional)



BF-TD515 (Commercial Conventional Portable Radio)

BF-TD515 is a business-critical DMR two-way Radio with outstanding performance to offer you a smooth transition from analog to digital. It delivers a superb digital audio experience and a long battery life to power you through the day, and a wide channel capacity together with adjustable power to meet all kinds of communication needs.

Highlights and Benefits



Slim & Discreet

Small size and light weight, it fits easily in your hand, and is not much a burden to wear it and work for the day. Its sleek design blends well with business uniform and environment.



Cost-effective Communication

It is suitable for working scenarios such as hotels, shopping malls, airports, clubs, etc. A smart choice to improve work efficiency.



Longer Battery Life

BF-TD515 lasts for longer than any conventional analog radios, meeting the battery needs of a full-day operation.



Manual Channel Editing

No need to connect to a PC in order to add, delete or edit channels on radios.



Features and Details

Applications

- Text message, address book, power-on password
- Low, Medium, and high power switching
- Hands-free VOX
- Roaming

General Performance

- Frequency bands: VHF:136-174MHz UHF: 350-400/400-480/450-520MHz
- 1024 channels/ 64 zones
- Display: 1.77" TFT
- IP67 Protection
- 5W output power, 18v00mAh battery



Voice Services

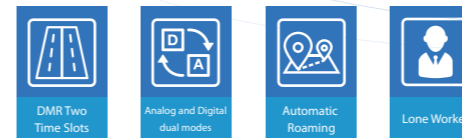
- DMR two time-slots
- Digital/Analog mixed mode

Data Services

- SMS
- General encryption

Safety Services

- Emergency call



BF-TD516/TD872 (Commercial Conventional Portable Radio)

these two models bring digital communication benefits of higher spectrum efficiency, better audio quality and coverage. With rugged, compact and anti-slip ergonomic design, it is ideal for security, constructions site, shopping mall, etc.

Highlights and Benefits



Slim & Discreet

Small size and light weight, it fits easily in your hand, and is not much a burden to wear it and work for the day. Its sleek design blends well with business uniform and environment.



Enhanced Noise Cancellation

Incorporates advanced audio processing technology AMBE + 2™ and FEC to effectively suppress background noise, enhance audio quality and deliver loud and clear audio.



Cost-effective Commercial Communication

It is suitable for working scenarios such as hotels, shopping malls, airports, clubs, etc. A smart choice to improve work efficiency.



BF-TD872 BF-TD516

Features and Details

General Performance

- Frequency bands: UHF:350-400/400-470/450-520MHz
- 32 channels/ 2 zones
- IP54 Protection
- 2000(mAh(TD516)/2600mAh(TD872) battery
- 5W(TD516)/8W(TD872) output power

Voice Services

- DMR two time-slots
- Digital/Analog mixed mode
- Multiple communication modes: delayed access, Offline, rejection of strange calls

Data Services

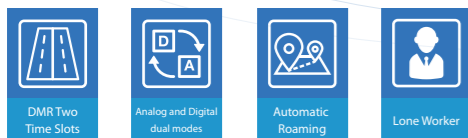
- SMS
- General encryption

Safety Services

- Emergency call
- Intelligent voice alarm

Applications

- Text message, address book, power-on password
- Smart low & high power switching
- Hands-free VOX
- Roaming



BF-TM950 (DMR Tier III Trunking Mobile Radio)

With strong anti-interference, this efficient mobile radio works in different modes, including DMR Tier III trunking, MPT1327, DMR Tier II and analog conventional, ensuring its interoperability with the legacy analog networks. Operated on a desktop or mounted in a vehicle, its flexible design enables great performance through its simple operation via the handheld microphone, making it an ideal solution for public security, rescue, utilities, etc.

Highlights and Benefits



Enhanced Communication Efficiency

- Incorporating ground-breaking full-duplex call technology to allow simultaneous two-way voice calls.
- DMR Trunking Mode enables access to a pool of radio channels, which are dynamically allocated to users when required.



Professional Industrial Design

Control panel with a 2.8-inch display. Remote mount head supported. The mobile radio receiver and transmitter could be separated, which is convenient for flexible installation on car or motorcycle.



Enhanced User Safety

Lone worker, emergency calls, covert mode, GPS and location services, active and positive alarm mode ensure personnel safety.



Four Modes

It works in DMR Tier III, MPT 1327, DMR Tier II & Analog Conventional mode, seamlessly switching between networks with uninterrupted communication experience.



Features and Details

Safety Services

- Emergency call
- Lone-Worker
- Covert mode
- Analog alarm

Data Services

- Status/SDS messaging (in TMO & DMO)
- Group Message
- ARC4& AES256 Encryptions
- TF card encryption

Voice Services

- Full duplex call
- DMR Virtual Trunking

General Performance

- Frequency bands: VHF:136-174MHz
- UHF: 350-400/400-470/450-520MHz
- 1024 channels/ 64 zones
- Display: 2.8-inch IPS
- IP54 protection
- 50W output power, 3W speaker

TM950没有VHF的频段



Applications

- Automatic roaming
- GPS/ Satellite
- Support Bluetooth 4.0
- Intimate functions like stopwatch, alarm clock, calendar, etc.
- Keyboard lock



BF-TM8250 (Enhanced Conventional Mobile Radio)

BF-TM8250 is compatible with the SVT system, which provides versatile voice & data services for critical communications. It comes with a large size color display, which delivers good visibility even under strong light. The five programmable buttons allow the user to access any features he needs and thus greatly facilitate ease of use. Besides a full set of digital features, the integrated remote kill/stun/revive features bring unprecedented efficiency to teamwork and radio management.

Highlights and Benefits

User Friendly Design

- Bright, Color LCD Display: The high contrast color display is easy to read in all kinds of lighting.
- Power-on Password: Nobody can mess with your radio.
- Status Voice Prompt: This user-friendly function enables the drivers to keep their eyes on the road.

Full DMR Conventional Features

- Suitable for small properties, construction site and motorcade. It easily and flexibly realizes efficient and rapid communication in the control area.

Cost-effective with SFR Feature

- Functioning as a single frequency repeater, it allocates one timeslot to receive while the other to transmit; and in DMO mode further extends radio coverage. One device serves two purposes.



Features and Details

Applications

- Automatic roaming (optional)
- GPS (optional)
- Bluetooth (optional)

Voice Services

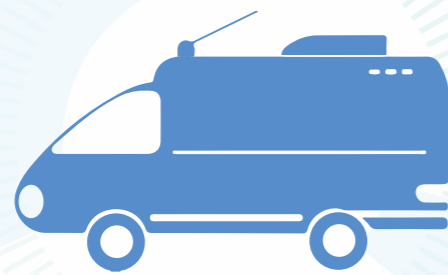
- DMR Virtual Trunking
- DMR Two Time -slot

Safety Services

- Emergency alarm
- Covert mode
- Lone worker

General Performance

- Frequency bands: VHF:136-174MHz
- UHF:350-390/400-470/450-520MHz
- 1024 channels/ 128 zones
- Display: 2.0" TFT
- IP54 Protection
- 50W output power, 10W speaker



Data Services

- Status/SDS messaging (in TMO & DMO)
- Groups data



BF-TM8500 (Conventional Mobile Radio)

This mobile radio is a reliable, cost-efficient solution to keep your team communicate, coordinate and collaborate for maximum efficiency and safety. With features of 45W high power for long-range communication, power-on password, Bluetooth, access to Belfone conventional DMR systems to enjoy call capacity and clear voice communications, etc., the radio enables your workers to connect without distraction, whether they're delivering cargo, dispatching trucks or transporting passengers.

Highlights and Benefits

User Friendly Design

- Bright, Color LCD Display: The high contrast color display is easy to read in all kinds of lighting.
- Power-on Password: Nobody can mess with your radio.
- Status Voice Prompt: This user-friendly function enables the drivers to keep their eyes on the road.

Full DMR Conventional Features

- Suitable for small properties, construction site and motorcade. It easily and flexibly realizes efficient and rapid communication in the control area.

Abundant Features for Business Users

- More features like recording, Bluetooth voice and programming, OTAP via Bluetooth, GPS and automatic roaming benefit users greatly.



Features and Details

Applications

- Automatic roaming
- GPS (optional)
- Recording (optional)
- Bluetooth (optional)

Voice Services

- DMR Virtual Trunking
- DMR Two Time -slot
- Digital/Analog mixed mode

Security Services

- Emergency alarm
- Covert mode
- Lone worker (optional)

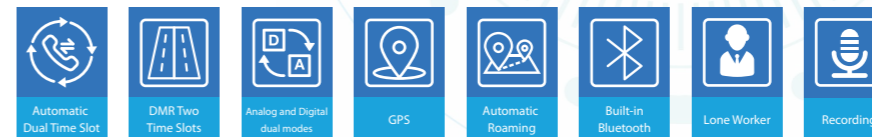
General Performance

- Frequency bands: VHF:136-174MHz
- UHF:350-400/400-470/450-520MHz
- 1024 channels/ 64 zones
- Display: 1.77" TFT
- IP54 Protection
- 45W output power, 3W speaker



Data Services

- SMS
- Static/Dynamic encryption
- DTMF + 5Tone analog signaling



Terminal Comparison

所有的数字终端功率都写成 5W，除了TD872









Type	Commercial				Enhanced Commercial			Professional
Model	TD516LF	TD516	TD515	TD872	TD510	TD511	TD910D	TD920D
Pictures								
Frequency Range	446MHz LF	UHF: 400-470MHz		UHF: 400-480/350-390/450-520MHz, VHF:136-174MHz	UHF: 400-480/350-390/450-520MHz, VHF:136-174MHz		UHF: 400-480/350-390/450-520MHz, VHF:136-174MHz	400-480 MHz 136-174 MHz
DMR Tier	I	I,II	I,II	I,II	I,II	I,II	I,II	I,II,III 没有集群
Work with Systems	N/A	IP Connect, Simulcast		IP Connect, Simulcast	IP Connect, Simulcast, SDC Smart Dispatch, SVT Virtual Trunking		IP Connect, Simulcast, SDC Smart Dispatch, SVT Virtual Trunking, BTX/ETX Trunking 没有集群	IP Connect, Simulcast, SDC Smart Dispatch, SVT Virtual Trunking, BTX/ETX Trunking
Output Power	UHF: 4W	UHF: 4W	UHF: 4W	UHF: 7W VHF: 8W	UHF: 4W VHF: 5W	UHF: 4W VHF: 5W	UHF: 4W VHF: 5W	UHF: 4W VHF: 5W
Mode	Analog/DMR	Analog/DMR	Analog/DMR	Analog/DMR	Analog/DMR	Analog/DMR	Analog/DMR	Analog/DMR
Battery Capacity	1800mAh	1800mAh	1800mAh	2600mAh	2000mAh	2000mAh	①2500mAh ②3350mAh	①2500mAh ②3350mAh
Channel Capacity	32	64	512	32	512	1024	3773	3773
Water&Dust Protect	IP54	IP54	IP54	IP54	IP67	IP67	IP68	IP68
Keypad	N/A	N/A	Full Keypad	N/A	N/A	Full Keypad	Limited Keypad	Full Keypad
Display Type	N/A	N/A	1.4" LCD B/W, 4 lines	N/A	N/A	1.77" LCD, Color, 6 lines	1.77" OLED, 5 lines	2.0" semi-transparent LCD, Color, 10 lines
SMS	N/A	N/A	YES	N/A	N/A	YES	YES	YES
DMO Pseudo Trunking	N/A	N/A	N/A	YES	YES	YES	YES	YES
Break& Interrupt	N/A	N/A	N/A	YES	YES	YES	YES	YES
Roaming	N/A	N/A	N/A	YES	YES	YES	YES	YES
Analog Signaling	N/A	N/A	N/A	N/A	DTMF+2/5Tone	DTMF+2/5Tone	N/A	N/A
Lone Worker & Mandown	N/A	N/A	N/A	N/A	Optional	Optional	YES	YES
Noise Cancellation	N/A	N/A	N/A	N/A	N/A	N/A	N/A 有	N/A 有
Encryption	Normal	Normal	Normal	Normal	AES256/ARC40	AES256/ARC40	AES256/ARC40 TF Card	AES256/ARC40 TF Card
GPS	N/A	N/A	N/A	N/A	Optional	Optional	YES	YES

TF卡加密：TD950，BP860，TM950，其它均不支持

Professional		Hybrid (POC+DMR)			Mobile Radio		
BP750	BP860	TP800	SCP810	SCP860	TM950	TM8250	TM8500
UHF: 400-480/350-390/450-520MHz, VHF:136-174MHz		UHF: 400-480/350-390/450-520MHz, VHF:136-174MHz LTE-FDD: B1/B3/B5/B8; LTE-TDD: B38/B39/B40/B41; WCDMA: B1/B5/B8 TD-SCDMA: B34/B39			UHF: 350-400MHz / 400-470MHz	UHF: 400-480/350-390/450-520MHz, VHF:136-174MHz	UHF: 400-480/350-390/450-520MHz, VHF:136-174MHz
I,II,III	I,II,III	I,II	I,II	I,II,III	I,II,III	I,II,III	I,II
IP Connect, Simulcast, SDC Smart Dispatch, SVT Virtual Trunking, BTX/ETX Trunking		PoC System, IP Connect, Simulcast	POC System, IP Connect, Simulcast, SVT Virtual Trunking	POC System, IP Connect, Simulcast, SDC Smart Dispatch, SVT Virtual Trunking, BTX/ETX Trunking	IP Connect, Simulcast, BTX/ETX Trunking	IP Connect, Simulcast, SDC Smart Dispatch, SVT Virtual Trunking, BTX/ETX Trunking	IP Connect, Simulcast
UHF: 4W VHF: 5W	UHF: 4W VHF: 5W	UHF: 4W	UHF: 4W VHF: 5W	UHF: 4W VHF: 5W	UHF: 45W	UHF: 45W VHF: 50W	UHF: 45W VHF: 50W
Analog/DMR/Ad-hoc	Analog/DMR/Ad-hoc	Analog/DMR/PoC/Gateway	Analog/DMR/Ad-hoc/PoC	Analog/DMR/PoC/LTE	Analog/DMR	Analog/DMR	Analog/DMR
①2300mAh ②3350mAh	①2400mAh ②3350mAh	5000mAh	4000mAh	①2400mAh ②3500mAh	N/A	N/A	N/A
1024	1024	100	1024	1024	1024	1024	1024
IP68	IP68	IP54	IP68	IP68	IP54	IP54	IP54
Full Keypad	Full Keypad	Full Keypad	Limited Keypad	Limited Keypad	full keypad palm mic	full keypad palm mic	no keypad palm mic
1.77" LCD, Color, 6 lines	2.4" semi-transparent LCD, Color, 10 lines	1.77" LCD, Color, 6 lines	2.88" IPS Touch panel, 480*640	4" IPS Touch panel, 540*1080	2.4" semi-transparent LCD, Color, 10 lines	1.77" LCD, Color, 6 lines	1.77" LCD, Color, 6 lines
YES	YES	YES	YES	YES	YES	YES	YES
YES	YES	YES	YES	YES	YES	YES	YES
YES	YES	YES	YES	YES	YES	YES	YES
YES	YES	YES	YES	YES	YES	YES	YES
N/A	N/A	N/A	DTMF+2/5Tone	DTMF+2/5Tone 没有	DTMF+2/5Tone	DTMF+2/5Tone	DTMF+2/5Tone
YES	YES	YES	YES	YES	N/A	N/A	N/A
N/A 有	AI降噪	N/A	N/A	YES	YES	YES	N/A
AES256/ARC40 TF Card	AES256/ARC40 TF Card	Normal	AES256/ARC40 TF Card	AES256/ARC40 TF Card	AES256/ARC40 没有TF卡加密	AES256/ARC40	AES256/ARC40
Optional	Optional	YES	YES	YES	Optional	Optional	Optional

TD510-PLUS：2音和5音
TD511-PLUS：2音和5音 DTMF
TM8500：2音和5音 DTMF
其它的没听说有

Terminal Comparison

Type	Commercial				Enhanced Commercial			Professional
Model	TD516LF	TD516	TD515	TD872	TD510	TD511	TD910D	TD920D
Pictures								
TTS (text-to-sound)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES
Full Duplex Call	N/A	N/A	N/A	N/A	N/A	N/A	N/A	有
SFR Feature (single frequency repeater)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Extended Optional Hardware	N/A	N/A	N/A	N/A	Local Voice Recording (400 hours)	Local Voice Recording (400 hours)	UHF+VHF Dual Band in One	Local Voice Recording (400 hours)
Built-in Bluetooth	N/A	N/A	N/A	N/A	N/A	Optional	N/A	蓝牙可选
Wireless Accessories Options	N/A	N/A	N/A	N/A	N/A	Optional	N/A	蓝牙可选
Intrinsic Safety Version	N/A	N/A	N/A	N/A	YES (CNEX/IECEX/ATEX)	YES (CNEX/IECEX/ATEX)	N/A	N/A

Professional		Hybrid (POC+DMR)			Mobile Radio		
BP750	BP860	TP800	SCP810	SCP860	TM950	TM8250	TM8500
							
YES	YES	N/A	YES	N/A	N/A	YES	N/A
YES	YES	N/A	YES	YES	YES	YES	N/A
YES	YES	N/A	YES	N/A	N/A	Optional	N/A
RFID/NFC Guard Patrol	RFID/NFC Guard Patrol, Local Voice Recording (400 hours)	RFID/NFC Guard Patrol	RFID/NFC Guard Patrol, Local Voice Recording (100 hours)	RFID/NFC Guard Patrol	Local Voice Recording (400 hours)	Local Voice Recording (400 hours)	N/A
N/A	Optional	YES	YES	YES	Optional	Optional	Optional
N/A	Optional	Optional	Optional	Optional	Optional	Optional	Optional
YES (CNEX/IECEX/ATEX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Software Suite

Consisting of Dispatch Service System (Dispatch), Voice Recording System (VRS), Network Management System (NMS), BelFone Command Center Software Suite empowers quick, informed, and decisive response to emergent calls. With years' experience in closely working with first responders, and therefore, the insights of how dispatching tools should be designed to complement and optimize the users' handling of emergencies and daily routine tasks, BelFone offers its command center software suite with flexible configurations to match the users' specific requirements, while ensuring standard handling process within the user's institutions and task forces for higher collaboration efficiency and personnel safety.



Dispatcher

With abundant features and enhancements of versatile voice calls, data service, GPS, automatic roaming, terminals control and advanced encryption, BelFone dispatch console streamlines real-time distribution of mission critical information for improved dispatch decision making and increased responder awareness and safety, facilitating faster and more accurate response and management.

Coordinate Fast Response and Effective Collaboration

Enable officers to process critical information, give instructions and notify field responders in time. Connect related personnel and optimize interoperability between departments and agencies regardless of the communication networks they are using, analog or digital, to maximize management efficiency and solve problems instantly.

Remote Upgrade and Effortless Evolution

To ensure mission critical management performance, agile development and flexible deployment options are provided to meet your needs. Users are promptly informed about the availability of new features, security updates and version enhancements.

User Centered Design

With the intuitive user interface, the dispatcher can see all the important information without a hassle, and therefore, focus on the job itself, instead of spending extra time in navigating the information and data rushing to the commander center, especially when the emergency happens.



Voice service	Data Service	Security Service	Location Service	Other Features
Individual Call	Status Message	Authentication	GPS Polling	DGNA
Group Call	Short/Long Message	E2E Encryption	GPS Tracking	Group Patch
Broadcast Call	Emergency Alarm	Override/ Interrupt	Geo-fencing	Voice Recording
All Call	Message Template	Ambient Listening	History Track Query and Replay	Log Management
Emergency Call		Discreet Listening		Radio Status Monitor
PSTN Call		Stun/Revive/Kill		
Full Duplex Call				
AVL Call				
Including Call				

NMS (Network Management System)

With abundant features of device monitoring, management and configuration, fault management, remote upgrading, etc., BelFone network management system, consisted of network management client and the server, ensures uninterrupted network communication and transmission, flexible operation of various network applications and higher security of information.

Easy Maintenance

- Remote update
- Alert function
- Report function

Comprehensive management functions

- Device management
- Subscriber management
- System configuration
- Alarm management
- Security management
- OTAP
- Software upgrade
- Channel monitor

VRS (Network Management System)

As a professional voice recording solution, BelFone DVRS (Digital Voice Recording System) is designed for trunking system to capture, store and share audio evidence gathered from the field, which will greatly help to settle disputes, provide key information for analysis, and maximize management effectiveness.

Multi-level Authority, Seamless Sharing & Collaboration

- One-point Query
- Detailed History for Each Record
- Statistical Report of Transmission

Crystal Clear Voice and Flexible Recording, Simplified Information Collection

- Voice recording
- Multiple radio recording simultaneously
- Logging and retaining the data for future analysis.

Modernization and urbanization go hand in hand, which contributes to economic prosperity eventually. Meanwhile what can't be ignored are the challenges coming along with development, city management, public safety, natural disasters, etc. When it's time to consider a new or upgraded communications system, BelFone has the innovative ideas, cutting-edge technologies, and expert team to deliver customer-oriented, pragmatic, systemic communications solution, and excellent after-sale service.

Design and Deployment Service

DESIGN- Innovative Ideas, Cutting-edge Technologies, Expert Team



System Design

Delivers a full-feature communication solution.



Coverage Design

Ensures communications availability and reliability.



Customization

Specifies the design of each element of your radio network based on your requirements.



Network Migration

Ensures a seamless transition to your new network.



DEPLOY- Efficient Management, Trouble-free Installation, Considerate Training



Project and Program Management

Explicit plan and management to ensure network is installed on time within budget.



System Documentation

Provides necessary files prepared to understand and maintain systems better.



Technical Training

Comprehensive and thoughtful training to enhance and update staff's skills, and gain the greatest value.



Installation

Installs, connects and tests the complete equipment, radios, accessories, etc.



Acceptance Testing

Performance and acceptability test compliant with the business requirements.



System Integration

Ensures all equipment, network, communication are integrated as specified.



Debugging

Installs, tests and optimizes to transmit seamlessly.

General Support

1. Online Service Portal

Proactively manage service cases, download software updates, access support documentation, and utilize service applications online – anytime.

2. OEM/ODM Design Services

Outsourcing or hiring a managed service, means contracting out a part or all of your radio communications to a professional supplier who can provide you with the most cost-efficient service. You also gain access to a wider range of skills and experience while freeing your own staff to concentrate on core business issues.

3. Software Maintenance

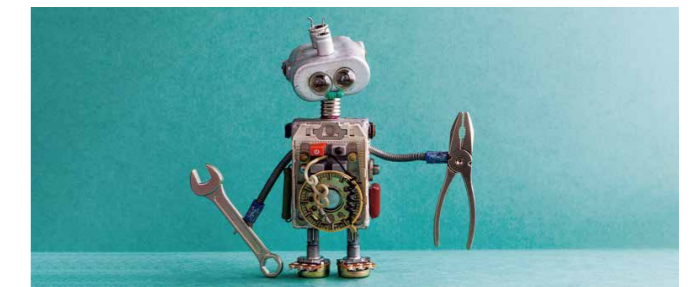
Proactively prevent faults, improve performance, and adapt to changing environments by accessing current releases of hardware and software. Full version releases with new features – not just point release bug fixes – are regularly available and fully supported, so you get the maximum advantage when you decide to update your communication products and systems.

4. Warranty

Provides a 24-month warranty service for system products delivered by BelFone. The warranty period starts from the date the installed product is accepted after commissioning.

5. Repair

BelFone provides industry standard repair service for the products. For channel partner, BelFone encourages local services and prepares training and documents for better services to customers.



Training

We offer a wide range of training courses to ensure everyone can properly maintain, configure, troubleshoot, or operate the network with the right skill set. Whether you are an administrator, technician, or end user, we hope that you are equipped with knowhow and advanced skills.



1. BelFone Partners

- Our partners worldwide are the key for successful implementation of communications system, and we will do our best support BelFone Partners.
- Questions will be replied within 24 hours.
- Train the trainer. Onsite, using your equipment, we can train your in-house trainer, who will be able to pass the knowhow to your organization.



2. End Users

- We will provide necessary training for users, dispatcher and management personnel of the following knowledge and skills.
- Mobile and portable radios operation; knowledge of the features and functions.
 - Dispatching system operation, its features and functions.



3. Online Training

Regular online training will be provided to BelFone partners and end users to have the industry-specific expertise and valuable knowledge you can count on. It is helpful, cost-saving and convenient. For details, new training schedule will be updated regularly, so please subscribe or check our website news.

Emergency Communications & Response System

When disasters strike, a quick, informed and decisive response will save the day. Reliable networking, stable voice communications, swift dispatching, fast deployment and efficient coordination across different teams are of great importance when the unexpected happen. BelFone BMC Emergency Communications & Response System is designed to offer reliable connectivity when it is needed the most. It delivers an extensive feature set, including data and patrol management, real-time surveillance, personnel dispatching, multi-channel information transmission, emergency alarm, etc. Compliant with military standards, the whole system infrastructure is built to perform in tough environments. Adopting B/S network structure and integrating high precision BDS as well as RFID management, it provides reliable connectivity, intuitive operation and robust functionality, enabling the user to respond to emergencies promptly and effectively. Moreover, the system has great compatibility, practicality, reliability to cover the whole operating field and keeps everyone connected, and make sure that both safety and efficiency are maximized.

Topology & Networking

Ensure reliable communications for multiple scenarios with multi-layer networking and dispatching

3-Layer Networking

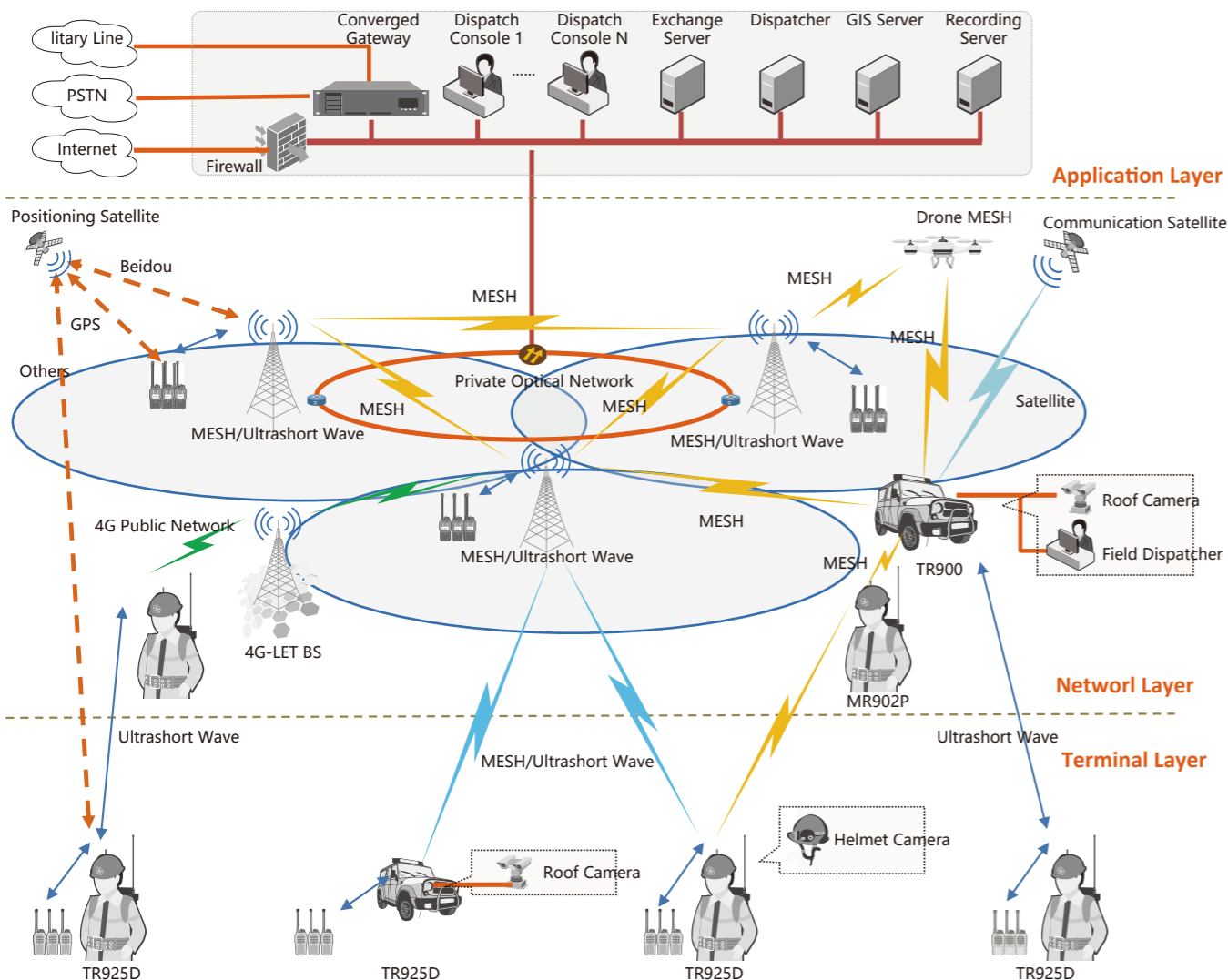
- Dispatch Center Network
- Field Command Network
- Field Operation Network

3-Level Dispatching

- Dispatch Center
- Field Commander
- Field Team Leaders

3 Typical Scenarios

- Daily Operations (Simulcast network)
- Emergency Response
- Cross-region Cooperation



Effective Preventive Strategy

BelFone BMC connects seamlessly the backbone network and field network to facilitate preventive actions and emergency handling. It empowers task forces to respond properly and efficiently to natural disasters, crimes and other emergencies.



Advanced and Multi-level Encryption

The system adopts both dynamic & static voice encryption, as well as AES256 encryption to ensure information security.



Ease of Operation, Good Mobility

Designed to meet all sorts of challenges, BelFone BMC system is highly mobile. Most equipment is vehicle mounted or man packed. Shock absorbers are adopted to reduce the effect of traveling over rough ground, which the job much easier to deploy, disassemble and transport the system during emergencies.



Flexible Networking, Fast Response

All the sub-systems work together to realize central and field network connections, command and dispatch across teams. When the situation requires, the sub-system is able to work independently and to facilitate communications for emergencies.



Military Standard, Strong and Durable

All base stations reach military standards. Features such as fast heat dissipation and high & low Temperature resistances ensure BMC system's reliability in harsh environments.



Seamless Cooperation

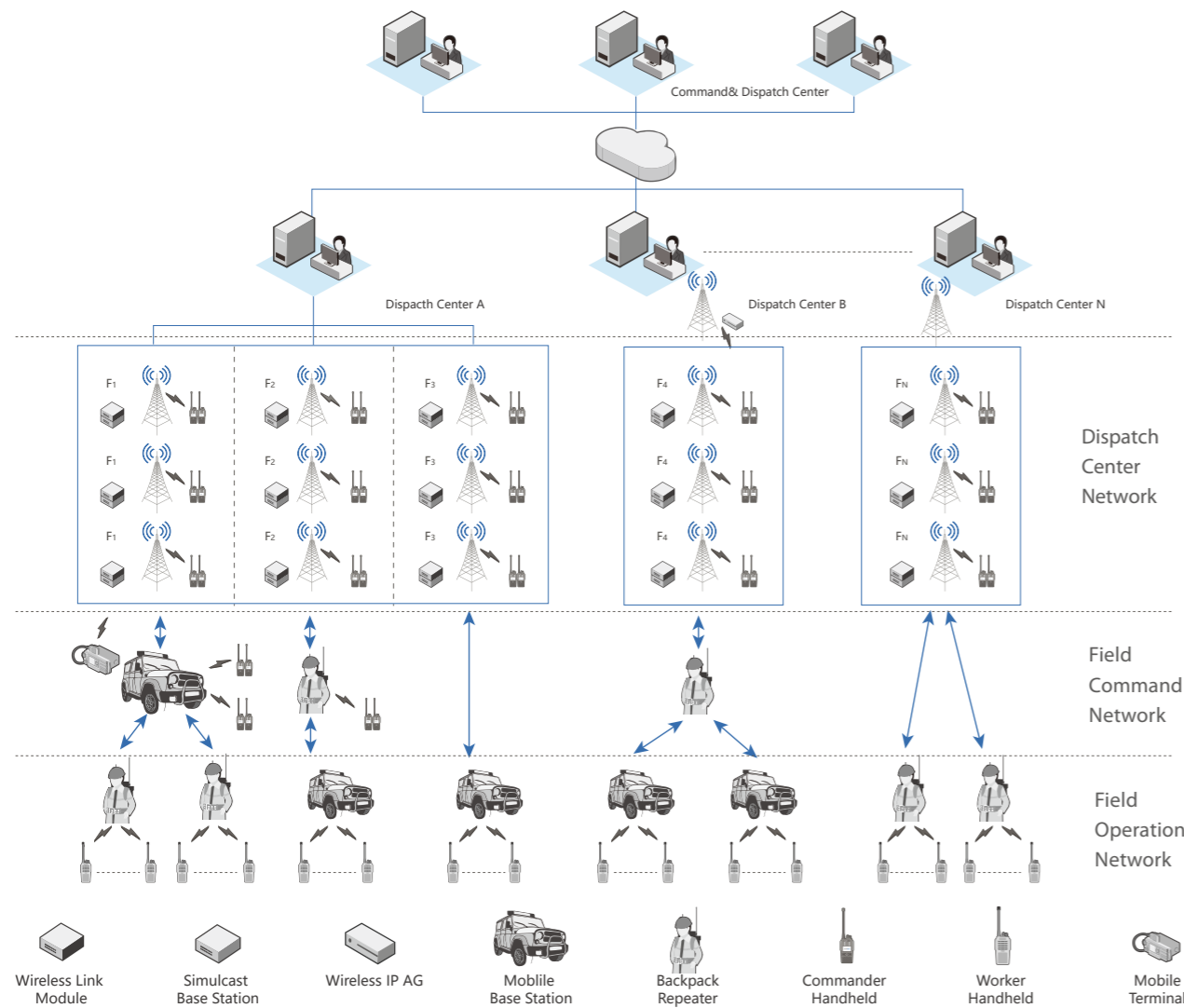
BMC system connects central and field command networks and enables interconnection among departments using different radio frequencies. Therefore, the first responders are able to collaborate as a team.

Elements

<h4>MC-C (Mission Critical Connect)</h4> <p>Center network, smart grid management.</p>	<h4>AD HOC System</h4> <p>Field operation network, last mile communications.</p>	<h4>MC-M (Mission Critical MESH)</h4> <p>On-demand video transmission.</p>
<h4>MC-B (Mission Critical Broad)</h4> <p>Broadband trunking, multimedia communication</p>	<h4>MC-Link</h4> <p>Satellite connect, HF, Microwave</p>	<h4>MC-COMMAND</h4> <p>Field Dispatch</p>

MC-C (Mission Critical Connect)

With simulcast and IP connect for its core network, MC-C's multi-layer architecture allows flexible and versatile network management. It is suitable for small size local networking, while highly scalable to larger size state or nationwide systems.



Smart Grid Managements

Based on the simulcast networking, the link logic is simplified, and spectrum efficiency is maximized, so that the system is stable and can handle the influx of any outside aid to achieve cross-region cooperation. Therefore, each area works in their own way in daily life, but units to collaborate and interoperate when required. It's a flexible grid management system.

Large Capacity, Nationwide Management

Large scale incidents and disasters can drive increasing demands to your communication system. The base stations are connected by multi-IP connections (wired/ wireless/private links) and are remotely controlled by the command center, so that the system can handle the loads with advanced channel management technology.

Core Network, Backbone Radio Network

As the central network of whole BMC system, it offers numerous services to the users who are interconnected by the access network, delivers routes to exchange information among various sub-networks, and establishes multi-layer daily communication networks.

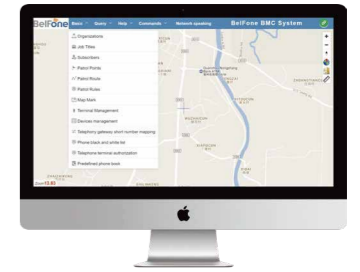
MC-C (Elements)



MC-Modules



MC-Server



Dispatcher

BF-TR900 Professional Repeater

BF-TR900 is a highly integrated DMR repeater in Belfone BMC system with IP54 and MIL-STD-810C/D/E/F standard to tackle various harsh environments. This versatile repeater can function as a fixed base station; and it supports IP networking as well as simulcasting mode. Unlike traditional repeaters, BF-TR900 run with self-inspection circuit and module redundancy to ensure steady and reliable operation. BF-TR900M supports Belfone IP connect systems BMC (Emergency Response) and SDC (Smart Digital Connect) systems.



Modular Design for Flexible Deployment



Ease of Maintenance and Management

- Renewable transceiver and baseband module
- Renewable PA module



Multiple Working Modes

- Repeater mode
- SDC base station (Smart Digital Connect, Belfone Centralized IP interconnect system).
- Simulcast base station
- Channel unit of SDP (virtual trunking) base station

BF-TC983 Duplexer



The duplexer is an important part of the duplex radio station to share same antennas. With the components' efficient heat dissipation and a solid six-cavity resonator, BF-TC983 duplexer brings advantages of low insertion loss, high isolation, stable performance and beautiful appearance.

Frequency Spacing	VHF: 5.7MHz; UHF: 10MHz
Insertion Loss(dB)	≤1.3dB
Nominal Impedance	50Ω
V.S.W. R	≤1.5
Suppression	> 75
Isolation(dB)	> 75 dB
Weight	1.2KG
Size	1U 9.5", 225×190×38 (L*H*D) mm

BF-TR908 Radio Link Module

BF-TR908 is a professional DMR radio link device that enables repeater/base station to connect with another repeater in a remote site where there is no infrastructure of IP connection. It operates in single frequency repeater mode and DMO mode to extend DMR radios communication range. It is mainly used to connect stations without link and provide one slot for voice communication, GPS data and SMS

- 25W output power
- OLED display
- IP54 water and dust resistance
- MIL STD 810G
- Modular design for different deployment requirements
- Multiple working modes as DMR radio link and single frequency repeater (reprogramming required; it cannot operate in two modes at the same time)

Frequency Range	VHF: 136-174MHz UHF:350-390/400-470/450-520MHz
Zone	1
Channel Capacity	1056
Channel Spacing	12.5KHz/25KHz
Operating Voltage	DC13.8V(±20%)
Frequency Stability	±1ppm
Antenna Impedance	50Ω
Size	1U, 9.5 Inch, 217x44x325mm (L*H*D)
Weight	2.7kg
Temperature	Storage Temperature: -30 C ~ +70 C Working Temperature: -20 C ~ +60 C
Output Power	VHF/UHF high power: 25W VHF/UHF low power: 10W



BF-TC917 Gateway Module

BF-TC917 is a multi-function gateway that enables a regular analog/digital radio to access to BMC system for voice calls. It provides a flexible and integrated networking solution to users who run a system with radios of different types and protocols. It works as a phone gateway that enables users to make calls over IP phone network (connected to PBX) and mobile cellular network (via SIM card).

- Support radio/phone gateway working mode
- OLED display
- IP54 water and dust resistance
- IP Connectivity
- MIL STD 810G
- Modular design for different deployment requirements
- Multiple working modes as radio gateway, phone gateway, phone exchange, link controller (IP, LTE/GSM link controller for TR908 and radios)

CPU Basic Frequency	580MHz
Flash Memory	32MB
Networking Protocol	TCP/UDP
IP Network Interface	RJ45
Local Wireless Network	WIFI (2.4G)
Debug Interface	USB
Working Voltage	DC 13.8V
Weight	2.5KG
Size	1U, 9.5 Inch, 217x44x325 (L/H/D)



BF-TC935 Power Supply

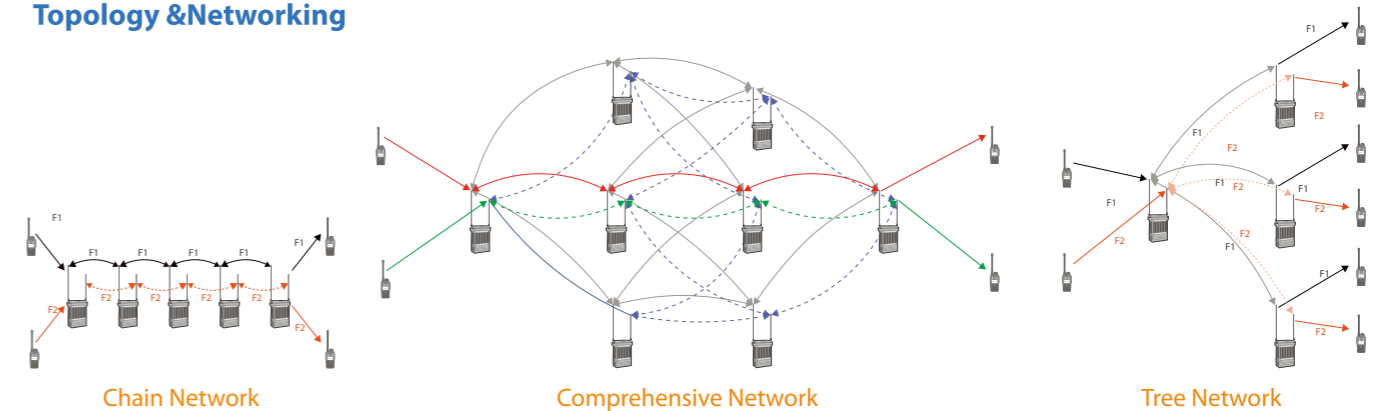
This power supply is mainly developed for our MESH base stations and BF-TR900 repeater. With compact structure and advanced circuits, it supports wide-range input, high efficiency, high reliability and various protection. It can be widely used in the military, police, fire protection, utility, petroleum, mining, transportation, water conservancy, forestry, broadcasting and TV, medical and other sectors.

Output Capacity	1-5 outputs
Overload	105-135% rated output power
Over Voltage	15.7V-18.4V
MTBF	206.5krs min.
Weight	3kg
Size	1U 9.5 inch, 217(L)* 44(H)* 325(W)
Safety Standards	UL60950-1, TUV EN60950-1, O/P-FG 0.5KVAC



In disaster response and relief, it is not uncommon that different departments use their own communications systems; and the essential information and data are scattered across systems that cannot be interconnected due to the adoption of different technologies. Efficient coordination and resources allocation become a challenge. Especially when the frequencies and radio types are different, organizations like medical, police and fire station cannot even talk to each other. Belfone answers with BMC's subsystem MC-D. It connects central command and field command network; and various departments with different frequencies or networks to manage to transmit in the same network, making all-in-one communication network to realize wider cooperation.

Topology & Networking



Features & Benefits

Coverage on Demand

As a highly mobile system, the on-site base station can be deployed and withdrawn without much hustle. Wherever the emergency happens, it offers coverage on demand. With best-in-class system designs and radio performance regardless of the environment, Belfone Ad Hoc is the choice of coverage on demand.

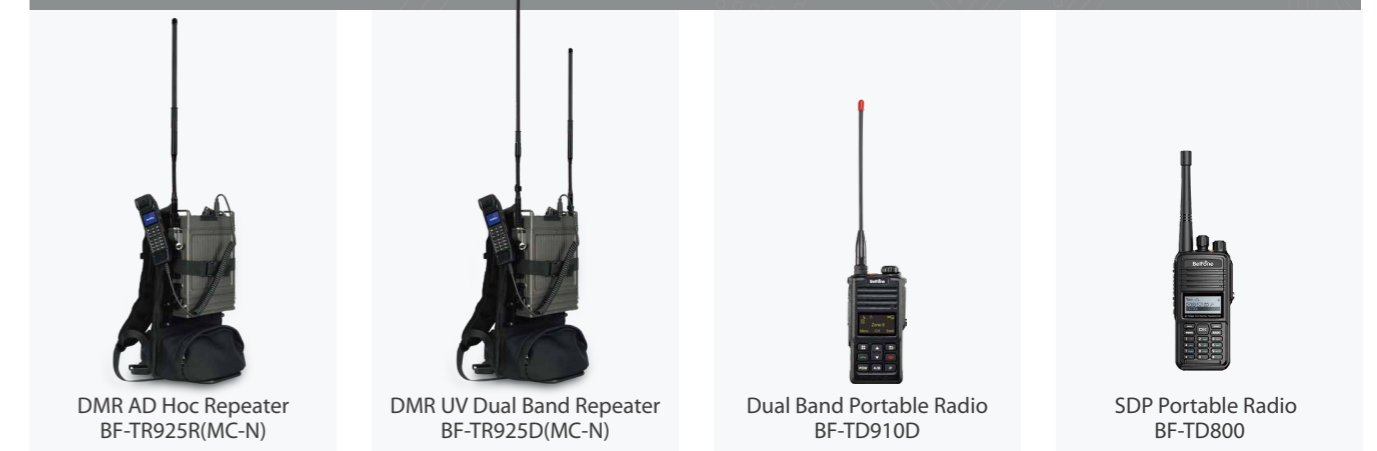
High Reliability and Resilience

Designed to be military standard rugged, portable, durable, waterproof and dustproof, it can be quickly deployed and implemented under the harsh conditions to ensure reliable connectivity. AP nodes in Ad-Hoc network is able to access the available links automatically even in the event of multiple points of failure.

Ensure Last-mile Communications

With the feature of auto repeater, the system allows the signal to keep hopping until it reaches the optimal node, which ensures last-mile connectivity beyond line-of-sight.

Elements



BF-TR925R (MC-N DMR Ad Hoc Repeater)

595 260

In emergency situations where there is no network coverage, Ad Hoc portable networks are very helpful. As a member of BF-TR925 family, BelFone TR925R(MC-N) can be a manpacked and vehicle mounted DMR Ad Hoc repeater designed for scenarios where no radio coverage available to realize signal multi-hopping and last mile communication. With features of fast deployment, seamless communication and flexible networking, it works as a radio, repeater and mesh node. It is an ideal solution for, personnel working at isolated utility sites, first responders during disaster and rescue operations or for those working underground or in tunnels.



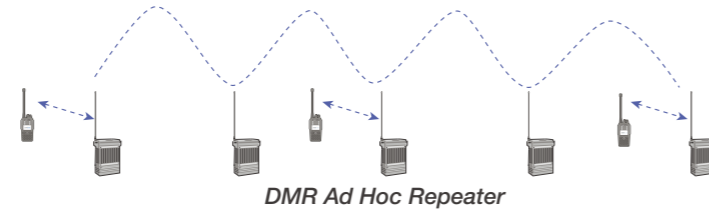
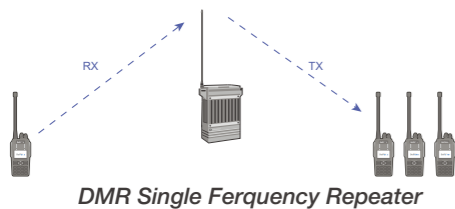
Versatile Connectivity

- 4G wireless communications link
- Satellite communication link
- Narrowband communication link
- IP connectivity for multi sites connection



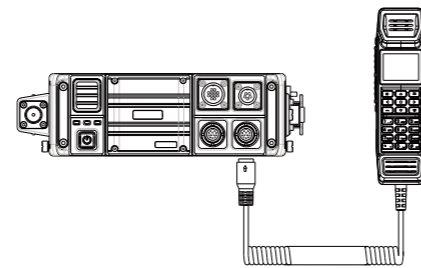
Multiple Working Modes

- DMR Ad Hoc repeater
- DMR single frequency repeater
- DMR base radio
- Analog base radio
- PSTN gateway



DMR and Analog Base Radio/ PSTN Gateway

Connected with remote controller microphone, BF-TC981 also works as a DMR or analog radio with PTT services. Support 4G SIM card to realize phone calls via carriers' network.



Flexible and Reliable Networking, Fast Deployment

- Multiple networking deployment: chain, tree, star, connected network, etc. thus, users can choose different networking based on actual environment.
- Highly reliable network: Based on mobile wireless ad hoc network, the device is capable of creating and joining networks simply by power-on. Signals will switch to another node automatically to ensure link continuity, when one node with network disconnects or malfunctions.



Ease of Installation

- Manpacked
- Modular hardware design.
- Vehicular/Desktop mounted.

BF-TR925D (DMR UV Dual Band Repeater)

BF-TR925D portable dual band repeater is specially designed for the rapid deployment during emergency response. Compliant with military standard, sturdy and durable, it can be vehicle mounted or man-packed. BF-TR925D works with BF-TR900 digital repeater and BF-TR925 portable repeater, or networks independently, to realize hierarchical networking and command and extend communication distance. Different frequencies of various departments manage to transmit in the same network, which makes an all-in-one communication network to realize wider cooperation. Organizations are better equipped to efficiently organize and share their resources during response operations.



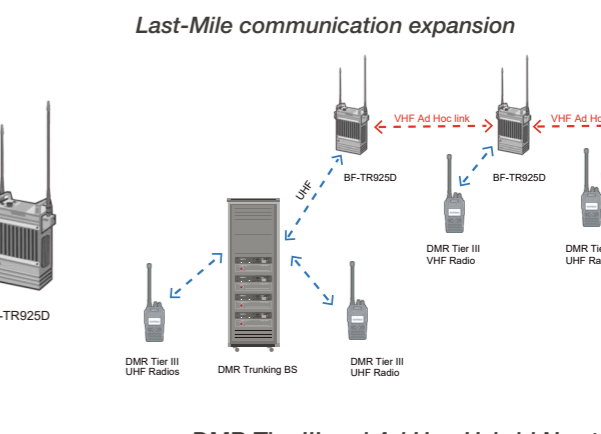
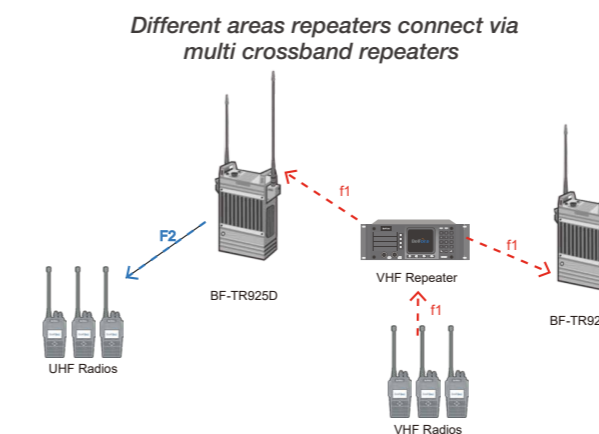
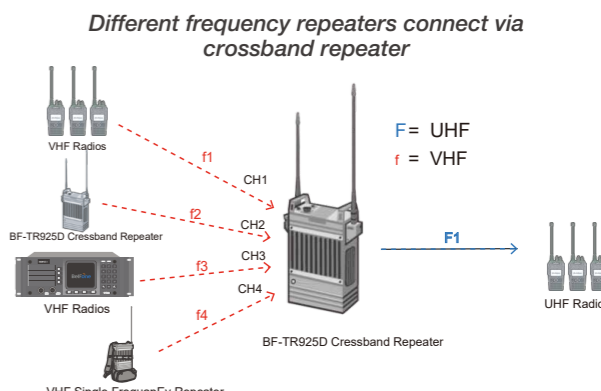
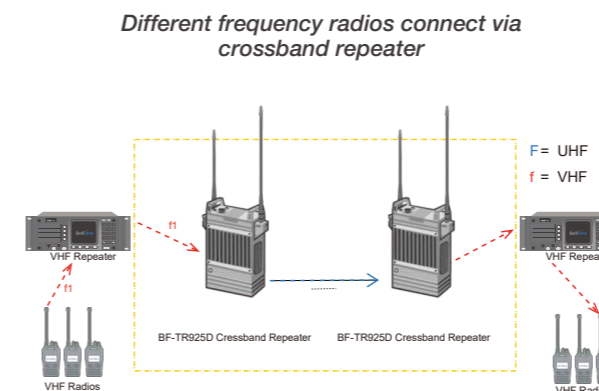
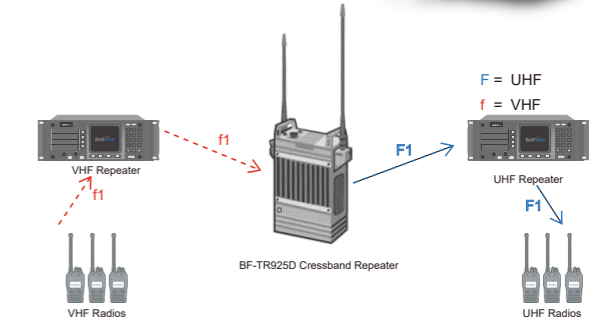
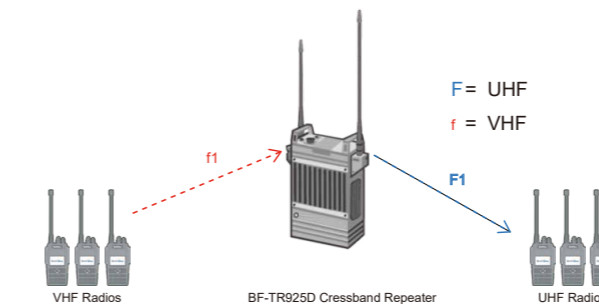
Dual Band Interoperability

The device is valuable, since it performs across multiple digital and analog networks and operates in both VHF and UHF for instant interoperability. Now you can efficiently manage mission critical voice and data in any environment and significantly improve your team's safety and response time.



Multiple Working Modes

- DMR single frequency repeater (12.5KHz bandwidth both bands)
- DMR/Analog UV cross band repeater
- DMR base radio
- Analog base radio (for UV both)



BF-TD910D (Dual Band Portable Radio)

BF-TD910D is a tough dual-band two-way radio capable of operating on both VHF and UHF band in analog and digital mode, so that users across different systems can instantly communicate for better collaboration. Its comprehensive feature kit includes versatile calls, emergency call, lone worker, scan/monitor, roaming, transmission authentication, etc. It works in a great diversity of communication scenarios, e.g., indoor operations, outdoor operations, cross-dept. teamwork, emergency response, etc.

Highlights & Features

Dual Band Interoperability

The device is valuable, since it performs across multiple digital and analog networks and operates in both VHF and UHF for instant interoperability. Now you can efficiently manage mission critical voice and data in any environment and significantly improve your team's safety and response time.

Reliable and Tough

This tough IP68-graded water and dust proof radio is designed to brave the challenges of harsh environments and to keep your workers connected safely and productively, wherever the job takes them.

Advanced Security

ARC4, AES256 and TF card encryption technologies and authentication protect mission critical radio system from unauthorized access or malicious disruption.

Users can eliminate voice records and important data through the terminal to prevent information



Applications	Security Services	Data Services
Automatic roaming	Emergency alarm	SMS
Two PTT	Lone-Worker feature	ARC4& AES256 Encryptions
Flashlight, VOX	Covert mode	

General Performance	Voice Services
Frequency bands: VHF:136-174MHz UHF:350-400/400-470/450-520MHz	DMR Virtual Trunk
3773 channels/3000 zones	DMR Two Time Slots
Display: 1.6" OLED	Private/Group/All/ Priority call
IP68 Protection	Interrupt/ Override
2W power, 250mAh battery	



BF-TD920D (Dual Band DMR Radio)

The BF-TD920D U/V dual-band digital two-way radio is designed based on the DMR standard, with improved audio clarity, smooth communication, and user-friendly interface. It delivers enhanced safety, privacy, stability, and data transmission capacity to ensure timely information sharing and efficient response, as well as facilitates effective and organized command and dispatch in challenging scenarios.

Highlights and Benefits

Enhanced RF Capacity

With the conventional superheterodyne circuitry design, BF-TD920D brings superior transmission and reception, guaranteeing stable reception across expansive areas. It provides close-range, offline communication and reliable supports for communications in network disruption, limited coverage, and unforeseen natural disaster.

Intelligent Noise Cancellation

BF-TD920D is equipped a built-in noise reduction module, with adaptive microphone noise reduction technology to filter background noise and suppress feedback. This allows users to deliver clear audio even in noisy environments or adverse outdoor weather conditions.

Multiple Encryption

BF-TD920D UV has been undergone military standards and IP68 protection. The multiple reinforcement tests on the screen provide it with excellent resistance to impact, vibration, and solar radiation, enabling it to adapt to various harsh environments.

3-Level Regions

BF-TD920D supports 3-level regions setting and 3773 conventional storage channels, allowing manual zone switch and enables swiftly cross-region reinforcement preparation, which enhanced management convenience, and guaranteed reliable communication for promptly respond and cross-region communication.

Military Standard

BF-TD920D supports 3-level regions setting and 3773 conventional storage channels, allowing manual zone switch and enables swiftly cross-region reinforcement preparation, which enhanced management convenience, and guaranteed reliable communication for promptly respond and cross-region communication.

Multiple Security Alarms

The BF-TD920D DMR radio supports GPS, man down, lone worker, emergency alarm and one key emergency alarm solution to further secure personal safety.



Voice Services	Security Services	Data Services
Private/Group/All call	GPS alarm	SMS
Silence Unknowing Call	Man-down alarm	XOR, ARC4, and AES256 Encryptions
TTS (text to sound)	Lone-worker feature	
	Emergency alarm	

General Performance	Applications
Frequency bands: VHF:136-174MHz UHF:350-390/400-480/450-520MHz	Roaming
38 channels	GPS (Optional)
Display: 2.0-inch Semi-transparent Screen	Recording (Optional)
IP68 Protection	Bluetooth (Optional)
5W output power, 2500mAh battery	

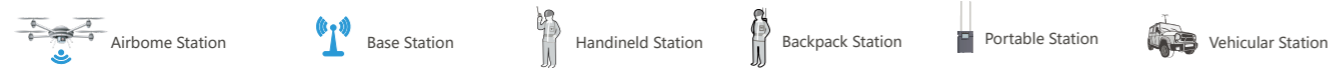
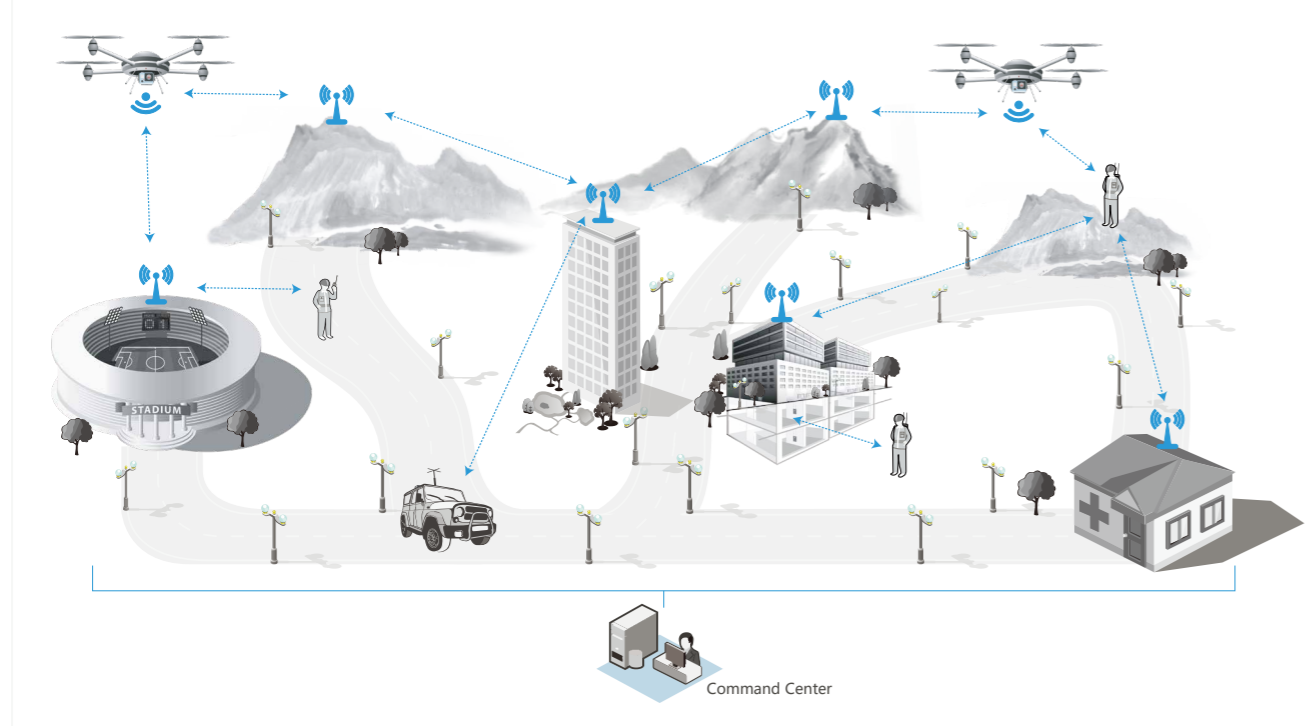


MC-M (Mission Critical MESH)

Elements

In real mission critical situation, things are more complicated than what we can imagine. Voice communication only is not enough to make rescue decisions; and more information are required for commanders. Wireless MESH network is a new network architecture consisting of a wide variety of nodes. Utilizing non-central distributed network to realize real-time multimedia interaction with voice, video and pictures, it operates on the move and beyond line-of-sight. It works with advantages of multi-hopping connection, self-organizing, self-managing, self-repairing, etc.

Topology & Networking



Features & Benefits

High Reliability

Compliant to military standards, the infrastructure is tough and robust, water & dust proof, easy to carry and operable in adverse environments. It can be quickly deployed to meet the communication needs of an emergency scene. There are multi links for a single AP node in WMN system, which effectively guarantees the normal operation of the whole system even if some links break down, as there is more than one path between a source and its destination in the network.

Great Mobility

It's impossible to predict where a disaster might strike and the emergency scene can change at any moment. Therefore, it's both important and necessary to deploy the temporary mobile base stations according to the specific situation. All the base stations are mobile and deployable. They can be set up soon after the emergency arises and immediately evacuated when the situation is under control.

Fast Deployment

In emergency response, a fast, precise and informed understanding of the onsite situation is of crucial importance, because it determines whether the commanders can have the information to make the right call. Adopting single frequency networking technology, BF-MR916, a mobile base station with high performance, brings maximum simplicity and convenience to onsite deployments. With BF-MR916, field workers can quickly establish network with minimum equipment.

NLOS Transmission

The technology of Wireless MESH Network (WMN) can easily achieve NLOS transmission with its routing technology. Signals keeps hopping from one node to another and automatically choose the best transmission path and finally reach the NLOS object node. This is the key to achieving 100% coverage for PMR users in all walks of life.

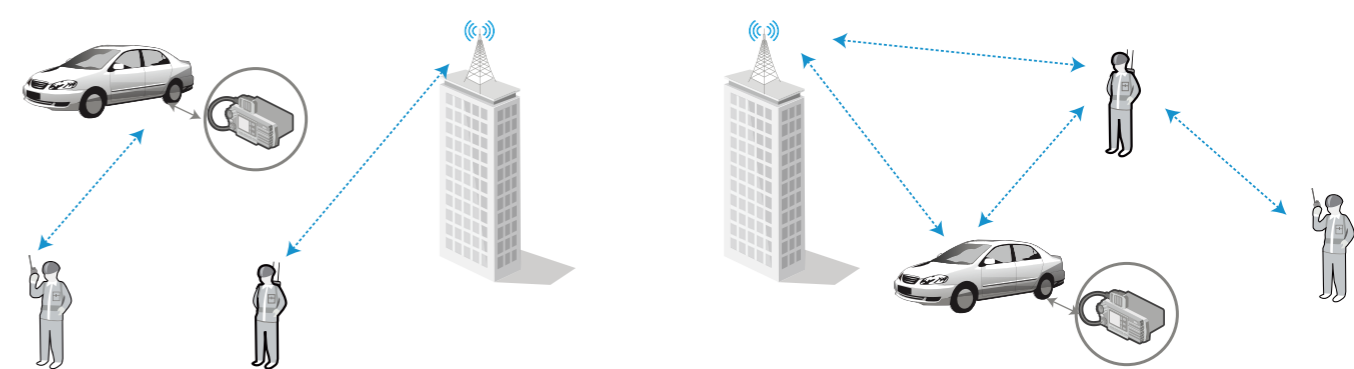


BF-TR920B MESH High Power Base Station

MESH base stations are mainly deployed at fixed points. The equipment has high transmission power to provide large coverage. It is especially suitable for scenarios such as long-distance coverage communication, information convergence and return, regional coverage support, commanding coverage, and repeater transmission nodes.



Networking



Features & Benefits

Long-range and Wide Area Coverage

This device works not only as link nodes to extend signal range, but also as commanding heights to expand network coverage.

Flexible Networking

For the non-central distributed network, channels and bandwidth are adjusted automatically. Users can choose different networking deployment based on actual requirements like chain, tree, star, connected network, etc.

Converged and Interconnected

With full IP network design, it supports different data transmission mode, interconnecting different networks to realized converged communications.

Simple & Cost-Efficient Linkage

Great effort is needed to deploy fiber and cables, dig trenches and thread pipes in order to set up wired linkage. It saves cost, labor and time to deploy the Mesh linkage.

Adaptive Bandwidth

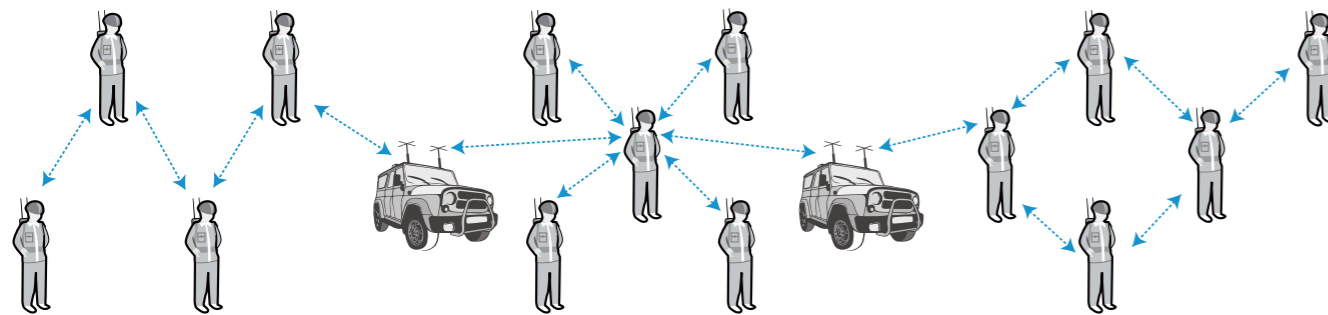
In order to transmit video continuously and smoothly, the built-in audio and video recorder adjusts picture and video resolution and frame rate based on available bandwidth.

BF-MR902P Backpack Station

The MESH backpack station with great mobility can be deployed quickly on vehicles or manpack to achieve real-time collaboration remotely between on-site team and the command center. Working with BF-TR925 series repeater, it can access the backbone network of the BMC system; it is an ideal solution for on-site command, regional emergency communication, fleet self-organized communication, security patrol, mobile monitoring, etc.



Networking



Features & Benefits



Versatile Mounting

Manpack: backpack portable repeater with a battery
Vehicular/desktop mounted



Fast Deployment, High Reliability

Mounted on command vehicle to deploy network the moment when it is needed.
Waterproof and vibration resistance, reliable under various harsh conditions.



Flexible Networking

For the non-central distributed network, channels and bandwidth are adjusted automatically. Users can choose different networking deployment based on actual requirements like chain, tree, star, connected network, etc.



Adaptive Bandwidth

In order to transmit video continuously and smoothly, the built-in audio and video recorder adjusts picture and video resolution and frame rate based on available bandwidth.



Intelligent Routing

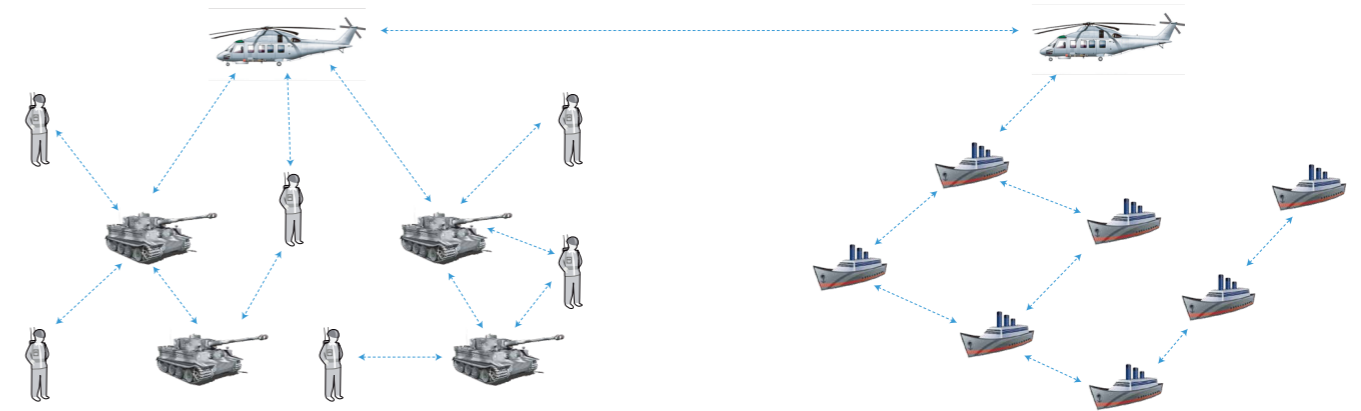
As the vehicle moves, the nodes update themselves in real-time and dynamically reconfigure routing, while the overall transmission and communication across the network experiences no disruption.

BF-MR925MS Airborne Station

Compact, light, low power and long battery life, the airborne MESH module is designed to work with hot air balloons and drones in special emergent conditions. As a high-altitude MESH node, it achieves ultra-long-distance relay with less power; and overcomes the blocking of terrain and building. Complementing other equipment, it can be used in systems for high-altitude photographing and videoing, as well as payload delivery.



Networking



Features & Benefits



Compact, Agile and Portable

Small size, lightweight, low power and long working life, flexible in connection modes, well fit for drones.



Fast Deployment, High Reliability

- Mounted on drones easily.
- Waterproof and vibration resistance, reliable under various harsh conditions.



Flexible Networking

For the non-central distributed network, channels and bandwidth are adjusted automatically. Users can choose different networking deployment based on actual requirements like chain, tree, star, connected network, etc.



High-altitude Coverage

Achieve ultra-long-distance relay with less power, overcome the blocking of terrain and buildings, greatly extend coverage distance.



Intelligent Routing

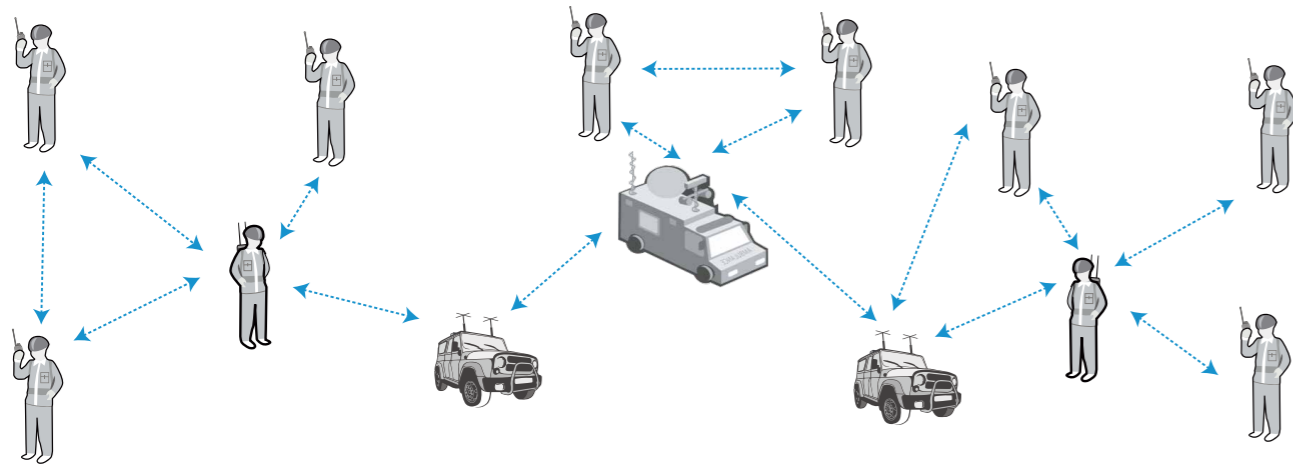
As the vehicle moves, the nodes update themselves in real-time and dynamically reconfigure routing, while the overall transmission and communication across the network experiences no disruption.

BF-MR901H (Handheld Radio)

The MESH handheld device is small and equipped with a detachable lithium battery. It can be hand-held or carried on the shoulder, back or waist of a soldier. As a wireless extension of the portable station, it is convenient to take it and go deep into the emergency scene. In the crowd, multimedia information such as high-definition video is transmitted in real-time, so that commanders can intuitively understand the situation instantly. At the same time, each individual node conducts multimedia interactions to achieve efficient coordination. The equipment is suitable for a variety of application scenarios such as local collaboration among frontline teams, interconnection for high-elevation or underground areas inside buildings and surveillance in the crowd.



Networking



Features & Benefits



Highly Portable

Small size and lightweight, high-performance integrated voice and data, smart connectivity anywhere.



Multimedia Dispatching

Dispatcher can send and receive real-time videos, pictures, voice and text for improved situational awareness to facilitates visualized dispatching.



Flexible Networking

For the non-central distributed network, channels and bandwidth are adjusted automatically. Users can choose different networking deployment based on actual requirements like chain, tree, star, connected network, etc.



Intelligent Routing

As the vehicle moves, the nodes update themselves in real-time and dynamically reconfigure routing, while the overall transmission and communication across the network experiences no disruption.

MC-B (Mission Critical Broadband)

Private LTE broadband network and public wireless network are used to realize multimedia communications. MC-B provides a new way for rapid and effective networking of the emergency communication and command system. The system provides good support for various broadband multimedia services to meet the requirements of emergency communications and significantly improve the ability of information collection and distribution, interactive data processing capabilities and emergency response efficiency.



MC-COMMAND

Designed to realize onsite command and dispatch when incidents occur, MC-COMMAND provides a complete operating interface, real-time intelligence and simplified operational view by integrating your systems into one single device to monitor real-time alerts and access information feeds. The plug-and-play design facilitates fast and convenient deployment without any other complex infrastructure. Able to operate independently or in multi-link access modes, MC-COMMAND establishes interconnection in the frontline and works as an on-site command center to manage and dispatch the team.



Features & Benefits



Real-time Situational Command

The integrated system empowers with versatile management functions as voice communication, positioning, personnel and device management and configuration, device status alarm management, etc.



User-centered Triple Display

All information, including map and position, video and dispatch interface, is shown together to make faster and data-driven decisions in the field.



Location, Tracking and Mapping

View all the location-based data in one place in real-time on a map display; instantly locate the devices and task force to alert, manage and command.



Versatile Connectivity, Highly Converged

Versatile connectivity of converged narrowband link, GSM, 3G/4G, Wi-Fi, IP connect and satellite link for challengeable situations.