



## A Quick Guide to BelFone Communication Systems

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Dedicated to increasing the efficiency and reliability of missioncritical communications, BelFone 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.com](http://www.belfone.com).

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Catalog | Quick Guide



# PREFACE

## DMR, A SAFETY NET 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 trusted 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 well 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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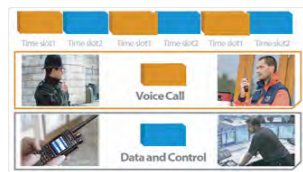
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# SYSTEM OVERVIEW

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.

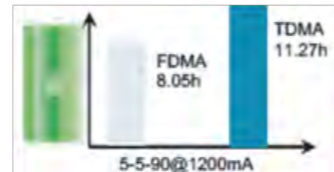
## DMR Advantages over Analog



▲ 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 increasing team collaboration efficiency and enhancing safety of front-line personnel.

## 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 component fails.

### IP Based Architecture

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



Voice Service	Data Service	Security Service	Other Service
<ul style="list-style-type: none"> <li>Individual Call</li> <li>Group Call</li> <li>Broadcast Call</li> <li>All Call</li> <li>Emergency Call</li> <li>PSTN Call</li> <li>Full Duplex Call</li> </ul>	<ul style="list-style-type: none"> <li>Status Message</li> <li>Short/Long Message</li> <li>Emergency Alarm</li> <li>GPS</li> <li>Enhanced GPS Pulling</li> <li>Packet Data</li> </ul>	<ul style="list-style-type: none"> <li>ESN Check</li> <li>Mutual Authentication</li> <li>E2E Encryption</li> <li>Override/Interrupt</li> <li>Ambient Listening</li> <li>Discreet Listening</li> <li>Stun/Revive/Kill</li> </ul>	<ul style="list-style-type: none"> <li>Roaming</li> <li>Handover</li> <li>OTAP</li> <li>DGNA</li> <li>Group Patch</li> <li>Call Forwarding</li> <li>Simulcast</li> <li>Scan Group</li> <li>Jamming Detection</li> </ul>

# ETX (Enhanced Trunking) System

Following ETSI open standards, Belfone ETX DMR Tier III trunking system is designed for mission critical organizations to empower with 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 availability and reliability 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 high way patrol, police, fire etc. Its max capacity is more than 50,000 subscribers.

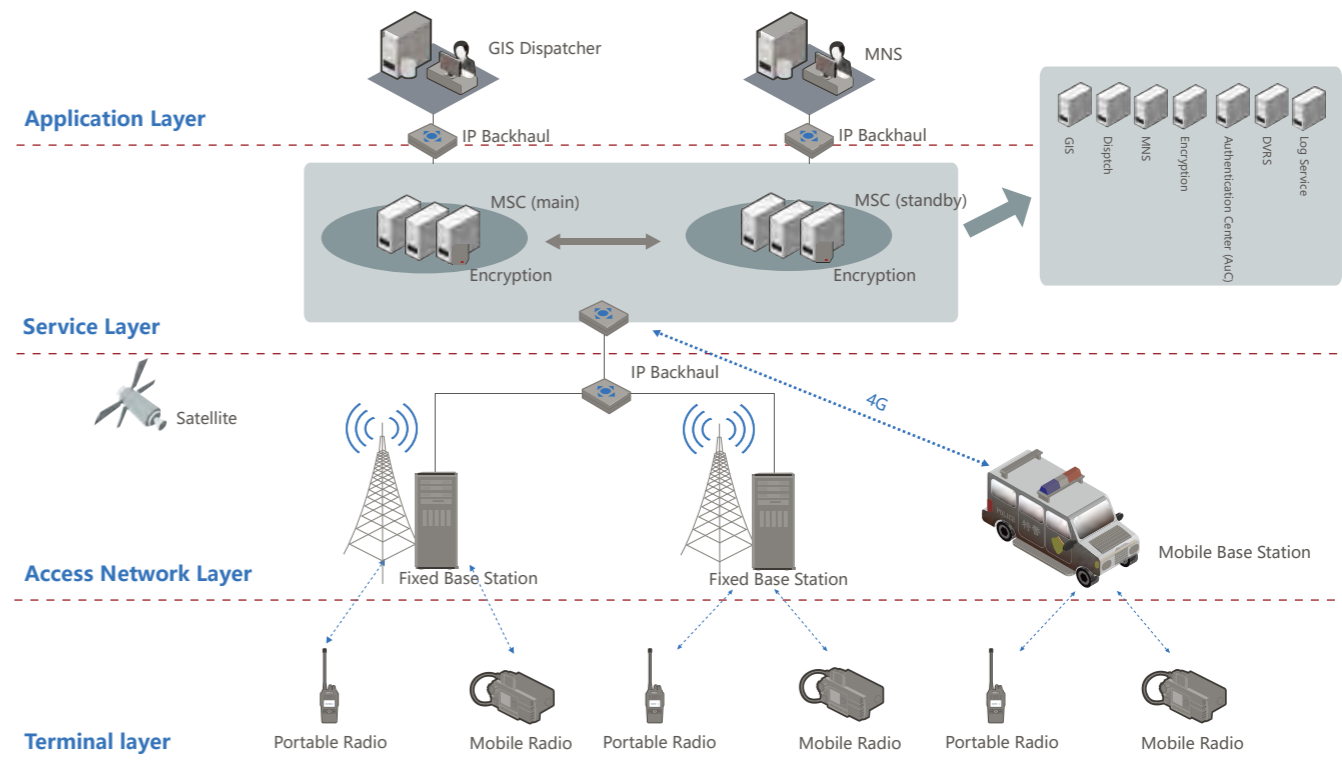
**MULTIPLE FALL-BACK MODES**

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 unwanted signals, 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



# ENHANCED TRUNKING SYSTEM (ETX)

## ETX Base Station



Capacity	Up to 24 carriers/BS
Frequency	350-400MHz; 400-470MHz
Size	4-carrier: 22U (600X600X1430 mm) 8-carrier: 37U (1,800 x 600 x 600 mm)
Receiving Sensitivity	-121 dBm@BER5%
Power consumption	4-carrier: ≤ 800 W 8-carrier: ≤ 1,400 W
Voltage	AC 110 V/220 V / DC 48 V
MTBF	100,000 hours
Operating Temperature	-30 to +60 °C

- Blade design for easy operation and maintenance
- High reliability with 1+N hot redundancy for BSCU, PMU and control channel
- Flexible scalability for easy expansion
- High availability with rich functions in isolated mode
- Excellent heat dissipation

## DMR ETX MSC(Mobile Switch Center)



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

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

## 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)

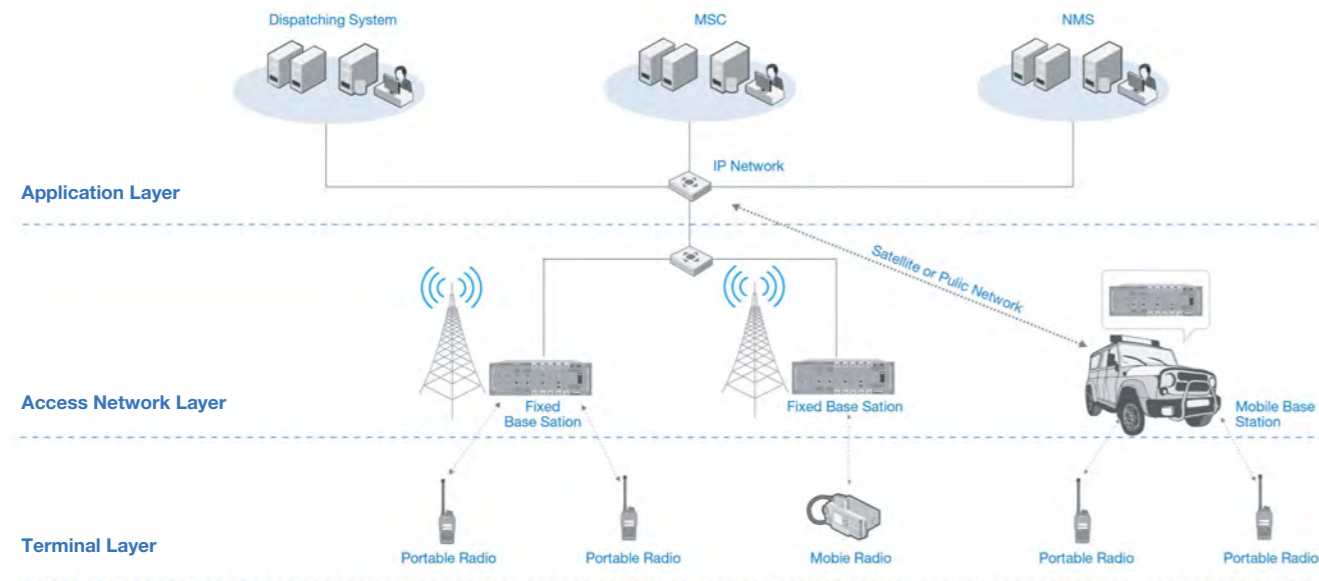


- Whole network voice recording
- Flexible recording
- Multi-level authority

# 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



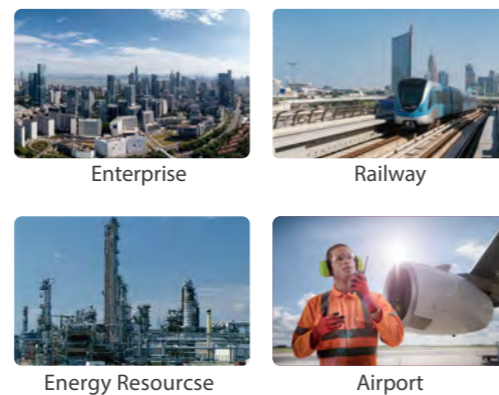
## Elements



## Specification

Max BS Capacity	256
Max Carrier Capacity	256*4
Max Carrier per Site	4
Dispatch Capacity	30
PSTN/PABX Gateway Capacity	60(2xE1)/30(1xE1)
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



- 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



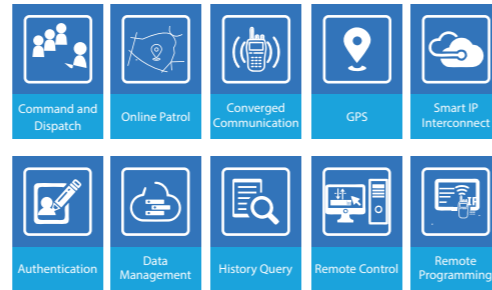
- Device management/monitoring
- Configuration management
- Subscriber management
- Fault management
- Security management
- Remote upgrading

# 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

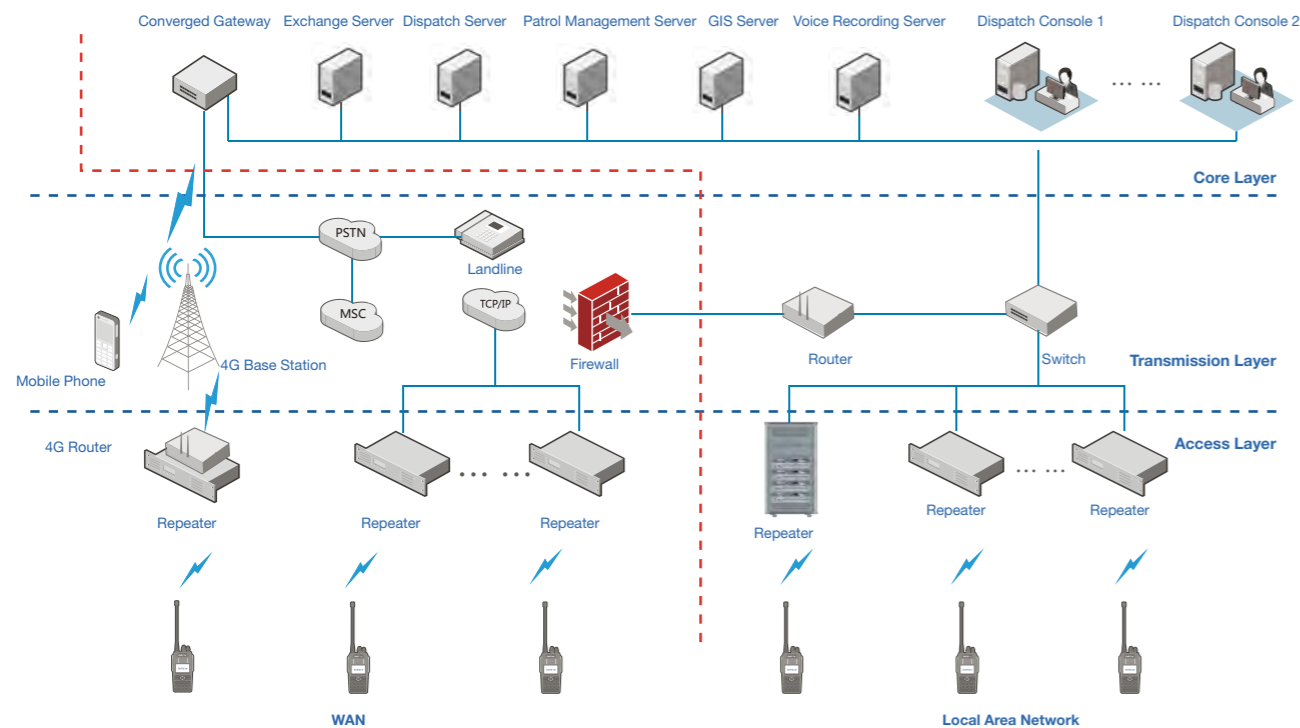
- Flexible networking with IP based architecture Realtime radio status monitoring
- Cloud deployment for the system server
- Patrol solution with RFID technology
- Intelligent Management and Dispatch Platform



## 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

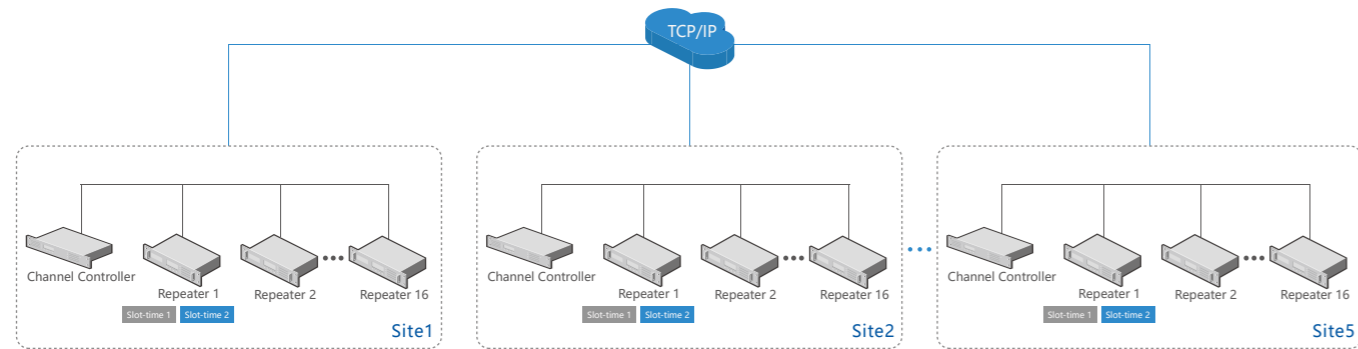
Energy

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 leasing; 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 expanding the number of equipment interconnection and expanding the business functions, and solves 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.

### Rich Extended Applications

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

### Traffic Balanced and Call Conflicts Reduced

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

## Application



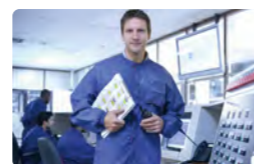
Large Enterprise



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



### Repeater



### IP Controller(Optional)



## 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



### Repeater



### Simulcast Controller (Optional)



## 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

## Hybrid Portable Series



### BF-SCP950 Smart Converged Portable Radio

As a revolutionary device that integrates broad and narrow band technologies, and offers unified communication experience, rich applications, and enhanced data security to meet diversified requirements from always changing critical situations.



### BF-SCP810 Public and Private Network Integration Smart 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-TD950 Enhanced DMR Tier III Trunking Portable Radio

Compliant with world's strictest water/dust-proof standard IP68, this radio has advanced features such as full-duplex call and multi-layer encryption to facilitate efficient team management and secure communications.



### BF-TD930 DMR Tier III Trunking Portable Radio

With GPS, IP68 and MIL-STD-810 C/D/E/F/G protection, it delivers outstanding performance even in harsh environment. Slim and robust body comes with a 1.77" HD screen adaptable to various illumination.



### 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 work from a desktop.

## 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 fulfill your duties.

## Commercial Conventional Series



### BF-TD505 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. On top of conventional analog functions, it also brings digital features.



### BF-TD506/BF-TD872 Commercial Conventional Portable Radio

A high-power DMR radio that consistently delivers clear voice even at the edge of coverage up to 15km. 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.

# Smart Converged Portable Radio BF-SCP950

## Diverge and converge all needs

Integrated with LTE and DMR, narrow and broad band, this new smart radio designed for public safety communications with competitive Edge and abundant human-centered features. As a two-way radio, it offers instant and reliable push-to-talk calls for critical voice communications. As a ruggedized smart portable terminal, it brings all the benefits of broadband data to professional users, and offers unified communication experience, rich applications and enhanced data security.



## Multi-mode Hybrid, Flexible Communication

A multi-mode radio works in DMR conventional mode, analog conventional mode, PoC (public 3G/4G) and MC-LTE (private LTE) mode, bringing all advantages of both narrow and broad band technologies together, which could always be stay in connect.



## Abundant Advanced Features

- Dual SIM Dual Standby (DSDS)
- OTG
- WIFI
- Waterproof fingerprint
- NFC
- Bluetooth
- RFID
- GPS



## Intelligent Multi-application Integration Platform

Support abundant third-party customized applications like Body Worn Camera, Navigation, Workorder etc., and various sensors can be integrated to realize more functions and enrich services.



# BF-SCP810(Public and Private Network Integration Smart 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.

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

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



# BF-TD950(DMR Tier III Trunking Portable Radio)

BF-TD950 is a full-duplex DMR trunking portable radio with GPS and IP68 protection. It delivers outstanding performance even in harsh environments. The slim and robust body comes with 2" HD IPS screen, enabling the user to read with ease in various light condition. It is a professional radio to enrich your trunking communications experience.

## Highlights and Benefits



### Enhanced Communication Efficiency

Incorporating ground-breaking full-duplex feature to allow simultaneous two-way voice calls, it facilitates crucial information exchange and makes sure the voice call gets through even in peak traffic. DMR Trunking Mode enables access to a pool of radio channels, which are dynamically allocated to users when required.



### Superior Audio Quality

It incorporates advanced audio processing technology to effectively suppress background noise and enhance audio quality, delivering loud and clear audio.



### Superior Quality in Challenging Environments

The IP68 level ruggedness ensures the quality voice calls in toughest conditions like dropping on the concrete, temperature shocks, blowing dust, wind driven rain, etc. Ergonomic Design: 2.0" high definition IPS display, readable in all lighting conditions.



### Long Battery Life

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



## Features and Details

### General Performance

- Frequency bands: VHF:136-174MHz  
UHF:350-400/400-470/450-520MHz
- 1024 channels/ 64 zones
- Display: 2.0" IPS
- IP68 protection
- 5W power, 3350mAh battery



### Safety Services

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

### Data Services

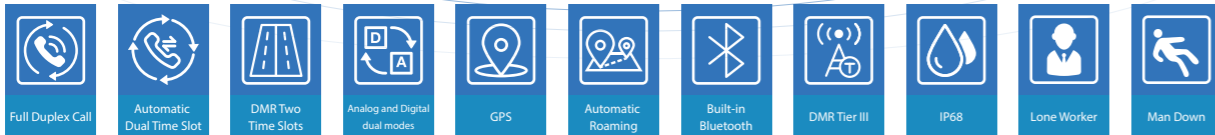
- Status/SDS messaging (in TMO & DMO)
- Group data

### Applications

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

### Voice Services





- Full Duplex Call
- Digital/Analog mixed mode



# BF-TD930(DMR Tier III Trunking Portable Radio)

TD930 is capable of versatile DMR Tier III trunking calls, secured with advanced encryptions and abundant in features. This cost-effective trunking and feature-rich radio benefits users from different sectors.

## 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 point.
- 
**RFID Reader for Patrol**  
 It helps organizations to execute security patrol tours and ensure that the officers will accomplish their tasks within the predefined time intervals.
- 
**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:350-400/400-470/450-520MHz
- 1024 channels/ 128 zones
- Display: 1.77" TFT
- IP68 Protection
- 5W output power, 2300mAh battery, 3350mAh(optional)

### Applications

- Automatic roaming
- GPS (optional)
- RFID (optional)
- Vibration

### Voice Services

- DMR Virtual Trunking
- Digital/Analog mixed mode

### Safety Service

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

### Data Services





- Status/SDS messaging (in TMO & DMO)
- 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 IP67 rated water and dust 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
- IP67 Protection
- 5W output power, 2000mAh battery

### Data Services

- Status/SDS messaging (in TMO & DMO)
- Group message
- ARC4& AES256 encryption

### Voice Services

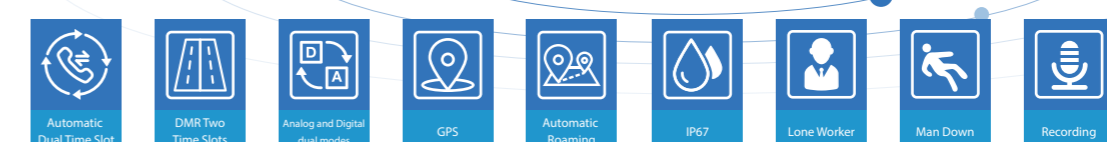
- DMR Virtual Trunk
- Digital/Analog mixed mode

### Safety Services

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

### 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 deliver cutting-edge data applications and expand 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. IP67 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
- IP67 Protection
- 5W output power, 2000mAh battery



### Data Services

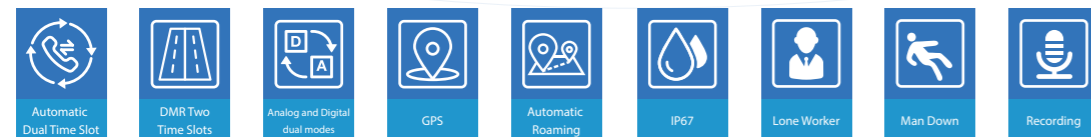
- Status/SDS messaging (in TMO & DMO)
- ARC4& AES256 encryption

### Voice Services

- DMR Virtual Trunk
- Digital/Analog mixed mode

### Safety Services

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



# BF-TD505(Commercial Conventional Portable Radio)

BF-TD505 is a great model for users to migrate their analog two-way radios in sectors such as hotels, restaurants, supermarkets, etc. On top of conventional analog functions, it also brings digital features like integrated voice and data and efficiency operation; therefore, you're better connected, safer and more productive.

## 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.



### 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.



### 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
- Smart low & high power switching
- Hands-free VOX
- Roaming

### General Performance

- Frequency bands: VHF:136-174MHz UHF:350-400/400-470/450-520MHz
- 160 channels/ 32 zones
- Display: 1.77" TFT
- IP67 Protection
- 5W output power, 2000mAh battery



### Voice Services

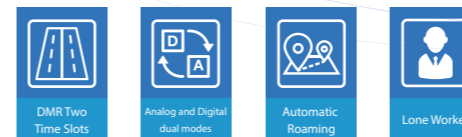
- DMR two time-slots
- Digital/Analog mixed mode
- Multiple communication modes: delayed access, Offline, rejection of strange calls

### Data Services

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

### Safety Services

- Emergency call
- Intelligent voice alarm
- Lone-Worker



# BF-TD506/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-TD506

## Features and Details

### General Performance

- Frequency bands: VHF:136-174MHz  
UHF:350-400/400-470/450-520MHz
- 160 channels/ 32 zones
- IP54 Protection
- 1800mAh battery
- 5W(TD506)/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

- Status/SDS messaging (in TMO & DMO)
- General encryption

### Safety Services

- Emergency call
- Intelligent voice alarm
- Lone-Worker feature

### Applications

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



DMR Two Time Slots



Analog and Digital dual modes



Automatic Roaming



Lone Worker

# 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

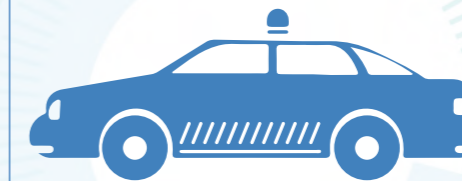
- Status/SDS messaging (in TMO & DMO)
- Group Message
- ARC4& AES256 Encryptions
- TF card encryption

### 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



### Applications

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



Full Duplex Call



Automatic Dual Time Slot



DMR Two Time Slots



Analog and Digital dual modes



GPS



Automatic Roaming



Built-in Bluetooth



DMR Tier III



Lone Worker

# 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

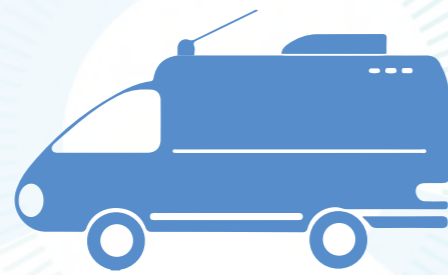
- DMR Virtual Trunking
- DMR Two Time -slot

### 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)

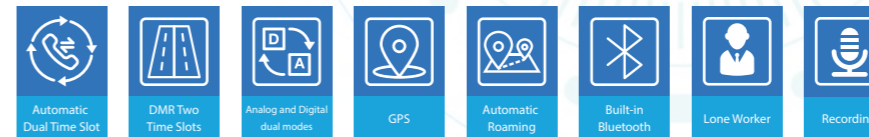
### General Performance

- 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

- Status/SDS messaging (in TMO & DMO)
- Static/Dynamic encryption
- DTMF + 5Tone analog signaling









# Terminal Comparison

Type	Handheld Radio							
Model	SPC950	SPC810	TP800	TD950	TD930	TD910D	TD512	
Pictures								
Frequency Range	UHF: 350-400MHz (PDT) + 4G/3G/2G; 400-470MHz(DMR) + LTE TDD: B1/B3/B5/B8 + B38/B39/B40/B41	UHF: 350-400MHz 400-480MHz GSM: B2/3/5/8 CDMA: BC0 WCDMA: B1/2/5/8 TDS: B34/39 FDD: B1/2/3/5/7/8/18/19/20/25/26/28a/28b TDD: B34/38/39/40/41	VHF: 136-174MHz UHF: 350-400MHz/400-480MHz/450-520MHz LTE-FDD: B1/B3/B5/B8 LTE-TDD: B38/B39/B40/B41 WCDMA: B1/B8 TD-SCDMA: B34/B39	UHF: 350-400MHz/400-470MHz	VHF: 136-174MHz UHF:350-390MHz/450-520MHz/400-470MHz	VHF+UHF1: 136-174MHz+400-480MHz VHF+UHF3: 136-174MHz+350-390MHz	VHF: 136-174MHz UHF: 350-390MHz/400-470MHz/450-520MHz	
Output Power	U:4W 4G/3G/2G/LTE: 0.2W-0.5W	≤3W	H: 4W L: 1W	H: 4W M: 2W L: 1W	H: 4W L: 1W	H: 4W M: 2W L: 1W	≤5W	
Channel Capacity	1024	1024	100	1024	1024	3773	1024	
Zones	64	/		64	128	3000	64	
Mode	Analog/Digital	Analog/Digital	Analog/Digital	Analog/Digital	Analog/Digital	Analog/Digital	Analog/Digital	
BelFone System Compatibility	BDC, BTX, ETX	SDC, BMC, SVT	/	BDC,BTX,ETX	SDC,BDC, BTX, ETX	BMC	BDC, SDC, SVT	
Display Type	4.0" IPS	2.8" 480*640RGB	1.77" transfective LCD	2.0" IPS 240*320RGB	1.77" TFT 128*160RGB	1.60" OLED	1.77" TFT 128*160RGB	
Battery Capacity	2850mAh	4000mAh	5000mAh	3350mAh(Li-Ion)	2300mAh(Li-Ion) 3350mAh(Li-Ion)	2500mAh(Li-Ion) 3350mAh(Li-Ion)	2000mAh(Li-Ion)	
Keypad	Half	Half	Full	Full	Full	Half	Half	
GPS	Optional	√	Optional	Optional	Optional	X	Optional	
RFID Reader for Patrol	Optional	Optional (NFC)	Optional	X	Optional	X	X	
Roaming	√	√	√	√	√	√	√	
Emergency Button	√	√	√	√	√	√	√	
Mandown	√	√	√	√	√	X	Optional	
Local Voice Recording	Optional	√	Optional	X	X	X	Optional	
Built-in Bluetooth	√	√	Optional	Optional	X	X	X	
Bluetooth Audio Accessories	Optional	Optional		Optional				

Handheld Radio				Mobile Radio		
TD511	TD510	TD505	TD506	TM950	TM8250	TM8500
						
				UHF: 350-400MHz / 400-470MHz	VHF: 136-174MHz UHF: 350-390MHz/400-470MHz/450-520MHz	VHF: 136-174MHz UHF: 400-470MHz UHF2: 450-520MHz
≤5W	≤5W	≤5W	≤5W	H: 45W/25W optional M: 10W L: 5W	H: 50W M: 25W L: 10W	H: 45W M: 25W L: 10W support customized
1024	512	1024	1024	1024	1024	1024
64	32	64	64	64	128	64
Analog/Digital	Analog/Digital	Analog/Digital	Analog/Digital	Analog/Digital	Analog/Digital	Analog/Digital
BDC, SDC, SVT		BDC, SVT		BDC, BTX, ETX	BDC, SDC, SVT	BDC, SVT
1.77" TFT 128*160RGB	/	1.77" TFT 128*160RGB	/	2.0" IPS 240*320RGB	2.0" TFT 176*220262	1.77" TFT 128*160RGB
2000mAh(Li-Ion)	2000mAh(Li-Ion)	1800mAh(Li-Ion)	1800mAh(Li-Ion)	/	/	/
Full	/	Full	/	Full (Remote Speaker Mic)	Full (Remote Speaker Mic)	No keypad (Remote Speaker Mic)
Optional	Optional	X	X	Optional	Optional	Optional
X	X	X	X	X	X	X
√	√	√	√	√	√	√
√	√	X	X	√	√	√
Optional	Optional	X	X	X	X	X
Optional	Optional	X	X	X	Optional	Optional
Optional	X	X	X	Optional	Optional	Optional
Optional				Optional (External)	Optional	Optional (External)

# Terminal Comparison

Type	Handheld Radio						
Model	SPC950	SPC810	TP800	TD950	TD930	TD910D	TD512
Pictures							
Full Duplex Call	√	√	X	√	√	X	X
Analog Signaling	/	X	/	2Tone	/	/	DTMF + 5Tone
Virtual Trunk	√	Optional	√	√	√	√	√
Single Frequency Repeater	X	X	X	X	√	X	X
Vibration	√	√	X	√	√	X	X
Text to Voice (TTS)	√	√	X	X	√	X	X
Telemetry	√	√	√	√	√	√	√
OTAP	√	√	X	√	X	X	X
MPT Upgradable	Optional	X	X	Optional	X	X	X
Tier III Upgradable DMR TIER III	√	X	X	√	√	X	X
Dust & Water Proof	IP68	IP68	IP54	IP68	IP68	IP68	IP67
EN30086 Approved (Analog)	√	X	√	√	√	√	X
MIL-STD-810	√	√	√	√	√	√	√
Encryption	AES/ARC TF card customization	ARC4/AES256	ARC4/AES256	AES256	ARC4/AES256	AES/ARC TF card customization	ARC4/AES256
Intrinsic safety	X	X	X	Explosion (CNEX/IECEX)	X	X	X

Handheld Radio				Mobile Radio		
TD511	TD510	TD505	TD506	TM950	TM8250	TM8500
						
X	X	X	X	√	X	X
DTMF + 5Tone	DTMF + 5Tone	/	/	2Tone	/	DTMF +2/ 5Tone
√	√	X	X	√	√	X
X	X	X	X	X	Optional(TR8250R)	X
X	X	X	X	X	X	X
X	X	X	X	X	X	X
√	√	√	√	√	√	√
X	X	X	X	√	X	X
X	X	X	X	Optional	X	X
X	X	X	X	√	X	X
IP67	IP67	IP54	IP54	IP54	IP54	IP54
X	X	X	X	√	X	X
√	√	√	√	√	√	√
ARC4/AES256	ARC4/AES256	normal	normal	AES256	ARC4/AES256	ARC4/AES256
Explosion (CNEX)	Explosion (CNEX)	X	X	X	X	X

# 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 in 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

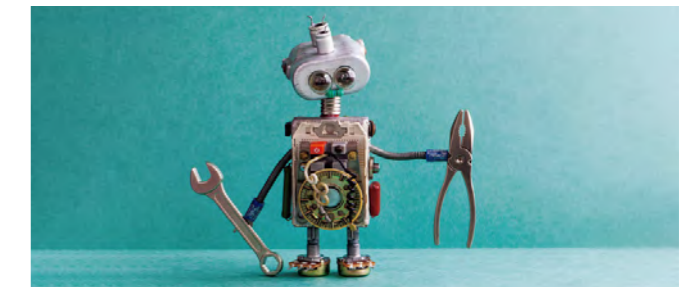
Proactively prevent faults, improve performance, and adapt to changing environments by accessing current releases of hardware and software. Full version releases with new features – not just point release bug fixes – are regularly available and fully supported, so you get the maximum advantage when you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

# BeFone 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 happens. BeFone 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

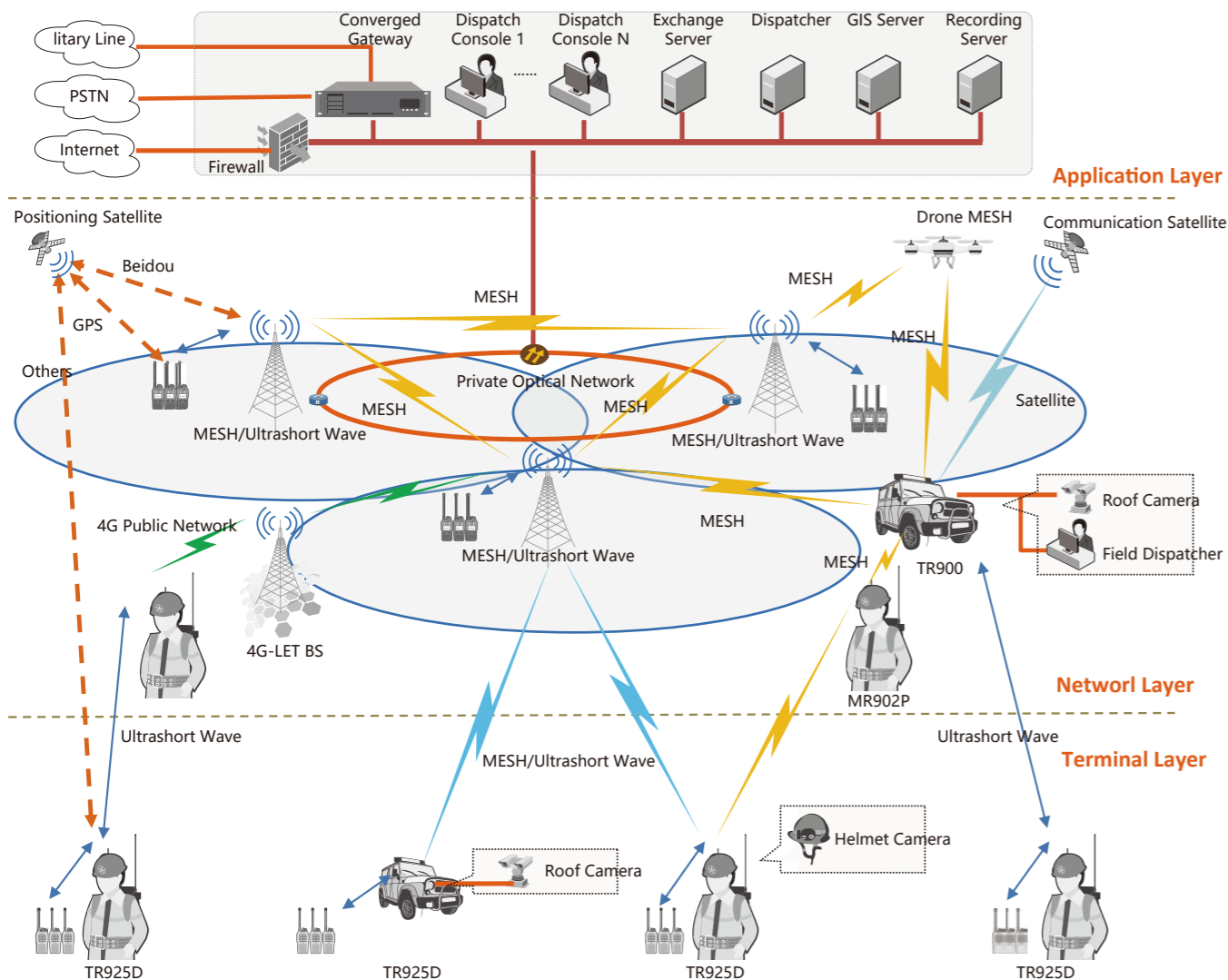
- Dispatch Center Network
- Field Command Network
- Field Operation Network

### 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

BeFone BMC connects seamlessly the backbone network and field network to facilitate preventive actions and emergency handling. It empowers taskforces 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 end-to-end encryption to ensure information security.



### Ease of Operation, Good Mobility

Designed to meet all sorts of challenges, BeFone 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 ruggedness standards. Features such as fast heat dissipation and high & low Temperature resistances ensure BMC system's reliability in harsh environments.



### Seamless Cooperation

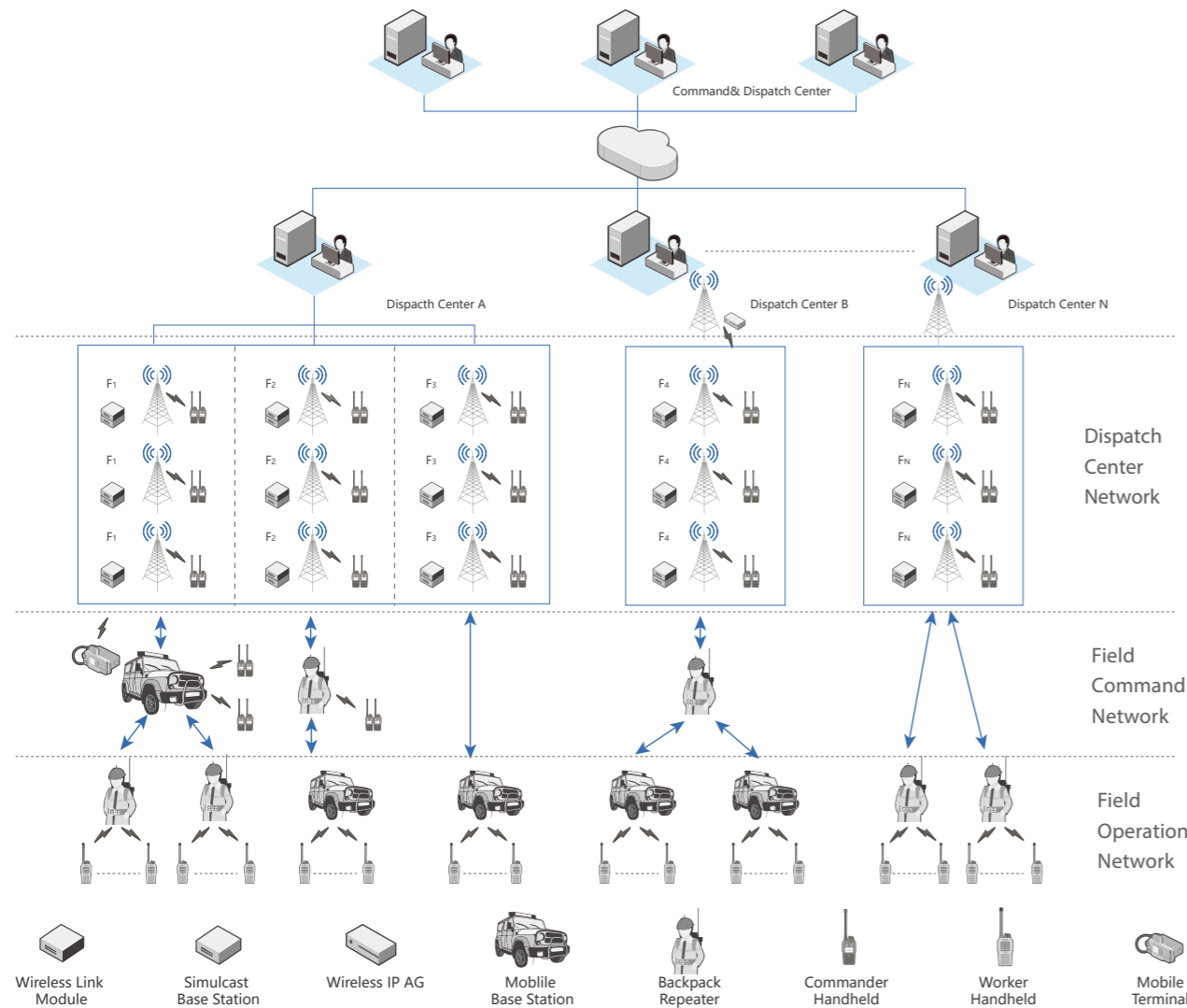
BMC system connects central and field command networks and enables interconnection among departments using different radio frequencies. Therefore, the first responders are able to collaborate as a team.

## 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 increased 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 load 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.

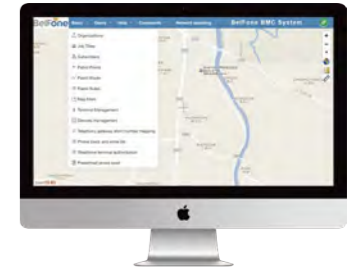
# MC-C (Elements)



MC-Modules



MC-Server



Dispatcher

## BF-TR900 Professional Repeater

BF-TR900 is a highly integrated DMR repeater in Belfone BMC system with ruggedness of 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

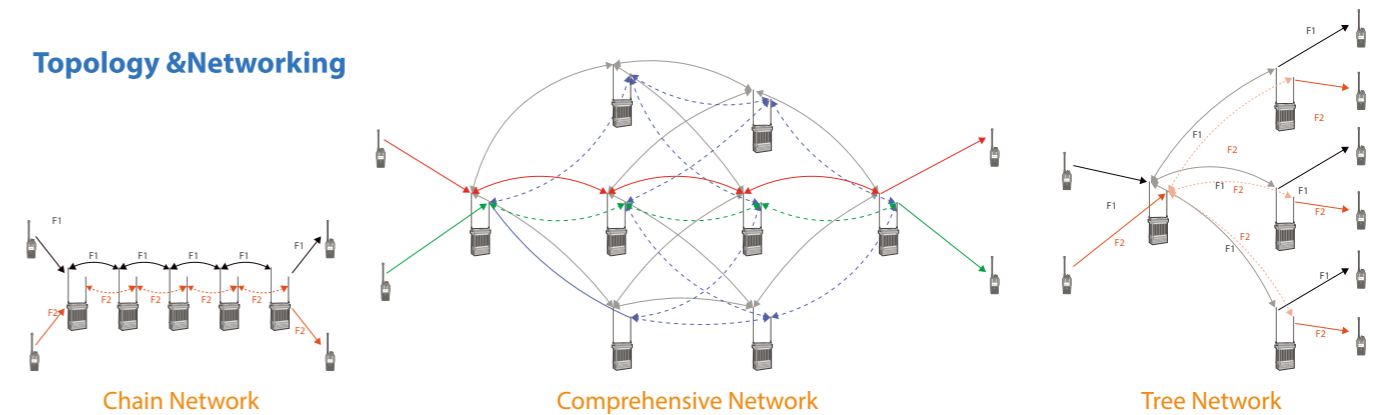
This power supply is mainly developed for our MESH base stations and BF-TR900 repeater. With compact structure and advanced circuits, it supports wide-range input, high efficiency, high reliability and various protection. It can be widely used in the military, police, fire protection, utility, petroleum, 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 different frequencies of various departments 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.

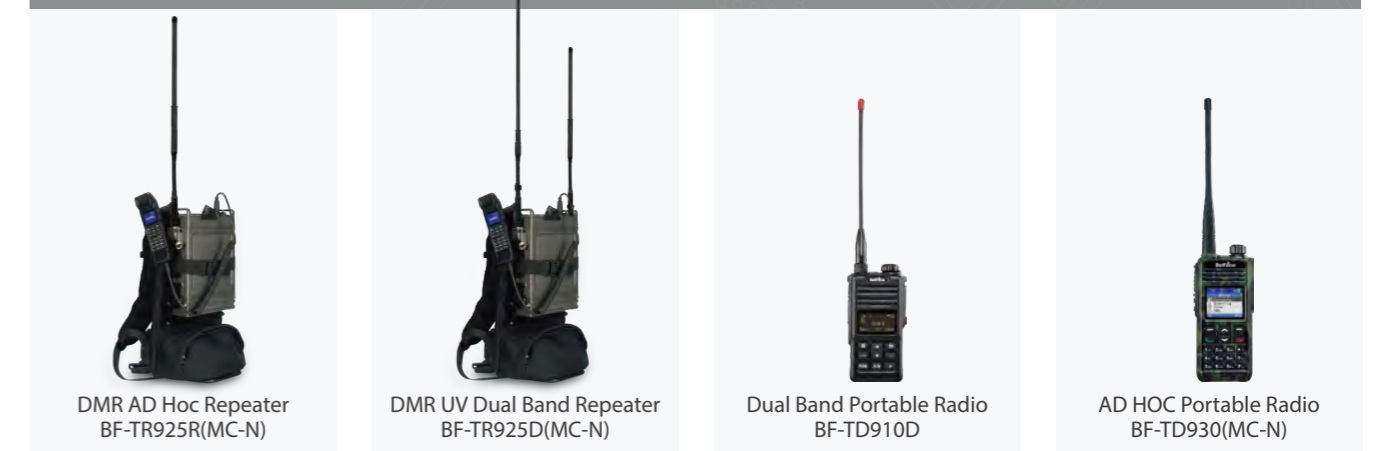
### High Reliability and Resilience

Designed to be military standard rugged, portable, durable, waterproof and dustproof, it can be quickly deployed and work under the harsh conditions to ensure reliable connectivity. AP nodes in MESH 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, BeIFone TR925R(MC-N) is a manpack 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 a ideal solution for search and rescue teams, personnel working at isolated utility sites, first responders during disaster and rescue operations or for those working underground or in tunnels.



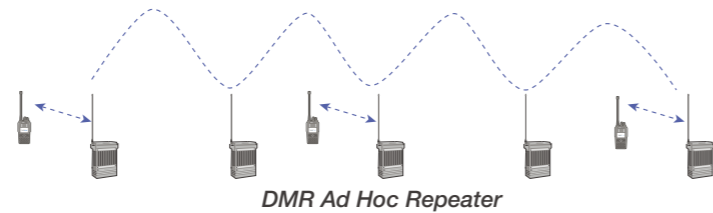
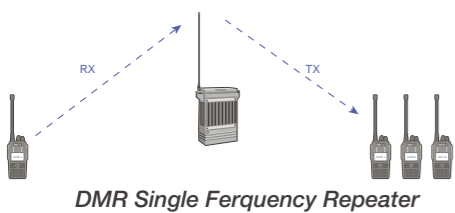
## Versatile Connectivity

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



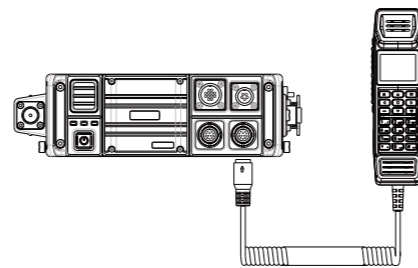
## Multiple Working Modes

- DMR Ad Hoc repeater
- DMR single frequency repeater
- DMR base radio (DMR Tier II, III)
- 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 within a network disconnects or malfunctions.



## Ease of Installation

- Manpack mounted.
- 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.



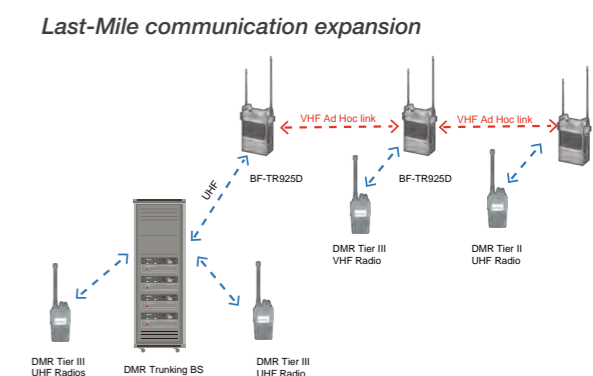
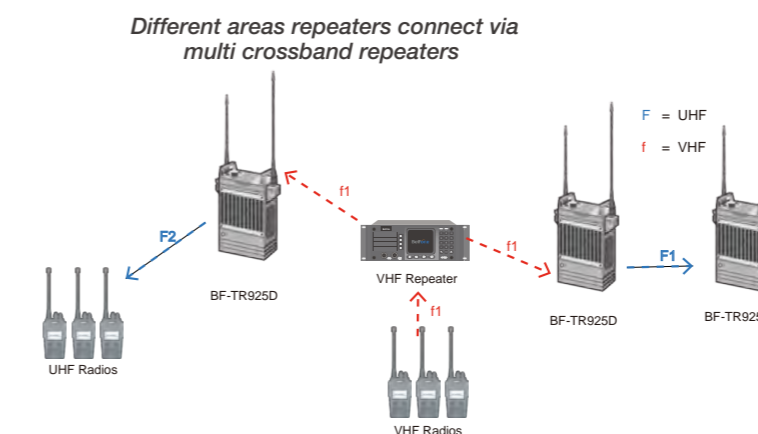
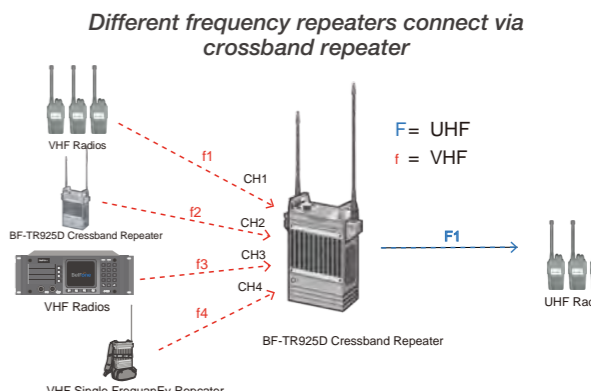
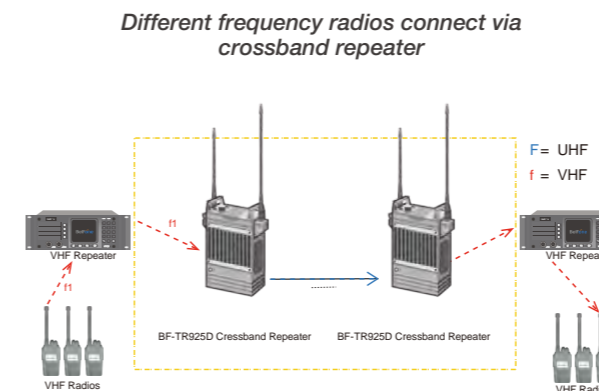
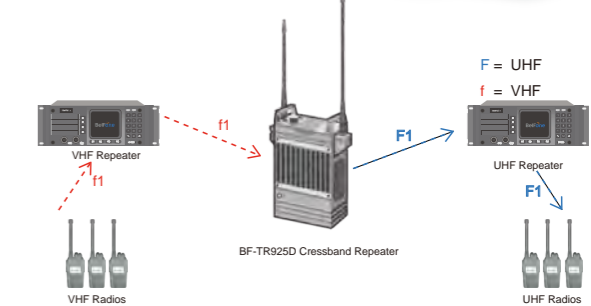
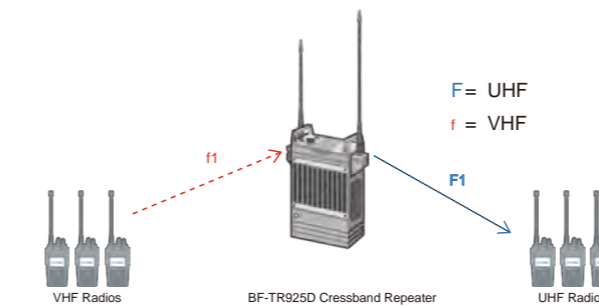
## Dual Band Interoperability

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 (DMR Tier II, III)
- Analog base radio (for UV both)



DMR Tier III and Ad Hoc Hybrid Network

# 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



# BF-TD930(MC-N) AD Hoc Portable Radio

Designed for emergency response system, BF-TD930(MC-N) works as a mobile repeater as well as a high-end digital radio which incorporates such advanced features as virtual trunking, IP68 protection, GPS, full duplex call, Ad Hoc, SFR, etc. Ad Hoc enables quick networking and flexible deployment. Features such as man-down, loner worker and emergency alert keep the users safe and sound. It greatly benefits on-site users from sectors such as public security and emergency response.

## Highlights and Benefits

### Flexible and Reliable Ad Hoc Networking

Without the aid of repeaters, this radio can speedily establish a portable Ad Hoc network with as many nodes as it may be needed. It is self-adapting and supports versatile network topologies.



### Handheld SFR in Dual Modes

This device can also function as a single frequency repeater, allocating one timeslot to receive and the other to transmit at same frequency and using DMO mode to furtherly extend radio coverage. One single device serves two purposes.



### Ad Hoc Networking

Enhanced Communication Efficiency  
Incorporating ground-breaking full-duplex call to allow simultaneous two-way voice calls, it facilitates crucial information exchange, making sure the voice call gets through even in peak traffic.

### Indoor and Outdoor Positioning

With better accuracy and precision, built-in GPS and wireless modules enable the commander to locate and track team member. It contributes a lot to personnel management and dispatching.



Applications	Security Services	Data Services
Automatic roaming	Emergency alarm	Status/SDS messaging (in TMO & DMO)
Two PTT	Lone-Worker feature	Groups data
Flashlight, VOX	Covert mode	ARC4& AES256 Encryptions

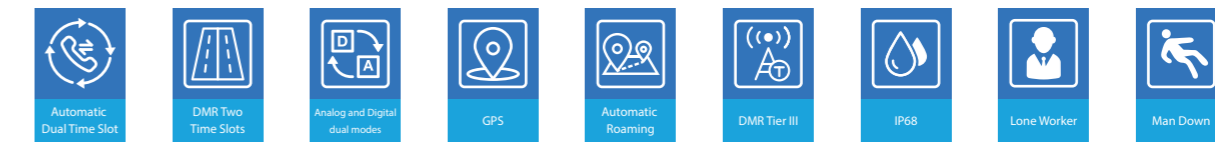
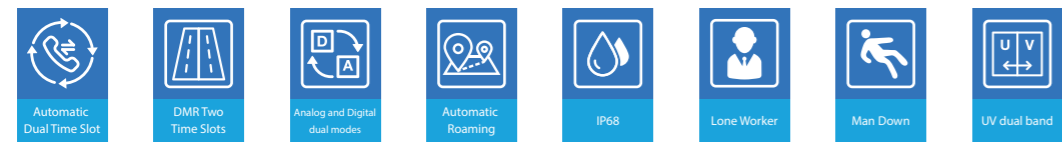
  

General Performance	Voice Services
Frequency bands: VHF:136-174MHz UHF:350-400/400-470/450-520MHz	DMR Virtual Trunk
3773 channels/3000 zones	DMR Two Time Slots
Display: 1.6" OLED	Private/Group/All/ Priority call
IP68 Protection	Interrupt/ Override
2W power, 250mAh battery	

Voice Services	Security Services	Data Services
Full-duplex call	Emergency alarm	Status/SDS messaging (in TMO & DMO)
DMR Virtual Trunk	Man-Down alarm	Groups data
Private/Group/All/ Priority call	Lone-Worker feature	ARC4& AES256 Encryptions
Interrupt/ Override	Covert mode	

General Performance	Applications
Frequency bands: VHF:136-174MHz UHF:350-400/400-470/450-520MHz	Automatic roaming
1024 channels/ 128 zones	GPS
Display: 1.77" TFT	RFID
IP68 Protection	SFR
5W output power, 2300mAh battery (3350mAh optional)	Ad Hoc
	Vibration

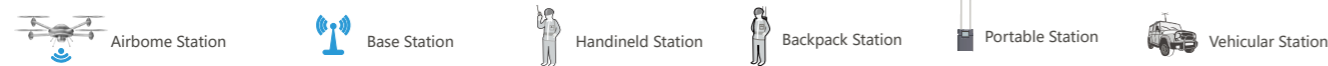
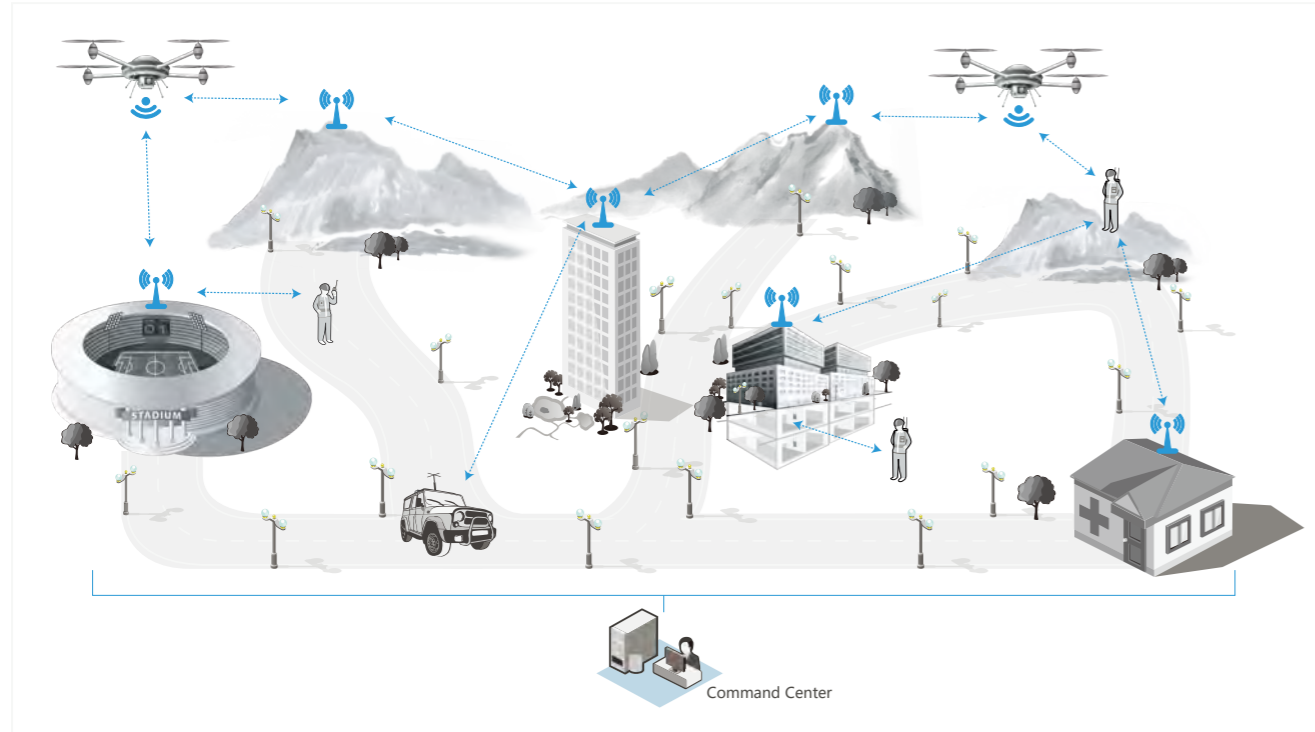


# MC-M (Mission Critical MESH)

# 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.

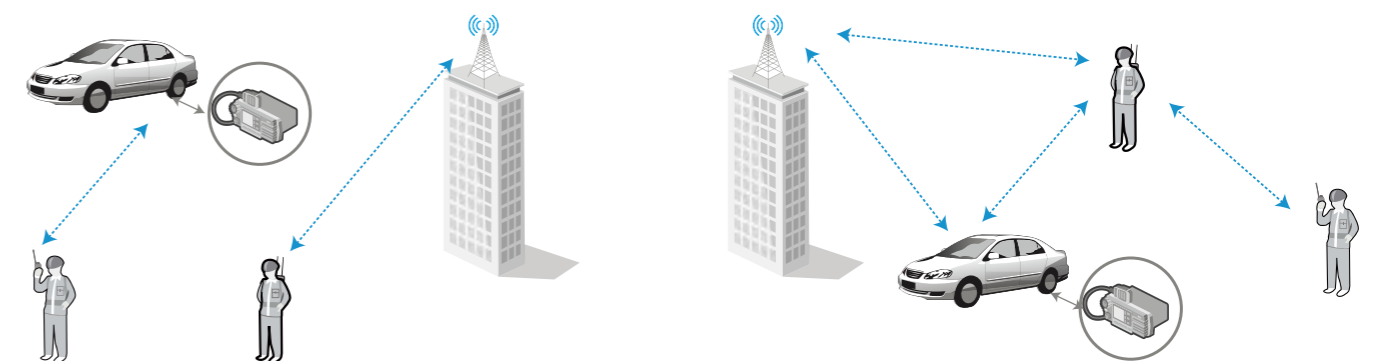


## BF-TR920B MESH High Power Base Station

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

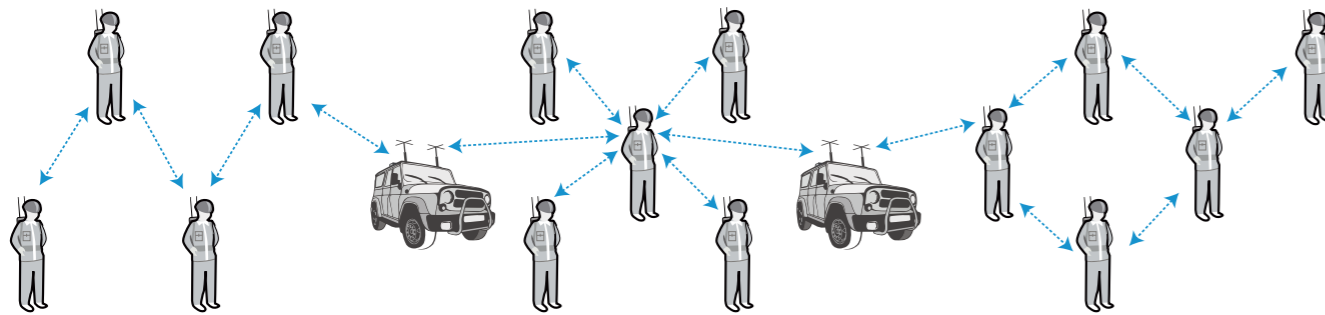
In order to transmit video continuously and smoothly, the built-in audio and video recorder adjusts picture and video resolution and frame rate based on available bandwidth.

# 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

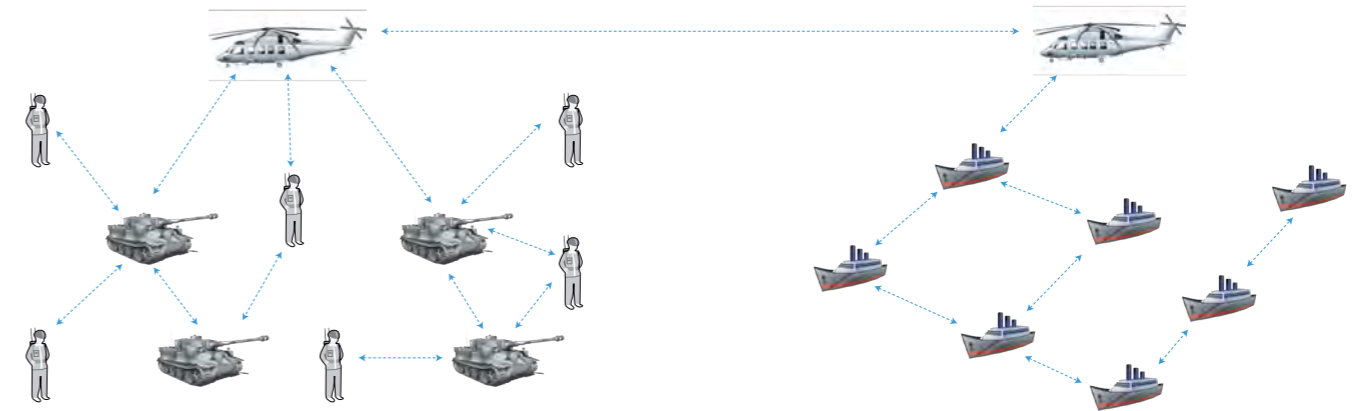
As the vehicle moves, the nodes update themselves in real-time and dynamically reconfigure routing, while the overall transmission and communication across the network experiences no disruption.

# 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

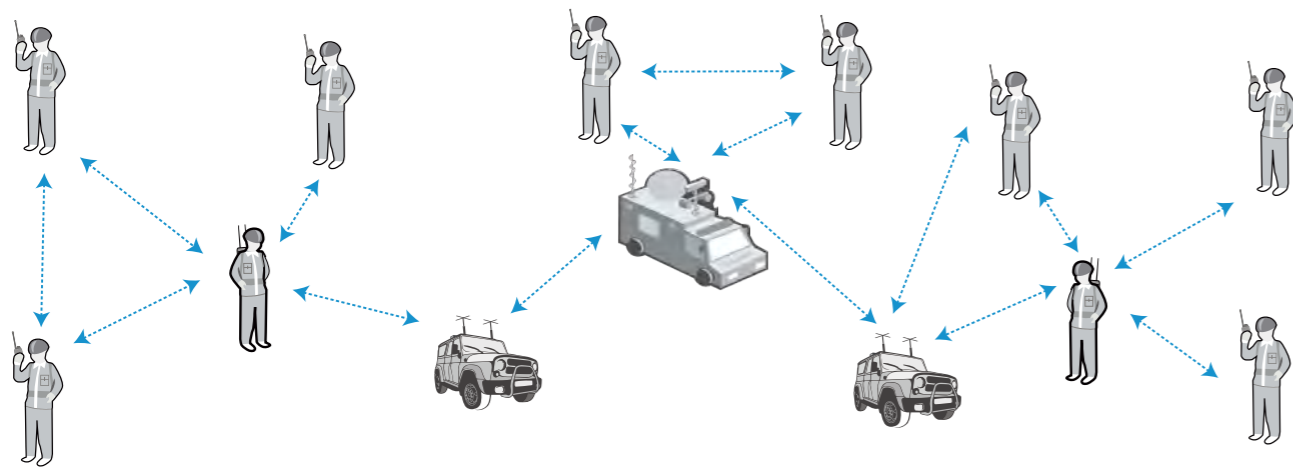
As the vehicle moves, the nodes update themselves in real-time and dynamically reconfigure routing, while the overall transmission and communication across the network experiences no disruption.

# 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.