Ensure Connection and Response for Emergency Communications

BelFone BMC Emergency Communication Products

DMR
DIGITAL MOBILE RADIO ASSOCIATION

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BelFone
Communications for Effciency and Safety

Communications Matter when Mission is Critical

BelFone Emergency Response Communication Soluiton for Disaster Rescue

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To Connect and Respond is Important When Mission is Critical

BelFone Emergency Response Communication Soluiton for Arm Force of Public Safety

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Fast and Stable Connection is Vital when Mission is Critical

BelFone Emergency Response Communication Soluiton for Forest Fire Fighting

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BelFone Emergency Response Solutions

BMC Mission Critical Communication Solutions

- **Missions is ensured when communication is critical**

  When disasters strike, a quick, informed, and decisive response will save the day. Fast deployment, efficient dispatching, network stability , voice and video communications, and coordination between different groups are of great importance when mission is critical. BelFone BMC Emergency Response solutions give you everything you need to connect and respond. This is the best choice for mission critical users.

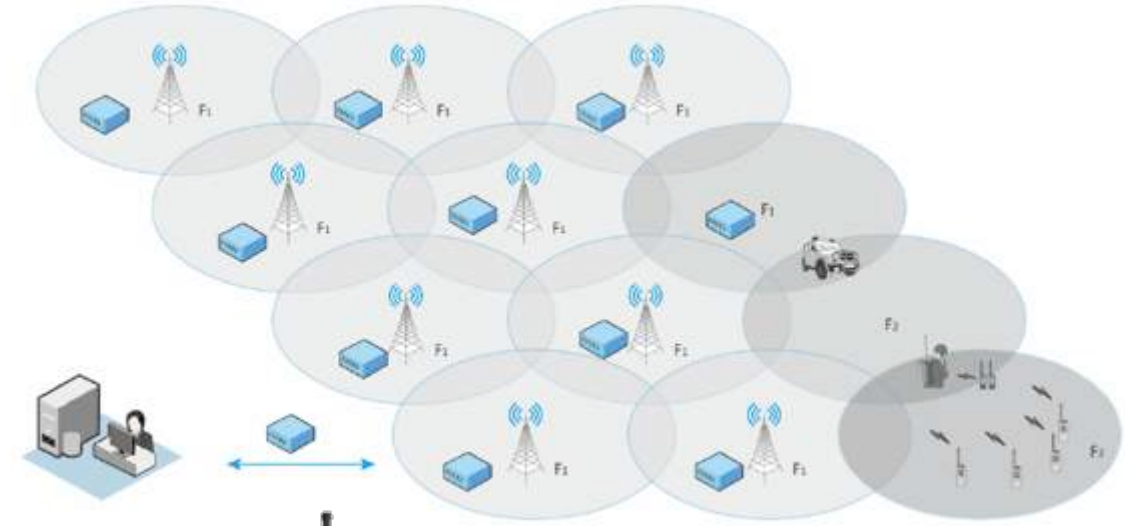
DMR

MESH

BelFone Emergency Response Solutions

DMR Mission Critical Communication Product

"3+3+3" Solution



3 Networking Schemes

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

3 Dispatching Levels

- Dispatch Center
- Field Commander
- Field Team Leaders

3 Application Scenarios

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

BelFone Emergency Response Solutions

DMR Mission Critical Communication Products

- **DMR Mobile Radio + Single Frequency Repeater**

  BF-TM8250R is a DMR mobile terminal with 2 timeslot which is able to function as a single frequency repeater. It allocates one slot to receive a signal and the other to transmit it on the same frequency, using DMO mode to extend radio coverage. In this way, it saves another frequency to function as a repeater without the need of a duplexer or an extra antenna. It is an excellent combination of mobility and capability!

BelFone Emergency Response Solutions

DMR Mission Critical Communication Product

- **Modulation design base stations**

  The BelFone BMC mission critical communication system infrastructure is based on module design. Thus it is fit for versatile combinations according to the specific needs of a specific case. The modules can be combined for both fixed infrastructures or portable uses. They are flexible enough to fit into all kinds of application scenarios.

  Flexible and functional, BelFone BMC emergency response solutions are ideal for the mission critical organizations.

Modules for DMR Mission Critical System Base Stations

50W Simulcast Repeater
BF-TR906

Simulcast Voter
BF-TC971

50W Dual Band Repeater & Base Radio
BF-TR910

Link Controller Module
BF-TC917

Wireless Link Module
BF-TC980

Duplexer Module
BF-TC983

Power Distribute Module
BF-TC973

Power Supply Module
BF-TC975

Make Your Own Combination

BelFone Emergency Response Solutions

DMR Mission Critical Communication Product

- **Backpack Dual Bands Repeater**

  BelFone IP 67 DMR backpack repeater is a 15W dual-bands-single-frequency repeater designed that meets MIL STD810G standards. It is uncommonly tough and robust to brave all kinds of harsh environments. It provides an opportunity to build a fast and flexible network for mission critical communication groups. The paired 40 AH battery pack ensures a long-lasting connection for critical communications. It is a dual modes device that supports both repeater working mode and base radio mode, which greatly facilitates fast deployments and instant response.

Portable Dual Band
Repeater & Radio
BF-TR911

40 AH battery
(Can customized to 60 AH)

BelFone Emergency Response Solutions

DMR Mission Critical Communication Product

Team Leader's Radio
BF-TD950

- **BF-TD950 Commander's Radio**

The 5W handheld radio BF-TD950 is a professional radio of DMR Tier 2&3. It offers a whole set of cutting-edge digital features such as transmit interrupt, user priority setting, encryption, authentication, full duplex, call to PSTN and PABX etc., make it ideal for a commander's use.

Features:

- 5W Output Power
- IP67 Dust&Water Proof
- 3300mAh Battery
- Transmit Interrupt
- Customized Encryption
- Full Duplexer
- Remote Monitor
- Kill/Revive
- Call to PSTN
- GPS Position

Team Crew's Radio
BF-TD939

- **BF-TD939 Team Crew's Radio**

The 5W handheld radio BF-TD939 is a professional radio design of DMR Tier 2. The IP54 protection makes it tough and robust, suitable for using in a variety of situations for team crews' communications.

Features:

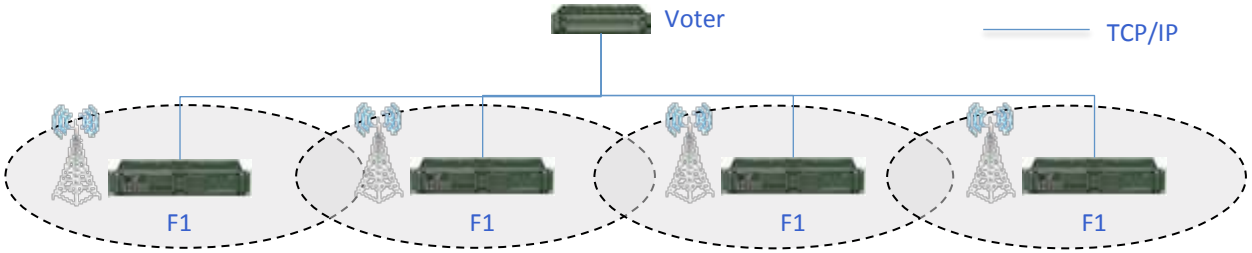
- 5W Output
- IP55Dust&Water Proof
- 2200mAh Li-poly Battery
- One-touch Call
- Scan & Monitor
- Emergency Alarm
- Late Entry
- Optional USB Battery
- GPS Position

BelFone Emergency Response Solutions

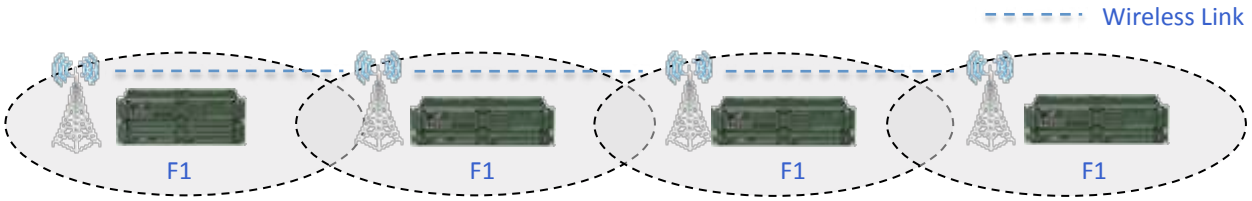
DMR Mission Critical Communication Product

Simulcast Networking

1.Simulcast Network over IP LAN/WAN



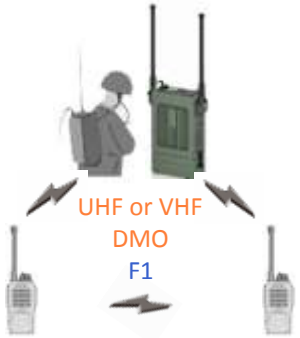
2.Simulcast Network over wireless link



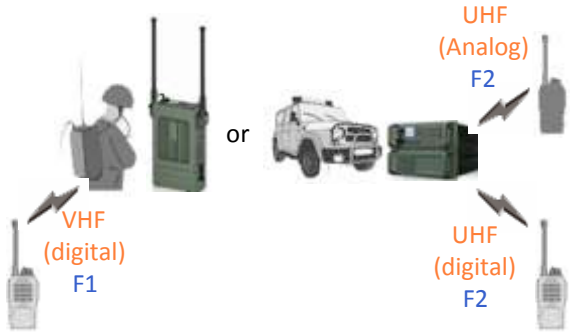
BelFone Emergency Response Solutions

DMR Mission Critical Communication Product

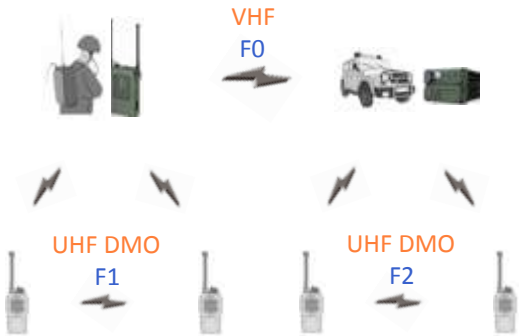
1.Single Frequency Repeater Networking Mode



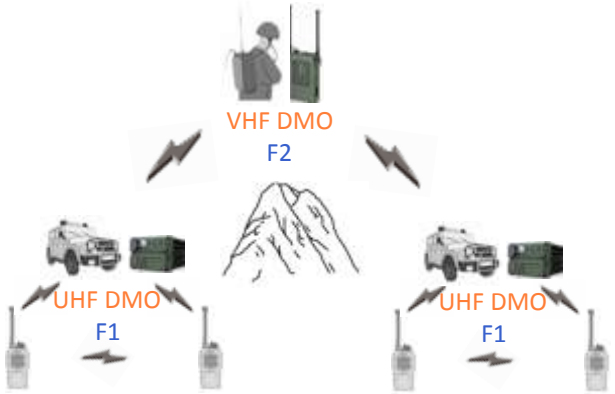
2.Cross Band Repeater Networking Mode (Mix Analog and Digital)



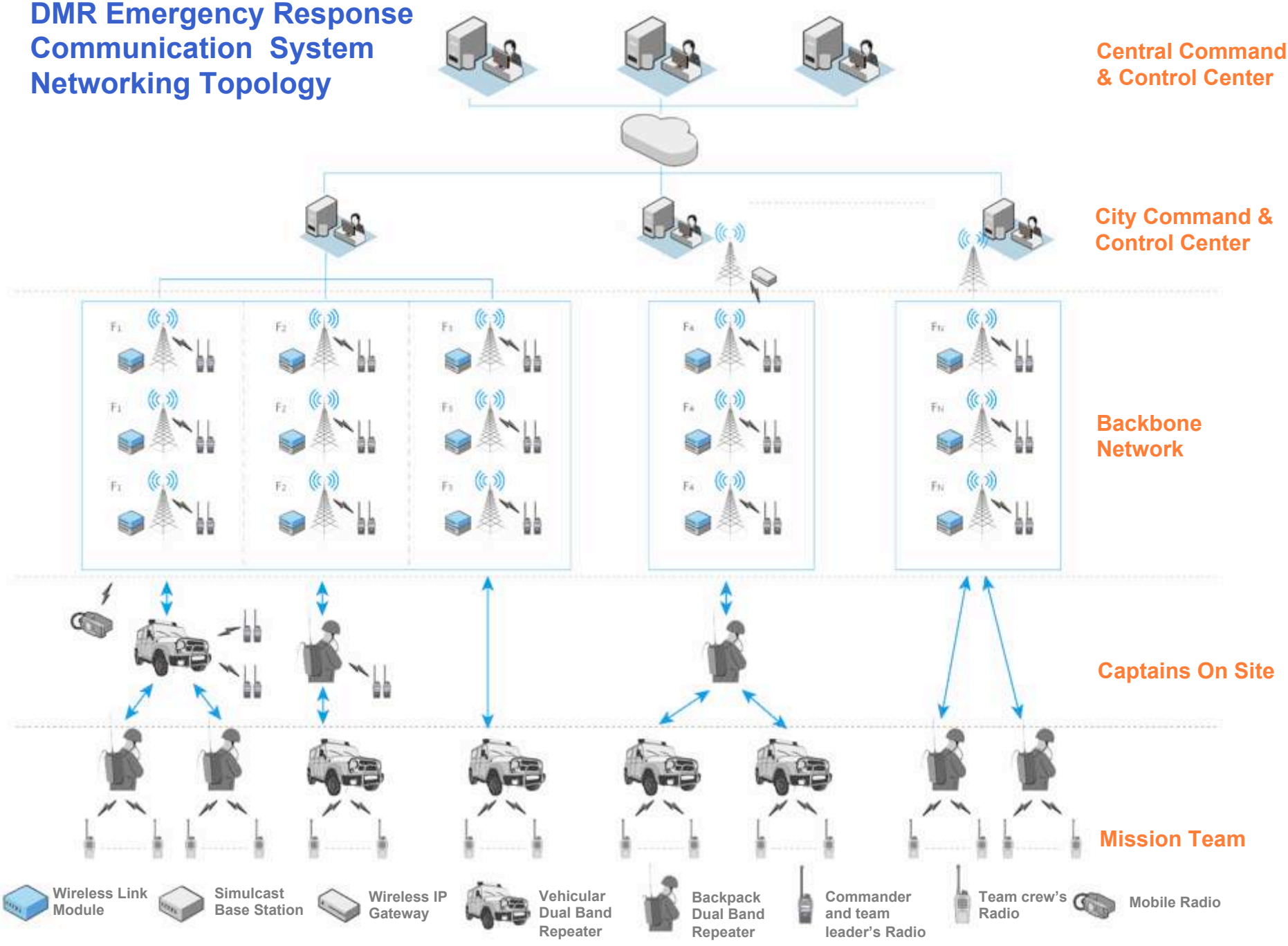
3. Direct wireless link Networking



4. Bridge wireless link Networking



DMR Emergency Response Communication System Networking Topology

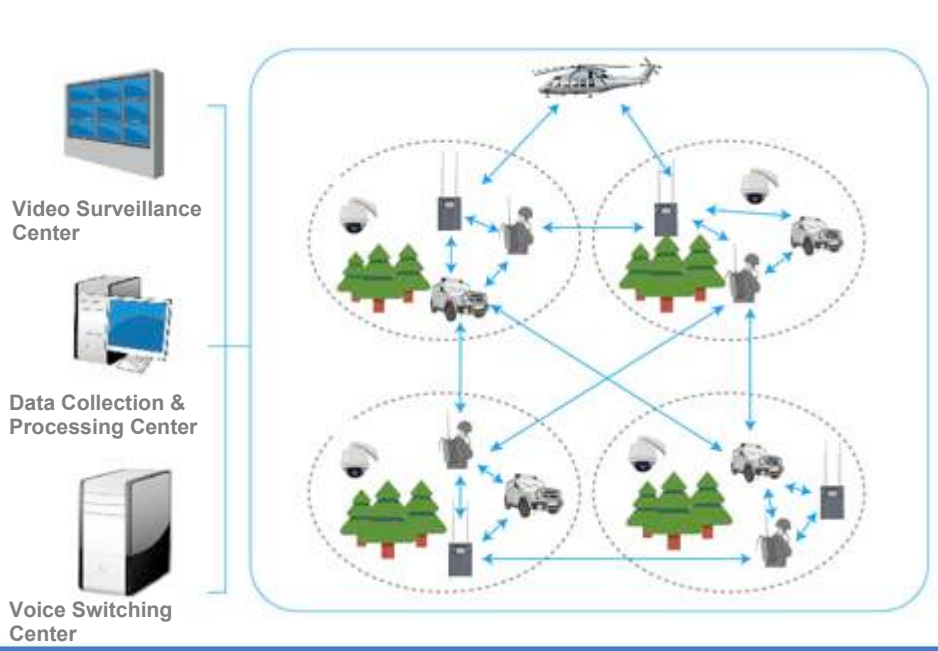


BelFone Emergency Response Solutions

MESH Broadband Communication Product

- **Broadband Video & Voice Communication Solution**

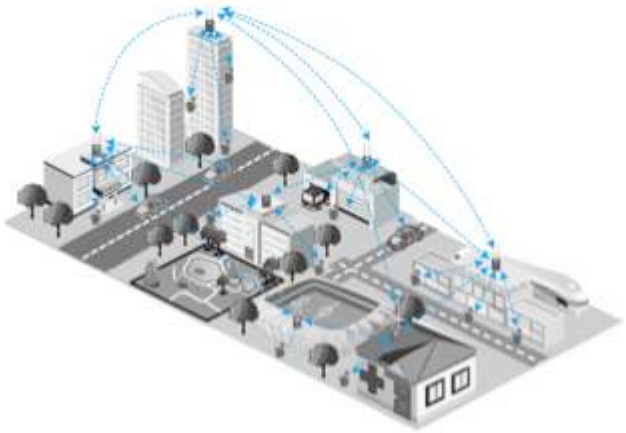
  The BelFone MESH wireless system for mission critical communication is a broadband communication system that works under MESH network to make a fast deployment scheme. The system provides both video and voice service for emergency communications, making the deployment of every terminal visible to the commander, and greatly facilitating dispatching work.

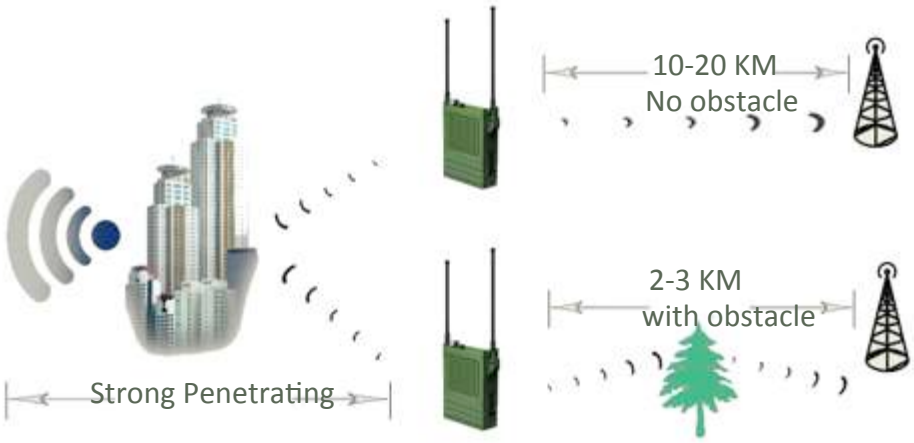


BelFone Emergency Response Solutions

MESH Broadband Communication Product

- **Advantage of BelFone MESH Ad Hoc Communication Products**
  - Long communication range
  - Wide Coverage
  - Strong Anti-inference
  - Easy to Install
  - High Stability
  - Good Diffraction
- **Main Features**
  - Frequency Band: 545-617 (support to customize within 350MHz-1.2G)
  - Maximum Data Rate: 96Mbps
  - Ideal maximum rage: 10-20 KM
  - Ad Hoc Networking: more than 50 nodes , more than 10 jumps





BelFone Emergency Response Solutions

MESH Broadband Communication Product

Specifications

General	
Working Frequency	545-617 (support customization within350MHz-1.2G)
Support Bandwidth	5M/10M/20M/40M
Power Output	33dBm(adjustable to 36 dBm)
Sensitivity	-102 dBm
Modulation	DSSS/CCK BPSK/QPSK OFDM BPSK/QPSK/16-QAM/64QAM
Working Voltage	7-47 V
Power Consumption	Maximum 15W

Ad hoc Networking	
Jumps	More than 10 jumps
Startup time	Cold start: 55s Hot start: less than 100ms
Network Node	More than 50 nodes

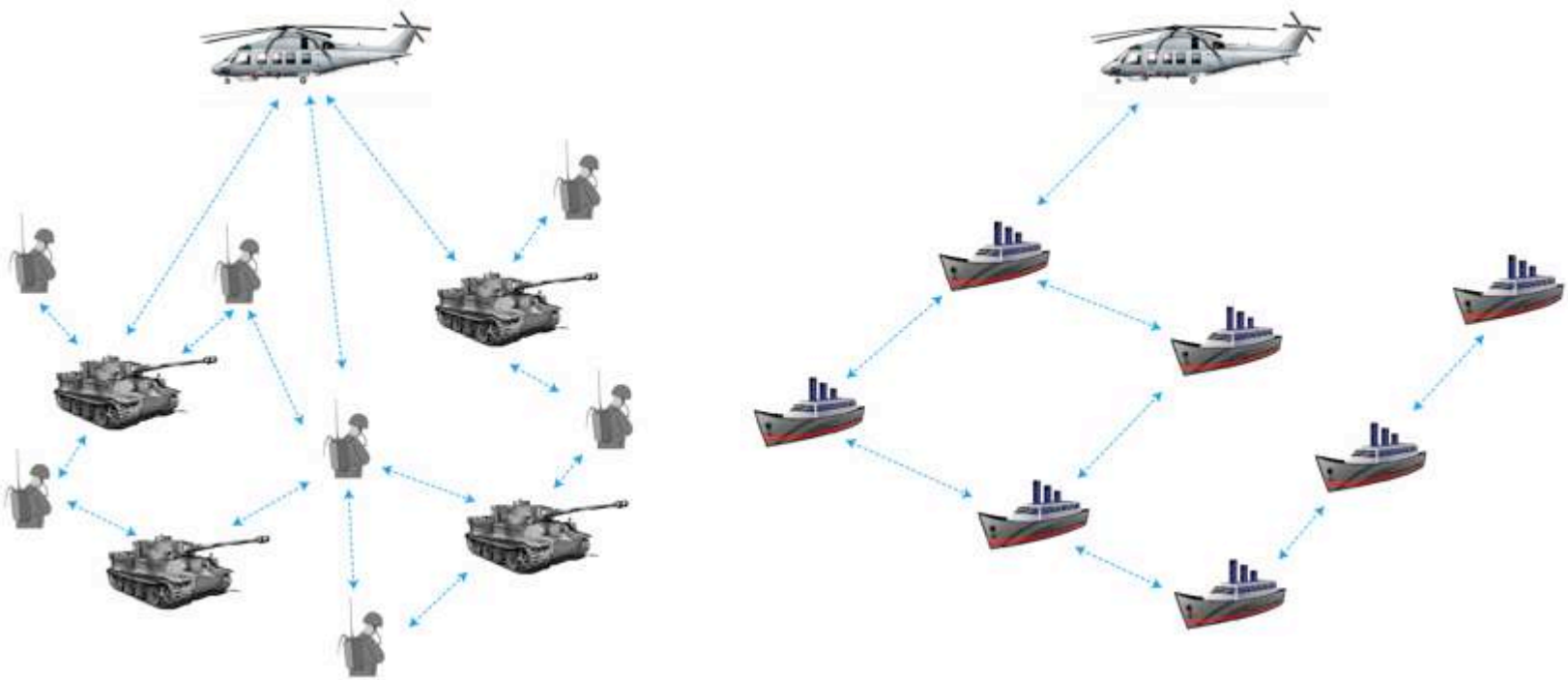
Emergency MESH Command Case
BF-MR917

Portable MESH communication
BF-MR916

BelFone Emergency Response Solutions

MESH Broadband Communication Product

Applications



Communications for Efficiency and Safety