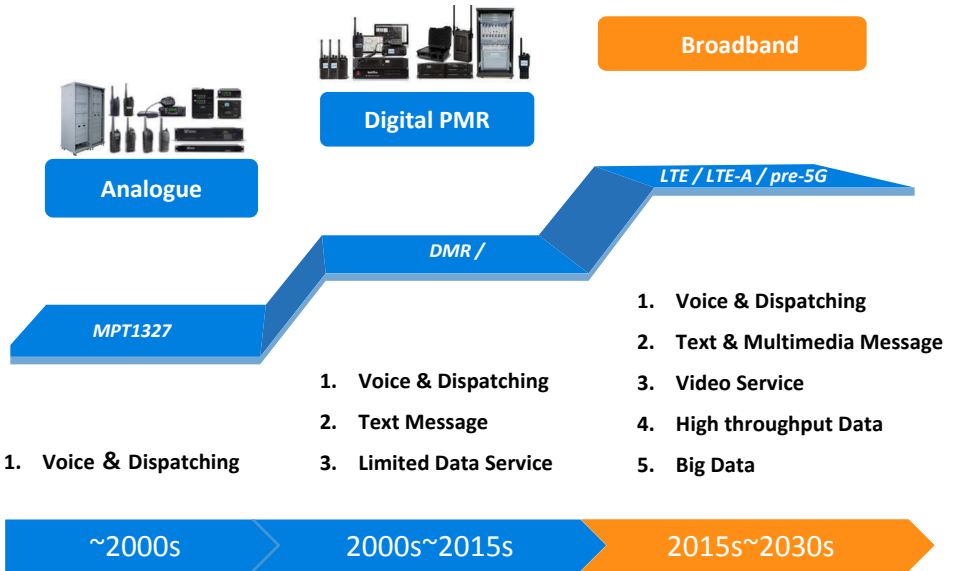# BelFone Smart Converged Portable Radio SCP970

Diverge and converge all needs

BelFone Smart Converged Radio BF-SCP970 is a revolutionary device that has integrated broad and narrow band, supporting DMR trunking and LTE. As a significant milestone, it offers unified communication experience, rich applications, enhanced data security, high productivity and cooperation efficiency, large capacity to meet diversified requirements from always changing critical situations.

BelFone

The Evolution and Migration of Professional Mobile Radios

Broadband

Digital PMR

Analogue

LTE / LTE-A / pre-5G

DMR /

MPT1327

1. Voice & Dispatching
2. Text & Multimedia Message
3. Video Service
4. High throughput Data
5. Big Data

1. Voice & Dispatching
2. Text Message
3. Limited Data Service

1. Voice & Dispatching

| ~2000s | 2000s~2015s | 2015s~2030s |

Highlights and Benefits

Multi-mode Hybrid, Versatile Connectivity, Flexible Communications

Multi-connection in versatile Network, different communication standards supported, broadband and narrowband converged. A multi-mode radio works in DMR conventional mode, DMR trunking mode, analogue conventional mode, MPT1327 trunking mode, PoC (public 3G/4G) and MC-LTE (private LTE) mode, bringing all the advantages of both narrow and broad band technologies together, which could always be stay in connect, to communicate whenever and wherever.

Multimedia Communication to Satisfy Actual Situations

Enjoy radio convenience and efficiency to deliver clear voice, and more smart applications for pictures, video, data etc. A new powerful radio with human-centered design, streamlined interfaces, accelerated communication. It brings you unprecedented advancements in mission-critical voice and data. So, you can focus on what matters most.

Intelligent Multi-application Integration Platform

Various smart working APPs like DMR, PoC, Body Worn Cam, Navigation, Workorder etc. are available and various sensors can be integrated to realize more functions, support abundant third-party customized applications to enrich services, leading intelligent management, ready for more challenges.

Rugged and Reliable Designs

Compliant with the highest protection grade IP68 (waterproof, dustproof) & MIL-STD-810G, Indicators such as impact, vibration, solar radiation meet military reliability standards, competent for most kinds of harsh working environments.

Convenient One Hand Operation

Use the device easily with only one hand even though it looks big, thus to set one hand free especially in serious and complicated situations, a new level of user friendly.

Details and Features

1 Dual Rugged Screen

- Convenient to check information from multiple angles.
- Dual screen switch automatically to save power.
- Visible in different lighting situations.
- Workable even with gloves, wet hands, in rain and dust.
- Super-tough, coming with IP68 rated water-resistance, a durable build with shatter-resistant display.

2 Versatile Necessary

PTT and programmable keys, operate as you please.

3 Perfect Audio Quality

* 3 microphones noise reduction under full duplex call, picks up sound evenly from all directions, be heard wherever you go.
* 2.5W high audio power, delivers crystal-clear and louder sound.

4 Safety Guarantee

Stay safe at all times with Lone Worker, Man Down. Emergency Alarm button and GPS positioning options.
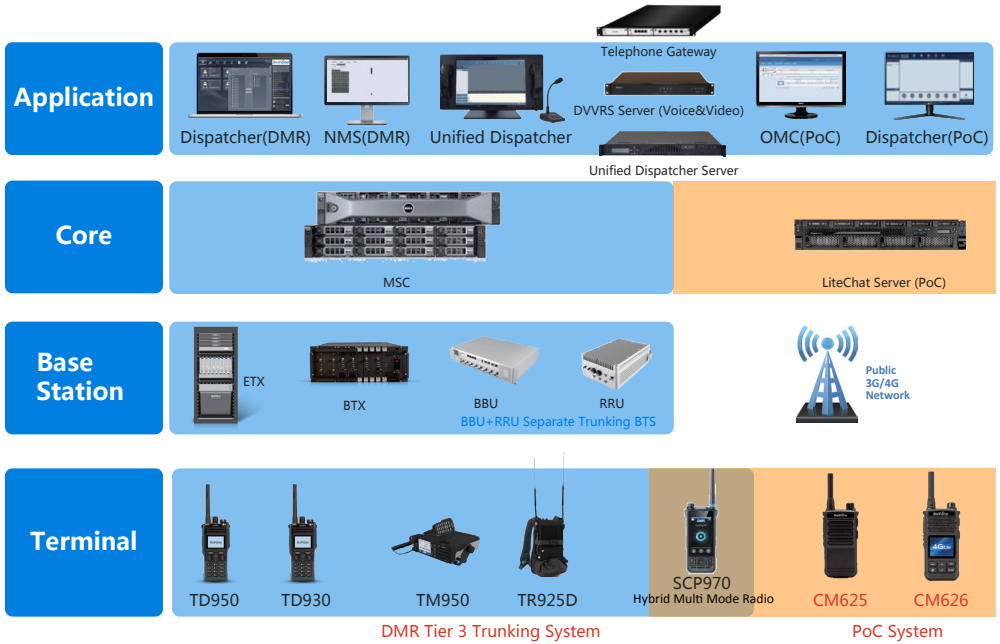
5 High Definition Camera

Rear 13MP camera, supports 4K HD video
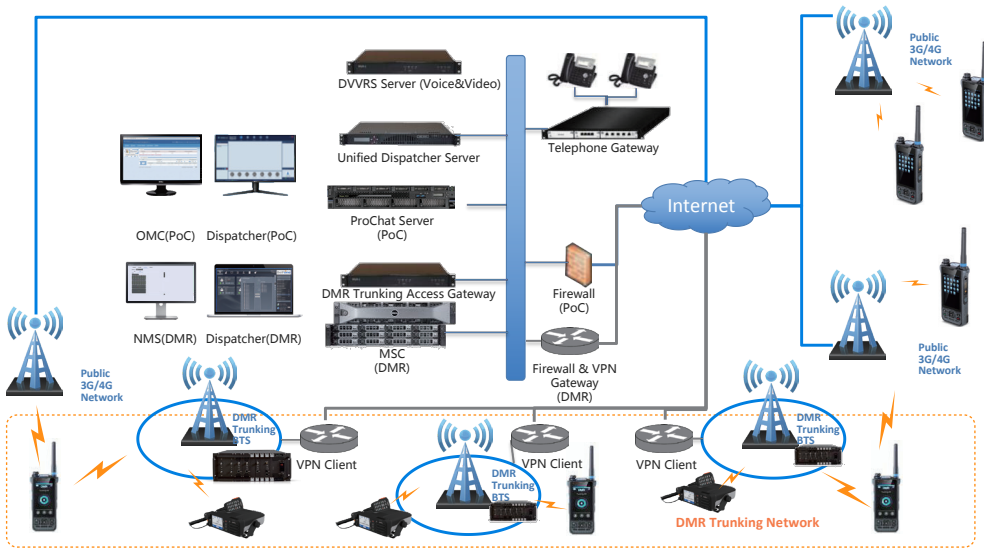
6 Smart Batteries

Let you work at ease, gives you more energy, better control and longer operation life.

BelFone DMR + LTE Hybrid Radio Solution

Application	Dispatcher(DMR) NMS(DMR) Unified Dispatcher Telephone Gateway DVVRS Server (Voice&Video) Unified Dispatcher Server	OMC(PoC) Dispatcher(PoC)
Core	MSC	LiteChat Server (PoC)
Base Station	ETX BTX BBU RRU BBU+RRU Separate Trunking BTS	Public 3G/4G Network
Terminal	TD950 TD930 TM950 TR925D SCP970 Hybrid Multi Mode Radio DMR Tier 3 Trunking System	CM625 CM626 PoC System

Topology of Hybrid DMR + PoC Network

DVVRS Server (Voice&Video)

Telephone Gateway

Unified Dispatcher Server

OMC(PoC)   Dispatcher(PoC)

ProChat Server (PoC)

NMS(DMR)   Dispatcher(DMR)

DMR Trunking Access Gateway

MSC (DMR)

Firewall (PoC)

Firewall & VPN Gateway (DMR)

Internet

Public 3G/4G Network

Public 3G/4G Network

Public 3G/4G Network

DMR Trunking BTS

VPN Client

DMR Trunking Network

DMR Trunking BTS

VPN Client

VPN Client

Specification

Frequency	
Network Mode	Broadband: TDD/FDD-LTE, WCDMA, GSM, CDMA； Narrowband: DMR
Broadband	LTE : FDD B1/B3/B5/B8 TDD B38/B39/B40/B41； WCDMA: B1/5/8； GSM: B3/B5/B8 CDMA: BC0； Band 28A/28B (support customized)
Private LTE Network	TDD 1.8G(1785 ~ 1805MHz)； TDD 1.4G(1447 ~ 1467MHz)
Narrowband (Radio)	350-400MHz，400-470MH
TRANSCEIVER	
Channel Spacing	12.5/25KHz
RX Sensibility	5% BER: 0.22uV
Inter-modulation	≥65dB
Suppression of Spurious Response	≥70 dB
Frequency Stability	±0.5ppm
Antenna Impedance	50Ω
Audio Distortion	≤3%
PERFORMANCE	
Operating System	Android 7.1
CPU Frequency	Qualcomm Eight-Core processor, 2.0GHz
Memory	2GB RAM +16GB ROM
Memory Card	support TF card and up to 128 GB
Sensor	Electronic compass sensor, light and proximity sensor, gravity acceleration sensor, air pressure sensor
GENERALSPECIFICATION	
Output Power	DMR: High power- 4W, Low power- 1W； LTE: 200 Mw
Battery	4200mAh，7.4V； Average working time is 16 hours (14H voice (5:5:90) + 2H video)
Color	Dark
Size	155mm(W) x 71mm(L) x 33mm(H)，antenna is not included
Weight	425g (including antenna, battery)
Display	Main Display: 4" Color LCD; Resolution: 640×1136；Multi-point capacitive touch display Top Display: 0.96" Black & White LCD; Resolution: 128*64；Anti-glare Tempered Glass
CAMERA	Front Camera: 8 MP； Back Camera: 13 MP, automatic focus； Sensor Type: CMOS
DATA	
WLAN	WIFI 802.11b/g/n/AC, frequency band 2.4G/5G, support WIFI hotspot
Data Interface	18pin waterproof interface (support USB2.0, audio, serial port)
USB Interface	no physical connection
Bluetooth	4.1 EDR
ENVIRONMENTAL	
Operating Temperature	-20℃~+55℃
Storage Temperature	-30℃~+60℃
Anti-vibration	Per MIL-STD 810
Water & Dust Proof	IP68

Standard Accessories

Power Supply	**Battery**	**Antenna**	**Belt clip**	**Charger**

Optional Accessories

Remote Speaker Microphone	**Earpiece**

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BelFone
Communications for Efficiency and Safety

Fujian BelFone Communications Technology Co., Ltd

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*.