












BP760

New Generation Professional Digital Radio

BelFone BP760 digital radio, as a lightweight communication device for high-end users, combines outstanding performance, ultimate reliability, crystal-clear voice transmission, and stable communication. It effectively breaks through communication barriers across industrial, commercial, public safety, and emergency scenarios, delivering a dedicated communication solution that is stable, efficient, and secure for customers.

-  SFR
-  Full Duplex Call
-  IP68 Protection
-  Multiple Alarms
-  GPS Positioning*
-  AI Noise Reduction
-  Ad-Hoc Networking
-  Advanced Encryption
-  Bluetooth/ Digital Recording*



* Represents optional features



PRODUCT FEATURES

HD Large Screen

BP760 features a 2.4-inch high-definition color display with grid-based menu interface. Critical information is presented in a waterfall dialogue format, allowing users to view alerts or text messages without scrolling through multiple screens. The display remains easily readable even in bright sunlight. Equipped with independent rotary knobs and shortcut keys, it enables one-touch on/off functionality, streamlining key operations to the greatest extent and delivering a clearer, more efficient interactive experience for users.

GPS Positioning*

BP760 is equipped with a GPS positioning function, enhancing real-time positioning accuracy by embedding 16 azimuth position information into voice communications. Deployed across diverse industries and scenarios, the terminal can upload location coordinates on demand, enabling bidirectional linkage and tracking with the dispatch platform to meet high-precision, visual dispatch requirements in operational environments.

Flexible Ad Hoc Networking*

BP760 supports an optional Ad hoc networking function. In extreme environments without base stations or network signals, multiple devices can automatically form a communication network and be flexibly deployed with various networking modes, including chain, mesh and tree topologies. It breaks the constraints of space and scale, enabling all-weather, all-terrain wireless voice coverage.

Wider Signal Coverage

BP760 employs a superheterodyne circuit design with a full-shield cover design to reduce front-end link losses and optimize back-end demodulation capabilities. This results in higher reception sensitivity, broader signal coverage, and extended communication distances, comprehensively enhancing communication performance metrics. Whether in dense urban areas or large industrial sites with complex signal environments, it guarantees precise and efficient command delivery to every corner.

AI Noise Reduction

BP760 features AI noise reduction technology that accurately separates human voices from ambient noise in real time, automatically adjusting the radio's audio output to prevent harsh sounds or missed calls. Equipped with a built-in high-power speaker and automatic acoustic feedback suppression technology, it delivers clear reception and loud, clear output while effectively avoiding close-range howling interference, providing a seamless voice experience in noisy environments.



- Zone Switch
- Stealth Mode
- Voice Control
- Shortcut Button
- Full Duplex Call
- Priority Interrupt
- Power-saving Mode
- Acoustic Signature Drainage
- Mandown
- Manual Dial
- Lone Worker
- Bluetooth 5.0
- Digital Recording
- Repeater/ Off-net Mode
- Digital to Analog Conversion
- Individual Call/ Group Call/ All Call

○ Represents optional features

Versatile Applications*

BP760 supports full-duplex voice communication, delivering smartphone-like smooth two-way calling. With an optional Bluetooth 5.0 module, it can connect to wireless accessories for hands-free efficiency. Its 24-hour recording function ensures critical instructions are fully documented, providing reliable evidence for task reviews and accountability.

Advanced Encryption

Safety is at the core of BP760. It adopts a digital codec and dual encryption solution (ARC4/AES256 + TF card hardware encryption), guaranteeing end-to-end encryption from signal transmission to content delivery, effectively resisting interference and eavesdropping. For every call, it establishes an exclusive encrypted protective shield, ensuring absolute privacy and security in communications.

Multiple Versions

With diverse communication mode requirements to complex scenarios, BP760 serves as a core communication hub, fully supporting seven modes including conventional, standard Trunking, virtual Trunking, same-frequency repeating, ad-hoc networking, and BelFone smart dispatch system. It ensures the most suitable communication network can be built in any scenario, delivering a rock-solid communication guarantee.

Multiple Alarms

In the event of emergencies, the BP760's SOS button enables one-touch distress calls. If a user is working alone or falls accidentally, the device can intelligently detect incidents and trigger automatic alarms. It locks onto the user's position with a continuous, accurate signal, leaving no danger undetected and fortifying the safety standards for every mission.

IP68 with Military-Grade Quality

BP760 is engineered to military standard, featuring military-spec rugged structure and IP68 protection. Its casting utilizes high-performance ABS+PC engineering plastic with both strength and premium texture. It withstands heavy downpours, dust, and even brief submersion, guaranteeing reliable operation in any demanding environment.

SFR

BP760 supports same-frequency repeater configuration, enabling rapid establishment of a same-frequency repeater network with a single frequency point. It activates same-frequency relaying without the need for additional Repeaters, expanding coverage for short-range communications. It compensates for the shortcomings of traditional two-way radios, such as limited communication range and crosstalk, provides guaranteed backup communication, and effectively resolves the issue of signal blind spots with ease.

SPECIFICATION

General	
Frequency Range(Optional)	VHF: 136-174MHz UHF3: 350-400MHz UHF: 400-480MHz
Channels	1024
Zones	128
Channel Spacing	25 KHz/12.5kHz
Working Voltage	DC 7.4V (± 20%)
Battery Capacity	2400mAh
Battery Life (5/5/90)	Digital: 25h Analog: 18h
Frequency Stability	± 0.5ppm
Antenna Impedance	50 Ω
Dimensions (L × W × H)	55.4 (L) *31.7 (W) *132.2 (H) mm
Screen	LCD Display, 320*240 pixels, 262000 colors, 2.4 inches
Weight	305g (including battery)
Recording (Optional)	≤24h
Bluetooth (Optional)	BT5.0

Transmission	
Output Power	≤5W
4FSK Modulation	12.5kHz (data only): 7K60FXD 12.5kHz (data and voice): 7K60FXE
FM Modulation	12.5 kHz: 8K50F3E 25 kHz: 16K0F3E;
Modulation Limitation	± 2.5kHz@12.5kHz; ± 5.0kHz@25kHz
FM Noise	40dB@12.5kHz/45dB@25kHz
Spurious Emission	-36dBm<1GHz/-30dBm>1GHz
Adjacent Channel Power	≤-60dB
Frequency Response	+1/-3 dB
Audio distortion	≤3%
Digital Voice Codec	AMBE/ NVOC Compatible

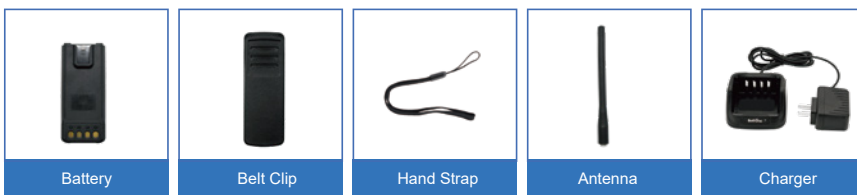
Receiver	
Digital Sensitivity	0.22 μ V/BER5%
Analog Sensitivity	0.22 μ V(12dB SINAD)
Intermodulation	65dB@12.5/25kHz
Adjacent Channel Selectivity	60dB@12.5kHz/70dB@25kHz
Spurious Suppression	70dB@12.5/25kHz
FM Noise	40dB @ 12.5kHz; 45dB @ 25kHz
Frequency Response	+1/-3 dB
Rated Audio Output Power	0.5W
Max Audio Output Power	1.5W
Rated Audio Distortion	5% (Typical)
Conducted Radiation	-57dBm

Environmental Specifications	
Operation Temperature	-30℃—+70℃
Storage Temperature	-40℃—+85℃
Moisture Proof	MIL-STD-810H
Shock& Vibration	MIL-STD-810H
Waterproof& Dustproof	IP68

Positioning	
Positioning Precise	Horizontal Position Accuracy ≤ -10m (with good signal)
TTFE(First Location) Cold Boot	≤1min (with good signal)
TTFE (First Location) Hot Boot	≤10 sec (with good signal)

Note: The above specification is tested by the trial standard. Due to the continuous development of technology, the data provided are for reference only.

STANDARD ACCESSORIES



OPTIONAL ACCESSORIES



Fujian Belfone Communications Technology Co., Ltd

Add:A-15 Huaqiao Economic Development Zone, Luojiang, Quanzhou, Fujian, China

Email: overseas@belfone.com

Phone: +86 595 28396717

Fax: +86 595 22771635

Belfone
Communications for Efficiency and Safety

SGS ISO CE FC CCC

f in YouTube

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.