











BP620/BP610

Professional DMR Radio

Belfone MEA
Communications for Efficiency and Safety



Belfone's new generation of professional DMR radio BP610/BP620. With its advanced AI noise reduction, sensitive receiving and transmitting, accurate positioning, and effective response speed, greatly improves users' communication experience in noisy environments, to provide users with a more sensitive, clearer, and more reliable communication guarantee.

-  IP68 Protection
-  RF Optimization
-  GPS Positioning*
-  AI Noise Reduction
-  TDMA Two Time-Slots
-  Bluetooth/Voice Recording*
-  AES256/ARC4 Encryptions
-  Three Types of Alarm Modes

(*Represents optional functions)



HIGHLIGHTS AND BENEFITS

AI Noise Reduction

BP610/BP620 equipped with a high-performance speaker and AI Reduction, can effectively filter background noise and eliminate whistling. It can also accurately extract the human voice to ensure that the radio sound can still be accurately captured in all kinds of noisy areas as achieving a clear and loud voice.

IP68 Protection

BP610/BP620 has IP68 certification. It is made of PC protective material, which can still maintain intact in rain, soaking, dust, etc. The screen has been reinforced with excellent impact resistance, can withstand 1.5 meters fall at multiple angles, easy to work in any harsh environment.

Satellite Positioning

BP620 supports displaying the location and distance of the target during the call. BP610/BP620 can be equipped with satellite positioning for real-time tracking and managing static and moving status, effectively coordinating and managing personnel, and improving command and dispatching efficiency.

*Customizable: GPS, GALILEO, GLONASS

Strong Communication Performance

The TDMA two-time-slot function of terminals allows users to achieve better voice capacity and audio performance in a wider range of signal environments. It also enhances the system management of digital communication. It can be coordinated with the Belfone SDC and SVT systems for command and dispatch, intelligent management, and channel allocation services.

Multiple Encryptions

BP610/BP620 adopts multiple encryptions to guarantee all-round secure communication, supporting ordinary encryption (dynamic encryption, static encryption), and AES256, ARC4, effectively improves the privacy of communication and the security of information.

Rich Applications

BP610/BP620 supports an optional Bluetooth 5.0 modular that allows to access wireless audio device, wireless PTT device, offering extensible accessory options. Besides that, it also allows an optional 250 hours recording to sustain long time communication.

Multiple Alarms

BP610/BP620 supports multiple alarm modes including one-key alarm, lone worker, and man down. Once an emergency occurs, it can automatically notify the commanding officer or the dispatching command platform to ensure the safety of personnel in different scenarios and effectively eliminate potential safety hazards.

RF Optimization

The motherboard of BP610/BP620 adopts an integrated metal shield to effectively isolate the interference and improve voice communication quality. Thanks to its new circuit optimization scheme, it provides a wider and more sensitive transmitting and receiving signal, ensures the transmitting and receiving of key voice in signal fringe areas, and realizes stable communication in complex environments such as high floors, large areas, and long distances.





FUNCTIONS

- Covert Mode
- Silence Unknowing Calls
- Individual Call/Group Call/All call
- Scanning/Monitoring/Remote Kill
- VOX
- Talk Priority
- Compatible Digital/Analog
- Battery Saving/ Low Battery Alert
- TDMA Two Time-Slots
- TOT/Launch Permission
- Original Battery Inspection
- Conventional DMR/SDC/SVT
○ Represents optional functions



BP620

BP610

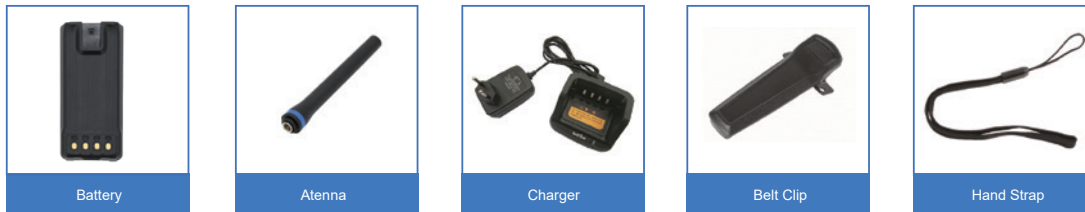
SPECIFICATION

General	
Frequency Range(Optional)	VHF:136-174 MHz UHF3:350-400 MHz UHF:400-480 MHz
Channel Capacity	1024
Zones	64
Channel Spacing	12.5KHz/25KHz
Working Voltage	DC 7.4V (±20%)
Battery Capacity	2000 mAh
Battery Average Working Time	BP610: Digital 24hours BP620: Digital 22 hours
Frequency Stability	± 1.5ppm
Antenna Impedance	50Ω
Demension	57 (L) *33 (W) *126 (H)mm
Screen (BP620)	1.77Inch
Weight	about 300g (Including Battery)
Recording (Optional)	250 hours
Bluetooth (Optional)	BT 5.0
Transmission	
Output Power	≤5W
4FSK Modulation	12.5k-Hz(date only):7K60FXD 12.5k-Hz(data and voice) :7K60FXD
FM Modulation	12.5 kHz: 8K50F3E; 25 kHz: 16KΦF3E;
Modulation Limitation	+/- 2.5kHz @ 12.5kHz; +/- 5kHz @ 25kHz
FM Noise	-40dB
Conducted Emission	-36 dBm≤1GHz/-30 dBm≥1GHz
Adjacent Channel Power	≤-60dB
Frequency Response	+1/-3 dB
Audio Distortion	3%
Digital Voice Codec	AMBE++

Receiver	
Digital Sensitivity	0.25 uV (5% BER)
Intermodulation	60dB
Adjacent Channel Selectivity	60dB
Spurious Suppression	60dB
FM Noise	-40dB
Frequency Response	+1/-3 dB
Rated Audio Output Power	1.0W
Max Audio Output Power	1.5W
Rated Audio Distortion	3%
Conducted Radiation	-57dBm
Environmental Specifications	
Operation Temperature	-20℃—+60℃
Storage Temperature	-30℃—+85℃
Waterproof& Dustproof	IP68
Positioning	
Positioning Precise	<2.5m (CEP50, with good signal)
TTFF(First Location) Cold Boot	< 30 Seconds (with good signal)
TTFF(First Location) Hot Boot	<1Second (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



BelFone Communications MEA

Add: 1804, Fortune Executive Tower, JLT Cluster T, Dubai, UAE
Email: sales@belfone.ae
Tel: +971 (0) 4570 0179

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

