

## Specification

General	
Frequency Range	VHF: 150MHz; UHF: 350MHz/400MHz
Channel Capacity	512
Zone	32
Channel Spacing	12.5KHz/25KHz
Working Voltage	DC 7.4V (±20%)
Battery Capacity	2600mAh
Frequency Stability	± 1.5ppm
Antenna Impedance	50 Ω
Recording Time	400 hours
Weight	284 g (including battery)
Dimensions	61(L)*36(W)*119(H)mm
Receiver	
Power Output	H: <3W; L: 1W
4FSK Modulation	12.5KHz (data only): 7K60FXD; 12.5KHz (data and voice): 7K60FXE
FM Modulation	12.5 KHz: 8K50F3E; 25 KHz: 16KΦF3E;
Modulation Limitation	+/- 2.5KHz @ 12.5KHz; +/- 5KHz @ 25KHz
FM Noise	-40dB
Spurious Emission	-36 dBm ≤ 1GHz/-30 dBm ≥ 1GHz
Adjacent Channel Power	≤ -60dB
Frequency Response	+1/-3dB
Audio Distortion	≤ 3%
Digital Vocoder	AMBE++
Transmitter	
Digital Sensitivity	5% BER: 0.25 uV
Analog Sensitivity	0.25 uV (12 dB SINAD)
Intermodulation	60dB
Adjacent Channel Selectivity	60dB
Spurious Suppression	60dB
FM Noise	-40dB
Frequency Response	+1/-3dB
Audio Power	1.5W
Audio Distortion	3% (typical)
Conduction Radiation	-57dBm
GPS Precision	Horizontal Accuracy ≤ -10m ( with good signal )
TTF (first location) Cold Boot	< 1 minute ( with good signal )
TTF (first location) Hot Boot	< 10 seconds ( with good signal )
Environmental Specifications	
Operating Temperature	-20°C ~ +60°C
Storage Temperature	-30°C ~ +85°C
Dust & Water Proof	IP67
Shock & Vibration & Humidity	Per MIL-STD-810 C/D/E/F Standard
Explosion Proof	CNEX Ex in IIB T4 GB

BelFone reserves the right to change the above specifications without any prior notice due to technical upgrades. For further information, please visit [www.belfone.com](http://www.belfone.com) or contact [marketing@belfone.com](mailto:marketing@belfone.com).



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## BF-TD510/TD511 Ex DMR Explosion-proof Radio

BF-TD510/511 Ex are CNEX Ex in IIB T4 GB certified explosion-proof two-way radio designed for potentially explosive work environments in industries like oil and petroleum, chemicals, mining, emergency response, and firefighting and rescue. They also come with a rich feature kit to further empower the user to brave his work environment and complete his task. With TDMA 2 timeslots, built-in GPS, voice recording and more, BF-TD510/511 Ex are your best explosion-proof radio solutions.

- CNEX Ex in IIB T4 GB Certified
- IP67 Dust & Water Protection
- TDMA True 2 Timeslots
- Built-in GPS Positioning
- 400 Hours' Voice Recording
- Multi-layers Safety Features



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## IIB T4 GB

BF-TD510/511 Ex are two intrinsically safe DMR two-way radios with an explosion-proof circuit design as well as a shatter-resistant structure. Their optimal stability and safety easily meet the challenges of explosive work environments.

## Voice Recording

With a 32G memory, BF-TD510/511 Ex can support over 400 hours' communications. These radios allow you to record and share your voice easily, replaying your communications during the operation. These are two explosion-proof radios with a good and long memory.



## Advanced Encryption with ARC4 & AES256

The ARC4 Technology together with AES256 keeps your communications safe and private, optimizing your information safety.



## GPS Positioning

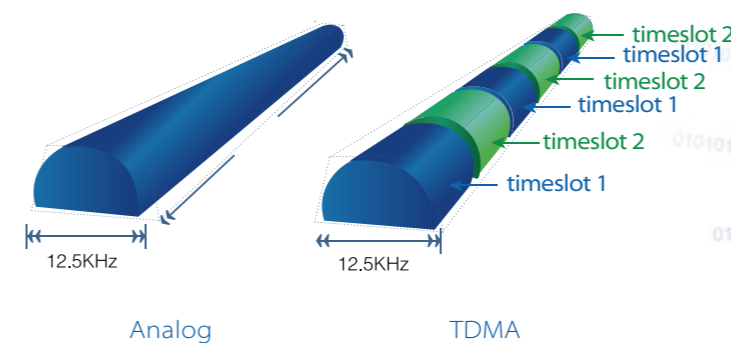
With built-in GPS, the user can track the whereabouts of a radio whenever he wants. You can know where all your workers are in real-time.

## Personnel Safety

If a worker slips or falls, the radio will immediately activate the integrated Mandown function and transmit a signal to other radios for help. The Lone Worker feature and Emergency Alarm are also available in case of any accident.

## DMO True 2-slots

In direct mode these radios support two voice calls simultaneously due to DMR two timeslots, which means two communication paths at one frequency with no extra costs.



## IP67 Protection

BF-TD510/511 Ex are tightly sealed against dust, spills, sprays and unexpected showers, ensuring outstanding performance in challenging environments.

## Digital/Analog Dual Modes

This enables BF-TD510/511 Ex to receive both digital and analog signals on the same channel and can automatically switch into a matching mode for efficient communications.



## Standard Accessories



## Optional Accessories

