

# BF-TD510/TD511

# **DMR** Portable

- 2-Tone/5-Tone
- Integrated High Precision GPS
- IP68 for Dust & Water Protection
- ARC4 & AES256 Encryption (optional)
- Mandown, Lone Worker, Emergency Alarms
- DMO True 2-Slot, Allowing for 2 Talk Paths at 1 Frequency
- Transmit Interrupt/Radio Priority for Emergency or Urgent Communication





### **OVERVIEW**

BelFone DMR IP68 portable radio BF-TD510/511 enjoy the advantages of superior audio quality, an outstanding coverage, a long-lasting battery life and more. The pseudo trunking and two timeslots technologies greatly increase spectrum efficiency without any extra costs. Where safety is concerned, the built-in ARC4 & AES256 encryption technology helps to maximize communication privacy while the delicate orange emergency button together with such functions as Man-down, Lone Worker and GPS helps to optimize your workers' safety.

### HIGHLIGHTS AND BENEFITS

#### **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 1 frequency with no extra costs or frequency license.

### Digital/Analog Dual Modes

Receive both analog and digital signals on a single channel and can automatically switch into the needed mode for efficient communications.

### **Personnel Safety**

Mandown: If some worker slips or falls, the mandown function will automatically activate and transmit a signal to other radios for help. Built-in Lone Worker, and Emergency alarms are also available in case of any accident.

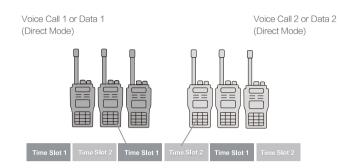
### Automatic Roaming (Programmable)

In an IP multi-site network, this feature enables these radios to automatically roam among all sites and stay connected, delivering more flexibility and efficiency.

# Advanced Encryption with RC4 Technology

The RC4 encryption technology keeps your communications safe and private, optimizing your information safety.

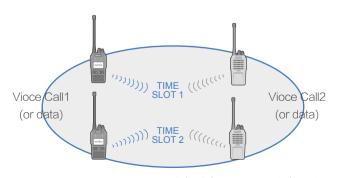






#### **Smart Virtual Trunking**

The DMO Smart Virtual Trunking(SVT) can enlarge the link capacity for higher effeciency



Solt 1, Solt 2 are automaticalty assigned to voice call 1 or voice call 2.



# Voice Recording (optional) (32G memory--can record over 400 hours' communications)

Support voice recording and you can play the recording on your radio. This is a radio with a good and long memory.

### Radio Priority-Based Interruption

This function enables a radio with higher level to interrupt communications between radios with lower levels, giving higher priority to radios with higher levels. This means better dispatching efficiency.

#### **IP68 Protection**

Tightly sealed against dust, spills, sprays and unexpected showers, ensuring outstanding performancein tough environments.





# **B**-TD510

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# **STANDARD ACCESSORIES**











# **OPTIONAL ACCESSORIES**











## **SPECIFICATION**

|                                | General  |
|--------------------------------|--|
| Frequency Range                | VHF: 136-174MHz;<br>UHF: 350-390MHz/400-480MHz/450-520MHz      |
| Channel Capacity               | TD510:32 TD511:1024  |
| Zone                           | TD510:64 TD511:64  |
| Channel Spacing                | 12.5KHz/25KHz  |
| Working Voltage                | 7.4V (±20%)  |
| Battery                        | 16/22 hours(2000mA)  |
| Weight                         | 239 g (include battery)  |
| Dimensions                     | 57(L)*32(W)*119(H)mm   |
| Frequency Stability            | ± 1.5ppm   |
| Antenna Impedance              | 50 Ω   |
|                                | Transmitter  |
| Power Output                   | H: 5W; 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                | AMBE3000   |
|                                | Receiver   |
| 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)                     |
| TTFF (first location)Cold Boot | < 1 minute ( with good signal )                                |
| TTFF (first location)Hot Boot  | < 10second ( with good signal )                                |
|                                | Environmental Specifications                                   |
| Operating Temperature          | -20℃~+60℃  |
| Storage Temperature            | -20℃~+60℃<br>-30℃~+85℃   |
| Dust& Water Proof              | 1P68   |
| Humidity                       |  |
| Shock & Vibration              | Per MIL-STD-810 C/D/E/F Standard                               |
| SHOCK & VIDIATION              | Per MIL-STD-810 C/D/E/F Standard                               |

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