



BF-TD511 Ex

Explosion-proof
DMR Portable Radio

Belfone MEA
Communications for Efficiency and Safety



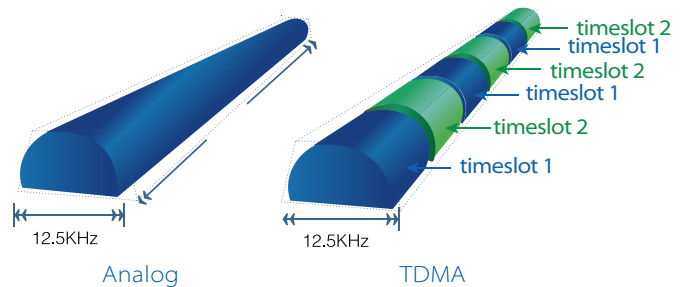


ATEX Certification

Based on the explosion-proof design of the circuit and structure, and has passed the ATEX certification (Ex ic II C T4 Gc、Ex ic IIIC T100°C Dc), BF-TD511 Ex can play excellent working and safety performance that can be used safely in various extreme work environments which full of explosive, inflammable gas.

TDMA True 2 Timeslots

BF-TD511Ex adopts TDMA 2 timeslots technology, which allows users in wider coverage to realize better audio quality, larger capacity, and clearer audio quality. The TDMA True 2 Timeslots trunking technology can dynamically allocate the spare timeslots to the groups that need to talk, easing the communication pressure when multiple groups are communicating at peak times. 2 timeslots communication allows communication to flow smoothly in real time during peak services or emergencies.



Voice Encryptions

Thanks to the ARC/AES256 advanced encryption technology, BF-TD511 Ex provides rock-solid encryption to every communication, preventing sensitive information leakage or eavesdropping during transmission and guaranteeing communication privacy and security.

One-key Alarm

For emergency response, the one-key alarm function of BF-TD511 Ex can effectively guarantee personnel safety in dangerous working environments.





VOX

BF-TD511 Ex supports VOX function so that users can still be in continuous communication without pressing the PTT key frequently in busy application scenarios like riding, outdoor activities, emergency rescue, and facilitating operation and response.

IP65 Protection

BF-TD511 Ex adopts sealing material in key points against dust and spills to realize IP65 protection; the whole radio is equipped with industrial PC+ABS material that can effectively weaken the shock impact when falling, and ensure normal communication in harsh environments.

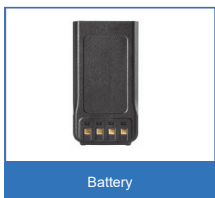
Digital/Analog Smooth Transition

BF-TD511 Ex supports both digital and analog modes that can receive digital and analog signals at the same time to be compatible with analog and digital modes, guaranteeing a smooth transition from analog to digital mode and reducing customer costs.

MAIN FUNCTIONS

- Talk Priority
- Channel Locking
- Private Call/ Group Call/ All Call
- DTMF Signaling
- Roaming/Scan
- 1024 Channels
- Low Battery Alert
- Alias Display
- Silence Unknown Calls

STANDARD ACCESSORIES



Battery



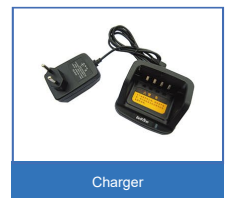
Belt Clip



Hand Strap



Stubby Antenna



Charger

OPTIONAL ACCESSORIES



Whip Antenna



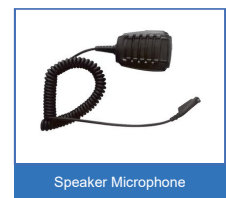
Super Charger



Programming Cable



Earpiece



Speaker Microphone



SPECIFICATION

General	
Frequency Range	UHF: 400–480MHz
Channel Capacity	1024
Zones	64
Channel Spacing	12.5KHz/25KHz
Operating Voltage	DC 7.4V (± 20%)
Battery Capacity	1500mAh
Battery Life (5/5/90)	Digital 16 Hours Analog 12 Hours
Frequency Stability	± 1.5ppm
Antenna Impedance	50 Ω
Dimensions (L × W × H)	57(L)* 33 (W)* 119 (H)mm
Weight	271g(Including Battery)
Transmitter	
RF Output Power	High Power: <2W Low Power: 1W
4FSK Modulation	12.5kHz Only data: 7K60FXD; 12.5kHz data and audio: 7K60FXE
FM Modulation	12.5 kHz: 8K50F3E; 25 kHz: 16K ΦF3E;
Modulation Limiting	+/- 2.5kHz @ 12.5kHz; +/- 5kHz @ 25kHz
FM Noise	-40dB
Conducted Emission	-36 dBm ≤ 1GHz / -30 dBm ≥ 1GHz
Adjacent Channel Power	≤ -60dB
Audio Response	+1/-3 dB
Audio Distortion	3%
Digital Voice coder Type	AMBE
Receiver	
Digital Sensitivity	5% BER: 0.25 uV
Analog Sensitivity	0.25 uV (12 dB SINAD)
Inter modulation	60dB
Adjacent Channel Selectivity	60dB
Spurious Response Rejection	60dB
FM Noise	-40dB
Audio Response	+1/-3dB
Rated Audio output power	0.5W
Max Audio output power	1.3W
Audio Distortion	3% (Typical)
Conducted Spurious Emission	-57dBm
Environmental Specifications	
Working Temperature	-20°C—+60°C
Storage Temperature	-30°C—+85°C
Humidity	MIL-STD-810G
Vibration & Shock	MIL-STD-810G
Dustproof & waterproof	IP65
Explosion Proof	Ex ic IIC T4 Gc Ex ic IIIC T100°C Dc

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BelFone MEA
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