



Specifications(BF-TD511)

General	
Version	Basic
Frequency Range	VHF: 136-174MHz; UHF: 350-390MHz/ 400-480MHz/ 450-520MHz
Channels	512
Zones	32
Channel Spacing	12.5KHz/ 25KHz
Working Voltage	DC7.4V ($\pm 20\%$)
Frequency Stability	$\pm 1.5\text{ppm}$
Antenna Impedance	50 Ω
Battery Capacity	Real 2000mAh
Battery Average Working Time	Digital 22 hours; Analog 16 hours
Dimension	60.8(L)* 35.7(W)* 118.5(H) mm
Weight	239g (including battery)
Transmitter	
Power Output	High power: 4.5W; Low power: 1W
4FSK Modulation	12.5KHz data only: 7K60FX; 12.5KHz data and voice: 7K60FXE
FM Modulation	12.5KHz: 8K50F3E; 25KHz: 16K ϕ F3E
Modulation Limitation	+/- 2.5KHz
FM Noise	-40dB
Spurious Emission	-36 dBm $\leq 1\text{GHz}$ /-30 dBm $\geq 1\text{GHz}$
Adjacent Channel Power	$\leq -60\text{dB}$
Frequency Response	+1/-3dB
Vocoder	AMBE++
Audio Distortion	$\leq 3\%$
Receiver	
Digital Sensitivity	5% BER: 0.25 μV
Analog Sensitivity	0.25 μV (12 dB SINAD)
Intermodulation	60dB
Adjacent Channel Selectivity	60dB
Spurious Suppression	60dB
FM Noise	-40dB
Frequency Response	+1/-3 dB
Audio Power	1.5W
Audio Distortion	3% (typical)
Conduction Radiation	-57dBm
GPS Precision	Horizontal Accuracy $\leq 10\text{m}$ (with good signal)
TTFF (first location) Cold Boot	< 1 minute(with good signal)
TTFF (first location) Hot Boot	< 10 seconds (with good signal)
Environmental Specifications	
Operating Temperature	-20 $^{\circ}\text{C}$ ~+60 $^{\circ}\text{C}$
Storage Temperature	-30 $^{\circ}\text{C}$ ~+85 $^{\circ}\text{C}$

Water and Dust Proof	IP67
Shock & Vibration	MIL-STD-810C/D/E/F