



BF-TR8500

Professional DMR Repeater

- High Power and Full-Frequency Band
- Malfunction Warning System
- Dual Circuits Protection Active Heat Dissipation
- 2U Frame Structure
- Smart/Centerless IP Connect
- Common-frequency broadcasting system
- Dynamic Channel Assignment
- ID Authentication for Air Interface





OVERVIEW

Based on the DMR/PDT protocol, BF-TR8500 is a full frequency repeater with high power. It boasts rich applications, optimises according to different situation demands and provides multiple versions including IP connect, SDC, common-frequency broadcasting and SVT, effectively resolving a plethora of problems including network coverage in large area, single telecommunication base station, multi-station netting, cross-regional dispatching and frequency resource scarcity and meeting the strict requirement of any conventional communication or trunking communication plan.

HIGHLIGHTS AND BENEFITS



High Power and Full-Frequency Band

Featured with high power and full-frequency band, the BF-TR8500's largest transmission power is 50W, which effectively helps users enlarge the terminal signal's coverage area. Property stability supports the use of full-frequency band, which enables users to choose frequency band and transmission power flexibly according to their own businesses, realizes large communication coverage and improves the efficiency of spectrum.



Malfunction Warning System

When the BF-TR8500 handles all kinds of problems that may happen in its operation, the malfunction warning system provides feedback about the operation state in time and automatically reports fault messages like reception error, transmission error, excessive high/low voltage, extremely high temperature, fan error, network failure and other anomalies. In the way, operators immediately notice the fault message and keep equipment in good condition, which greatly prolongs the equipment's life and keeps the communication service in normal operation.



Dual Circuits Protection Active Heat Dissipation

BF-TR8500 can charge with the provision of balancing charging and external battery charging (the maximum of the former is 1A). When the power failure happens suddenly, the equipment automatically switches to the direct current port that supports emergency transfer protection. In addition to supporting the heat dissipation, the equipment follows the air flow principle and adopts the CF active heat radiation, which ensures the repeater to operate under high-load working state or unfavorable room temperature.



2U Frame Structure

BF-TR8500 adopts professional 19 inches 2U standard frame structure with rugged and durable metal case. With diversified installation and deployment methods, users can configure suitable diplexer and put it in the cabinet without taking up extra space, saving deployment area. ACC interface supports rich extended applications including stimulated audio input and output and repeater back-to-back. Note: Diplexer is an optional accessory.



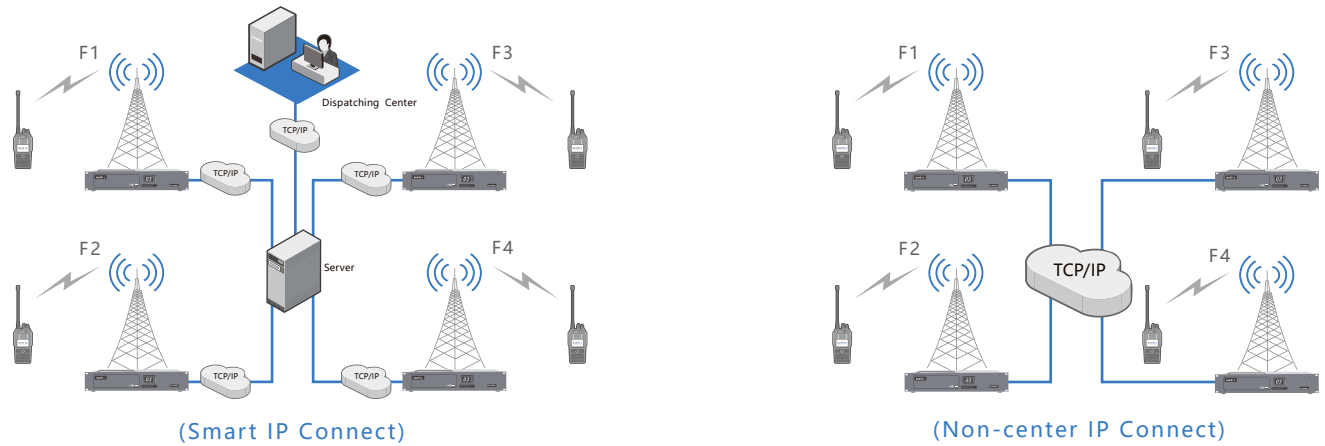
ID Authentication for Air Interface

Only ID-authenticated legitimate terminals can activate repeaters for voice and data service forwarding, thus avoiding illegal users from stealing and occupying channel resources and affecting normal communications.



Smart/Centerless IP Connect

BF-TR8500 supports IP connect among four repeaters and suitable smart IP connect system. Smart IP connect can build a number of BF-TR8500 repeaters into a professional wireless communication network covering a larger area, flexibly group these repeaters and divide channels again, which can better combine daily patrol and customer's need in emergency. BF-TR8500 repeater can be regarded as a network dot in the system and receive dispatching from the dispatching center after inserting the BF-TR8500 smart communication management system.

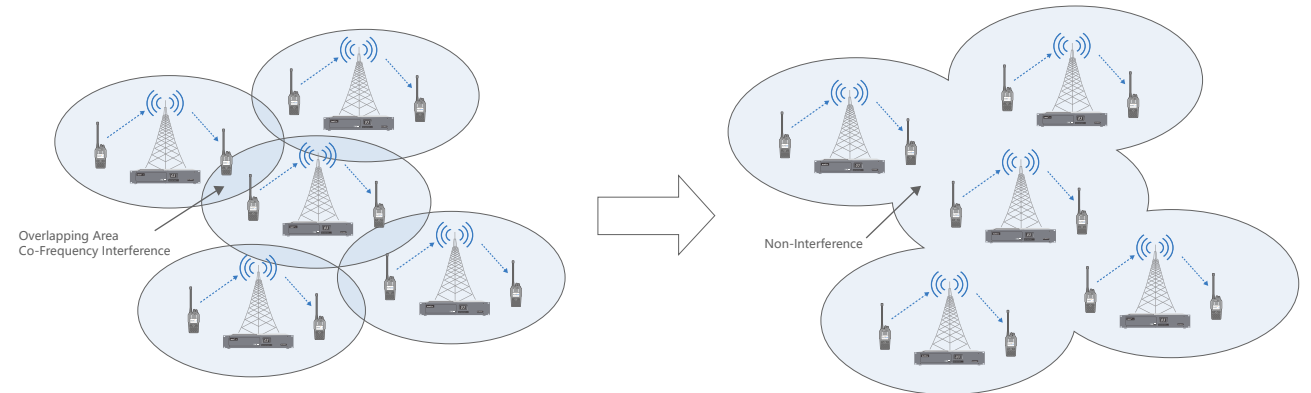


Notes: Non-center IP Connect or Smart IP Connect



Common-frequency broadcasting system

As the base station for common-frequency broadcasting, BF-TR8500 can be used for cross-regional simulcast communication. Only a set of transceiver frequency can realize all-round and large area coverage and solve the problem of wireless communication blind area. Simulcast communication broadcasting system can ensure area average field intensity and interruption reduction in the whole coverage.

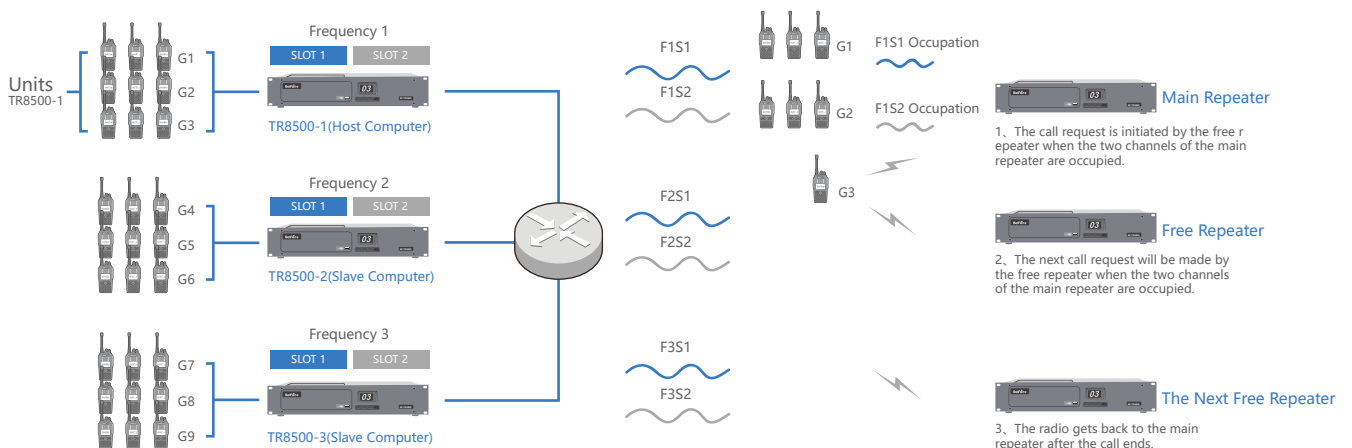


Notes: Simulcasting That Upgrades And Opens Is based on non-center IP connect.



Dynamic Channel Assignment

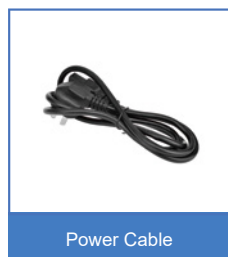
As the base station for common-frequency broadcasting, BF-TR8500 can be used for cross-regional single-frequency communication. Only a set of transceiver frequency can realize all-round and large area coverage and solve the problem of wireless communication blind area. Common-frequency broadcasting system can ensure area average field intensity and interruption reduction in the whole coverage.



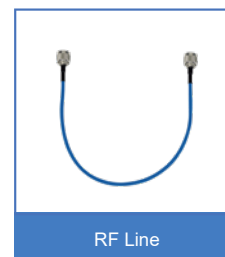
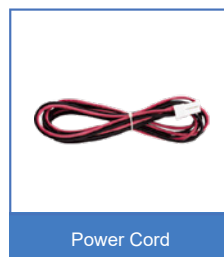
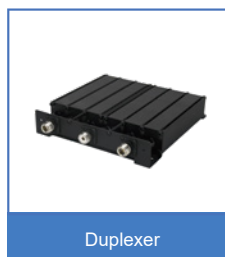
SPECIFICATION

General	
Frequency Range	VHF: 136~174MHz UHF: 350~400MHz/400~480MHz/450~520MHz
Channel Capacity	99
Channel Spacing	12.5KHz /25KHz
Antenna Impedance	50Ω
Main Power Supply	85~132VAC/170~264VAC (By switching) , 3A/115VAC,1.7A/230VAC
Backup Power Supply	11~13.8VDC, 9A
Operating Temperature	-30℃ ~ +70℃
Storage Temperature	-40℃ ~ +85℃
Dimensions (W × H × D)	441mm(L)*327.5 mm(W)* 88(H)
Weight	11.8Kg
Transmitter	
RF Output Power	≤50W
Frequency Stability	≤ ±0.5ppm (without GPS) ≤ ±0.02ppm (with GPS)
4FSK Modulation	12.5KHz (data only): 7K60FXD 12.5KHz (data and voice): 7K60FXW
Adjacent Channel Power	≤60dB
Spurious Radiation	-36dBm<1GHz -30dBm>1GHz
Receiver	
Sensitivity	3%BER≤0.35μV
Frequency Stability	≤ ±0.5ppm (without GPS) ≤ ±0.2ppm (with GPS)
Adjacent Channel Selectivity	≥60dB
Intermodulation Immunity	≥70dB
Spurious Response	≥70dB
Blocking	≥95dB

STANDARD ACCESSORIES



OPTIONAL ACCESSORIES



APPLICATION



Industry and Commerce



Public Enterprises



Transportation



Public Security

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