BF-TR955

Mobile Base Station

BF-TR955 multi-carrier, all-in-one DMR/PDT Trunked mobile base station features a standard rack-mounted design, integrating channel units, synchronization units, RF distribution units, and base station controllers to meet diversity communication needs. Providing voice Trunking, data collection, personnel positioning, personnel management, dispatching, and other services. It flexibly supports both vehicular mounting and optional portable case deployment. Allowing rapid network establishment and providing integrated command and dispatching services for communications in emergency scenarios of disaster relief, border patrol, emergency response, etc.

- DPD Technology
- Multi-Carrier
- Highly Integrated
- Flexible Deployment
- Easy to Operate
- IP65 Protection

BelFone

Communications for Efficiency and Safety

FEATURES

DPD (Deep Power Down) Technology

The BF-TR955 digital mobile base station adopts advanced digital predistortion processing technology to further suppress adjacent channel emissions, reduce adverse effects on communication signals, and enhance the amplification efficiency of the RF power amplifier. Significantly enhance communication efficiency, enabling stable and efficient operation in multi-carrier working modes.

Multi-Carrier

Compared to standard mobile base stations, the BF-TR955 supports more communication carriers, with each base station supports 5 carriers and a total of 10 Trunking channels. BF-TR955 can flexibly upgrade and expand system capacity based on user planning, supporting up to 8 carriers with a total of 16 service channels, carrying a larger volume of Trunking services.

Flexible Deployment

BF-TR955 is compact and lightweight with a standard 19-inch 2U rack-mounted structure and is ideal for scenarios where space and performance are critical. It is portable and flexibly supports car mounting, fixed place installation, medium or small vehicle mounting, or even deployed by drones, adaptable for rapid deployment in small, medium, and large-scale communication scenarios.

IP65 Protection

The BF-TR955 fully considers diverse deployment environments. It features a self-cooling design to bring excellent heat dissipation. Adheres to waterproof, dustproof, and shockproof standards, complying with IP65 dustproof and waterproof, it is rugged enough to maintain stable operation even in muddy, rainy, and other harsh and complex environments.

Highly Integrated

The BF-TR955 digital mobile base station features a highly integrated design, integrating key components and multiple functions into the core chip. Effectively reduces the system failure rate and signal-to-noise ratio, enhancing system stability and reliability.

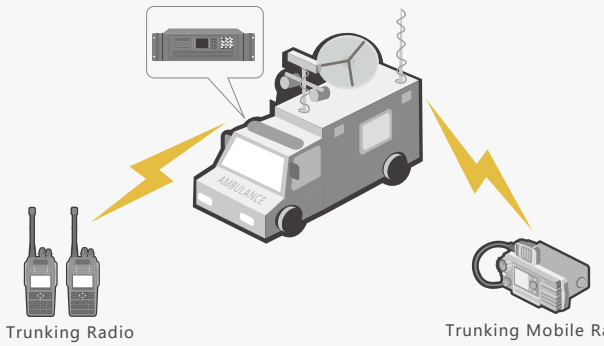
Easy to Operate

The BF-TR955 is equipped with a programmable fully digital keyboard and an HD 2.8-inch semi-transparent color screen that delivers clear visibility even under strong sunlight, allowing personnel to operate efficiently, adjust configurations, and monitor operating status under various lighting conditions.

APPLICATIONS

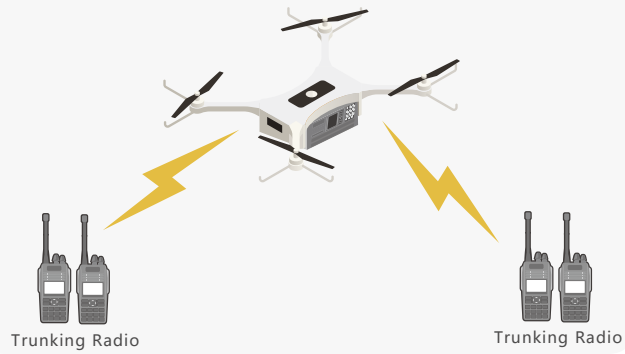
Single Site Application

Rapid Deployment for Emergency Response



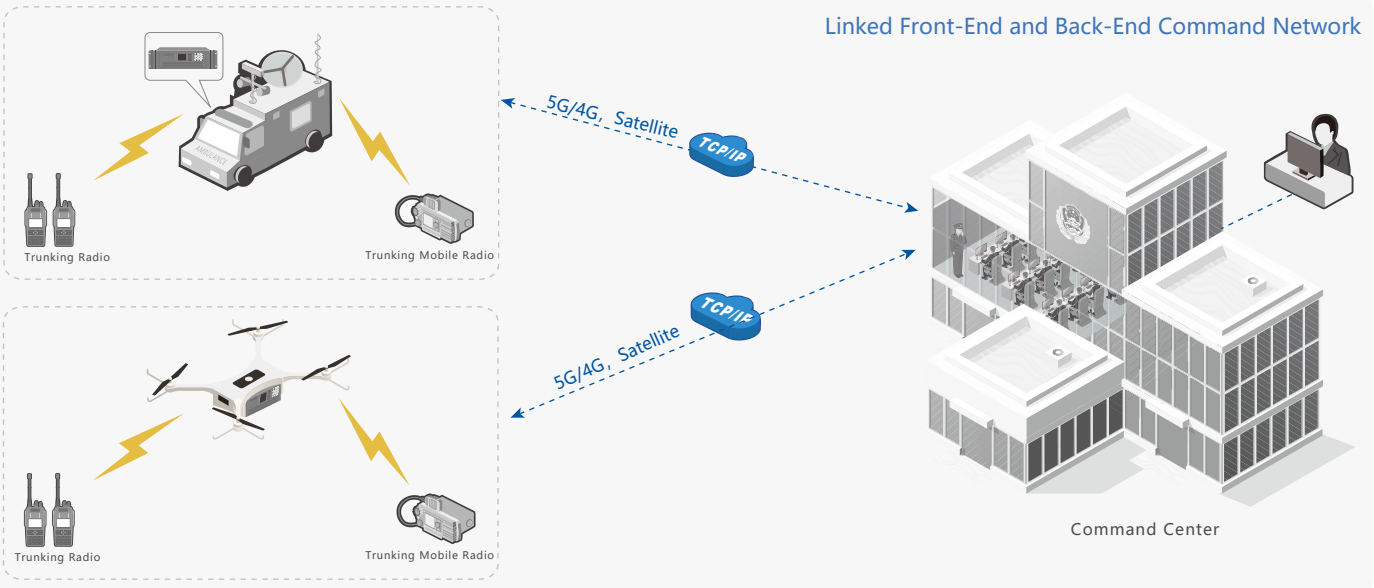
UAV Application

Rapid Deployment for Emergency Response



Access Core Network Application

Linked Front-End and Back-End Command Network



SPECIFICATION

General	
Frequency Range	UHF3：350-400MHz UHF1：400-470MHz
Carrier Frequency	5or8
Multiple Access	TDMA
Slots	2/carrier frequency
Modulation	4FSK，Modulation Index: 0.27
Carrier Spacing	≥250kHz
Operating Bandwidth	5MHz(UHF)
Duplex Spacing	10MHz(UHF)
Working Voltage	+48V DC　Customized 24VDC
Limit Voltage	+43V～63V
Maximum Power Consumption	≤200W
Working Temperature	+15℃～+35℃
Limit Temperature	-25℃～+55℃
Storage Temperature	-40℃~+85℃
Humidity	5%RH～100%RH
Atmospheric Pressure	53.5KPa～106KPa
IP Grade	IP65
MTBF	100,000 hours
MTTR	30Minutes
Weight	≤16Kg
Dimensions(W*L*H)	≤440mm*390mm*88mm

Interface	
Transceiver RF Interface	N-Female
GNSS synchronous Interface	TNC-Female

Receiver	
Static Sensitivity	≤-124dBm@BER5%
Dynamic Receiver Range	≥100dB
Stepped Frequency	12.5kHz
Co-Channel Interference Suppression	-12dB～0dB
Adjacent Channel Selectivity	≥60dB@12.5kHz
Intermodulation Response Rejection	≥70dB
Block	≥84dB
Spurious Response Immunity	≥70dB
Spurious Emission	9.00kHz～1.00GHz：≤-57dBm@100kHz 1.00GHz～12.75GHz：≤-47dBm@1MHz

Transmitting	
Rated Transmit Power	≤8W/Carrier (5 Carriers) ≤2W/Carrier (Optional 8 Carriers)
FSK Error	≤5%
Occupied Bandwidth (OBW)	≤8.5kHz
Maximum Frequency Deviation	±3.15kHz
Frequency Deviation	≤±100Hz
Intermodulation Attenuation	≤-70dB
Adjacent Channel Power Ratio	≤-60dB @ 12.5KHz;
Frequency Stability	0.5ppm
Adjacent Channel Power Ratio	≤-60dB @ 12.5KHz；≤-70dB @ 25KHz
Spurious Emission	≤-36dBm@100kHz；≤-30dBm@1.0MHz

Note: The above specification is tested by the trial standard. Due to the continuous development of technology, the data provided are for reference only.

APPLICATION SCENARIOS

Police

Emergency Rescue

FireFighting

Evens

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