

## **BF-TR925**

# PORTABLE PROFESSIONAL DMR REPEATER

- IP68 for water and dust protection
- Rouge and robust, designed as per MIL STD 810F/G
- Advanced privacy with AES256/ARC4 digital encryption
- Flexible and power self-adaptive by different installation
- Inbuilt GPS, convenient position tracking(optional)
- Power-on password to ensure information security
- ID Authentication for Air Interface





#### **OVERVIEW**

As a multi-functional backpack repeater in BelFone BMC System, BF-TR925 incorporates IP68 protection, robust military exterior, good heat dispersion, and flexible modular design to help mission critical users handle all kinds of tough environments. It can provide supplementary network coverage for the system fixed base station, and it can also operate independently as a repeater.

#### HIGHLIGHTS AND BENEFITS

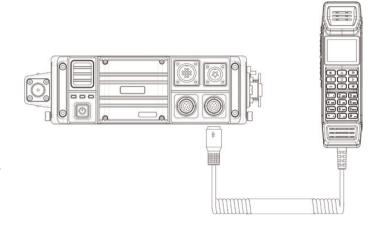


## Multi Working Mode, Highly Integrated

- DMR base radio (DMR Tier I, II)
- Analog base radio
- PSTN gateway (working with BF-TC981)

DMR and Analog Base Radio/ PSTN Gateway (working with BF-TC981)

- 1. Connect with remote controller microphone BF-TC981 to enjoy PTT function as a DMR or analog radio.
- 2. Support 4G SIM card to realize public network phone call.





#### Versatile and Ease of Fixing

#### Manpack mounted

Put a battery and manpack with holder for portable repeater, manpack can put extra battery for emergency backup use

#### Vehicular/Desktop mounted

Put a vehicular hub with AC/DC power supply and vehicular antenna, repeater will worked as vehicular repeater/base radio by DC 13.8V( ± 15%) or AC(80–264V)

#### Modular hardware design

Modular hardware design for easy maintenance and repairing, only change the faulty modules without changing the complete repeater if faulty founded



## Versatile Connectivity to Suitable for Challengeable Situations

- 4G wireless communications link
- Satellite communication link
- Narrowband communication link
- IP connectivity for multi sites connection (optional)

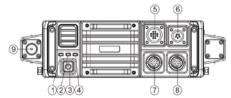


#### Versatile and Ease of Fixing

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.

## **FEATURES AND DETAILS**

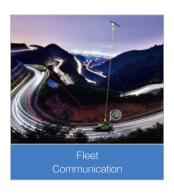
- IP68 for water and dust protection.
- Rouge and robust, designed as per MIL STD 810F/G.
- Advanced privacy with AES256/ARC4 digital encryption.
- Flexible and power self-adaptive by different installation.
  - Manpack with battery mode (with manpack kit, output power 3-15W).
  - Desktop/vehicular mode (with AC/DC mounting kit, output power 5-25W).
- IP connectivity for multi sites connection (with specialized Ethernet cable).
- Full duplex communication as DMR base radio (with remote control microphone).
- Inbuilt GPS, convenient position tracking(optional).
- Self-destructing function to turn data to dust on command in case of information leakage.
- Power-on password to ensure information security.



|   | ,000                         |
|---|------------------------------|
| 1 | A Repeater Working State     |
| 2 | B Repeater Working State     |
| 3 | Power Switch/Power Indicator |
| 4 | Network Indicator            |
| 5 | ACC Port                     |
| 6 | Lan Port                     |
| 7 | Palm Mic Port                |
| 8 | Program Port                 |
| 9 | Antenna Port 1               |

## **APPLICATION**









## **STANDARD ACCESSORIES**



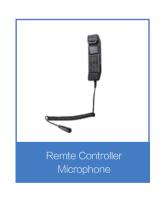






## **OPTIONAL ACCESSORIES**













#### **SPECIFICATION**

|                              | General   |
|------------------------------|---|
| Frequency range              | VHF: 136-174MHz / UHF: 350-400MHz / 400-480MHz / 450-520MHz   |
| Region                       | TR925L: 128 TR925M: First-level regions: 4 / Second-level regions: 3000 / Third-level regions: 3000 |
| Number of channels           | TR925L: 2048<br>TR925M: 3776  |
| Channel spacing              | 12.5KHz /25KHz  |
| Antenna impedance            | 50 Ω  |
| Operating voltage            | Vehicle-mounted: DC13.8V(±15%), negative grounded Manpack type: 10.8-12.6V                          |
| Current consumption          | <9A   |
| Operating environment        | -30℃~+70℃   |
| Storage temperature          | -40℃~+85℃   |
| Volume                       | 330mm(L)*218mm(W)*88mm(H)   |
| Weight                       | ≤6kg  |
|                              | Emission  |
| RF power                     | Vehicle-mounted: 5-25W (continuous emission) / Manpack type: 3-15W (continuous emission             |
| Frequency stability          | $\leq \pm 0.5$ ppm (without positioning) / $\leq \pm 0.02$ ppm (with positioning)                   |
| 4FSK digital modulation      | 12.5KHz only data: 7K60FXD / 12.5KHz data and voice: 7K60FXW  |
| Power of adjacent channel    | ≤60dB   |
| Spurious emission            | -36dBm<1GHz / -30dBm>1GHz   |
| Digital voice encoder        | AMBE  |
|                              | Receiving   |
| Sensitivity                  | 3%BER≤0.35uV  |
| Frequency stability          | $\leq$ ± 0.5ppm (without positioning) / $\leq$ ± 0.02ppm (with positioning)                         |
| Adjacent channel selectivity | ≥60dB   |
| Intermodulation immunity     | ≥70dB   |
| Spurious response            | ≥70dB   |
| Blocking                     | ≥95dB   |
| Rated audio output power     | $2W(8\Omega)$   |
|                              | Environmental Specifications  |
| Working Temperature          | -30°C~+70°C   |
| Storage Temperature          | -40°C~+85°C   |
| Vibration & Shock            | MIL-STD-810G Standard   |
| Humidity                     | MIL-STD-810G Standard   |
| Dustproof & waterproof       | IP68  |

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