

ZHC949 Digital FM Radio Repeater



1. Overview

ZHC949-25W digital FM broadcast repeater is a product specially developed for underground parking lots or small tunnels. It has an integrated design for receiving and sending, and the output RF power is 25W. It can forward up to 16 sets of FM broadcast programs at the same time; it can be realized with an emergency broadcast interface. Emergency broadcasting function. Built-in 4G router can realize 4G transmission remote monitoring.

The repeater is mainly composed of functional modules such as **radio frequency receiving and amplification, 16-channel digital frequency selection**, emergency broadcast signal switching, radio frequency broadband linear amplification, output band-pass filtering, DC switching power supply, 4G router, and central control unit. It adopts fully enclosed structure, three-proof treatment, natural cooling without fan, and long-life design. All input and output interfaces are connected and led out from the rear panel.

The repeater, in conjunction with a passive signal distribution system and a transmitting antenna, can achieve an underground parking lot of approximately 20,000 square meters and 16 channels of FM broadcast signals without blind spots.

2. Technical Specifications

1. RF input frequency range 87.00 MHz ~ 108.00MHz (or designated frequency)
2. RF output frequency range 87.00 MHz ~ 108.00MHz (or designated frequency)
3. The number of forwarding carriers ≤ 16
4. RF output power 0 ~ 25W continuously adjustable (other power can be customized)
5. RF output impedance 50 Ω
6. RF receiving antenna input connector N female
7. RF emergency broadcast input connector N female
8. The allowable deviation of RF output power $< \pm 10\%$
9. RF output power stability $< \pm 3\%$
10. Inter-modulation output $\cong -36\text{dBc}$
11. Out-of-band harmonics $< -60\text{dBc}$
12. Operating temperature range $-10^{\circ}\text{C} \sim 40^{\circ}\text{C}$
13. Power supply voltage AC220V / 50Hz
14. External communication TCP/IP (RJ45) and SMS modem
15. Cooling method Natural convection cooling
16. Dimensions 575mm \times 468mm \times 237mm
17. Weight 35kg