

ZHC368 FM Radio Modulator



Overview:

ZHC368D FM Stereo Broadcast Modulator is an excellent software radio product with excellent performance. The whole modulator adopts new digital signal processing (DSP) and direct digital frequency synthesis (DDS) technology. With the advantages of digital processing technology, it provides users with a perfect listening experience close to CD sound quality.

The modulator is composed of five parts: main control display, audio interface, digital signal processing, remote control telemetry interface and power supply. The modulator is installed in a 19-inch 1U standard case, and all input and output signals are led out from the rear panel.

Features:

- The whole process is digitally processed to achieve a perfect hearing effect close to the sound quality of [CD](#)
- Using new 550MHz digital signal processing ([DSP](#)) technology
- 1000MHz direct digital frequency ([DDS](#)) synthesis technology
- Using highly reliable system-on-chip ([SOC](#)) microprocessor technology
- Support [AES/EBU](#) standard digital audio input

- Support **RDS** subcarrier input
- **LCD** display working parameters in real time
- Standard **TCP/IP and RS232/485** serial communication remote control telemetry interface
- High-quality aluminum alloy, **1U, 19-inch** standard case
- Input power **AC 220V/110V** can be switched

Technical Specifications:

1. RF frequency range	87MHz ~ 108MHz in 10kHz steps
2. Output level	-30dBm ~ 10dBm continuously adjustable
3. Output impedance	50Ω
4. RF output level display	LCD
5. RF output connector	BNC
6. Residual wave radiation	<-60dB
7. Parasitic amplitude modulation	< -50dB
8. Allowable deviation of carrier frequency	± 200Hz
9. Analog audio input	-12dBm ~ + 8dBm
10. Audio level gain	-15dB ~ + 15dB step 0.1dB
11. Analog audio input impedance	600Ω balanced
12. AES / EBU input impedance	110Ω balanced
13. AES / EBU input level	0.2 ~ 10Vpp
14. AES / EBU sampling rate	30kHz ~ 96kHz
15. SCA input	unbalanced (option) BNC type connector
16. Audio pre-emphasis	0μs, 50μs, 75μs
17. Frequency response	± 0.01dB (30Hz ~ 15000Hz)
18. Left and right channel level difference	<0.01dB (100% modulation)
19. Stereo resolution	≥70dB (30Hz ~ 15000Hz)
20. Stereo signal-to-noise ratio	≥90dB (1KHz, 100% modulation)
21. Distortion	<0.01% (30Hz ~ 15000Hz)
22. Power supply voltage	AC90V ~ AC132V or AC180V ~ AC260V
23. Chassis size	19 inches, 1U (484mm × 305mm × 44mm)
24. Machine weight	4kg
25. Operating ambient temperature	-5 °C ~ + 50 °C
26. Relative humidity	<95%