

## ZHC618F-1000W/T Compact FM Stereo Transmitter



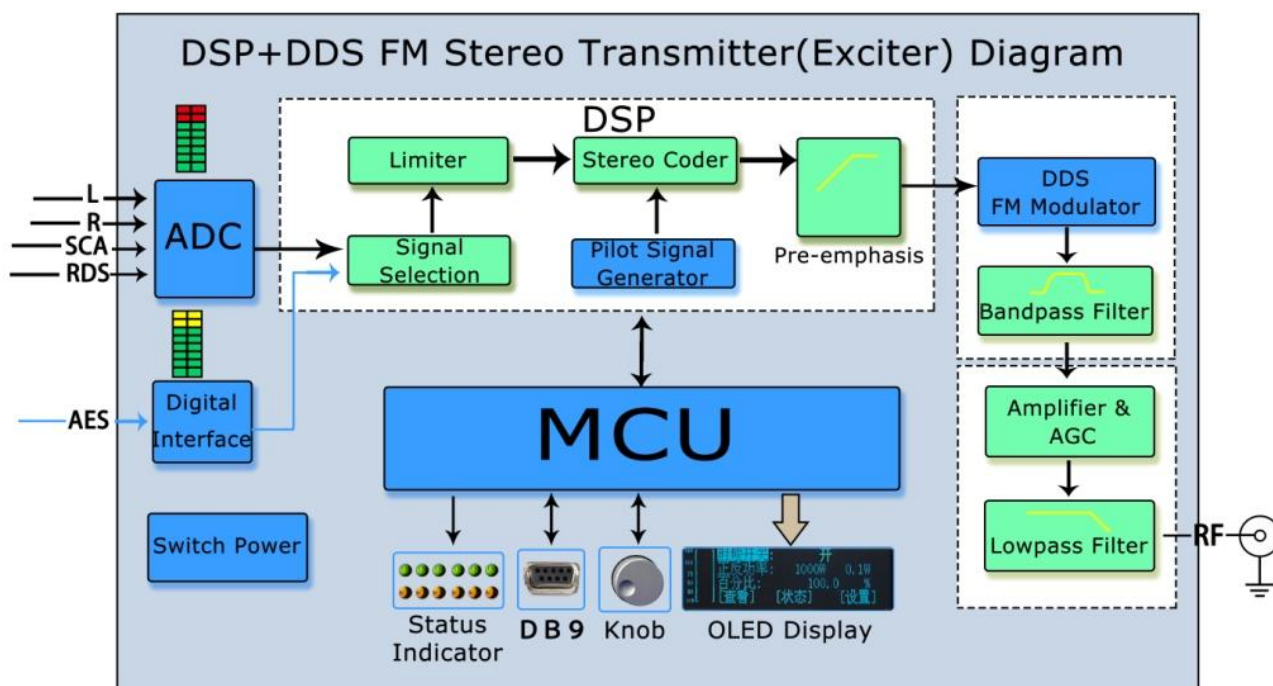
### Introduction:

This 1KW FM Transmitter uses new DSP + DDS digital technology for FM radio modulation board. It uses the new generation of high efficiency RF LDMOS transistor; low loss lumped filter; high reliability switching power supply and other components all been installed in a 2U height; 19-inch standard chassis. It reduced connection cables between components in common transmitter, so it's higher reliability and more easy for operation. The Modular design which form the compact and superior performance of the new 1KW FM radio transmitter. It has unparalleled technical indicators, the audio effects close to CD-quality.

This Transmitter uses modular structure design, it's easy for maintenance and repairing; it's using high reliability; wide band switching power supply which is suitable for global power application; the SMT chip can improve the reliability of this Transmitter.

## Features:

- High performance; high efficiency; high reliability; small size design.
- The entire transmitter be installed in one 2U height; 19 inch; High-quality stainless steel chassis. **Compact** structure.
- All-digital technology process **DSP+DDS**, Achieve CD quality perfect sound effect.
- Analog & Digital (**AES/EBU**) audio signal input directly, Digital can be priority.
- 1KW power amplifier module uses the newest high-efficiency LDMOS transistor (1400W); it's using microstrip impedance transformation technology; high efficiency & good consistency, easy for maintenance and replacement.
- Power amplifier radiator uses patented technology design, small wind resistance, large cooling area, high thermal conductivity.
- Using long-life German gale axial fan, high air volume, it can ensure long-term stable operation of the Transmitter.
- Power amplifier uses high reliability switching power supply, large amount of redundancy.
- Switching power supply has **protection functions** of over voltage, over current, under voltage, over temperature, short circuit, phase loss & lightning strike.
- Transmitter has **protection functions** of VSWR, over power, over temperature, over voltage, over current and lightning strike.
- All technical parameters can be read through the **OLED LCD**, intuitive and convenient.
- Power control using closed-loop automatic gain control (**AGC**), it can ensure the stable output power without drift.
- It uses **TCP/IP** and **RS232** remote control interface, it's easy to managed by local PC and remote monitoring.



## Technical Specifications:

- |                                   |                                        |
|-----------------------------------|----------------------------------------|
| 1. Frequency Range:               | 87.0MHz~108.0MHz<br>Setting step 10KHz |
| 2. Output Power                   | 0~1000W                                |
| 3. Output power deviation         | <± 10%                                 |
| 4. Output power stability         | <± 1%                                  |
| 5. Output Load Impedance          | 50Ω                                    |
| 6. RF Output Interface            | 7/16"(female)/ 7/8" Flange             |
| 7. RF efficiency                  | >75%                                   |
| 8. SFDR                           | < -70dB                                |
| 9. High Harmonic                  | < -65dB                                |
| 10. Residual Amplitude Modulation | < -50dB                                |
| 11. Carrier Frequency Precision   | ±200Hz                                 |
| 12. Analog Audio Input            | -12dBm~+8dBm                           |
| 13. Audio Input Level Gain        | -15dB~+15dB, step 0.1dB                |
| 14. Audio Input Impedance         | 600Ω, Balance, XLR                     |
| 15. AES / EBU input impedance     | 110Ω, Balance, XLR                     |
| 16. AES / EBU input level         | 0.2 ~ 10Vpp                            |
| 17. AES / EBU sample rate         | 30kHz ~ 96kHz                          |
| 18. SCA Input                     | Unbalance (optional) BNC connector     |
| 19. Pre-emphasis                  | 0μS, 50μS, 75μS (optional)             |
| 20. Audio Response                | ±0.1dB (30Hz~15000Hz)                  |
| 21. LR channel level difference   | <0.1dB (100% modulation)               |
| 22. Stereo Separation             | ≥50dB 30Hz ~ 15000Hz                   |
| 23. Stereo S/N ratio              | ≥70dB 1KHz, 100% modulation            |

24. Distortion	<0.1% 30Hz~15000Hz
25. Power supply	AC single-phase 220V / 110V
26. Cooling mode	Forced Convection
27. Temperature Range:	-5°C~+45°C
28. Relative humidity	<95%
29. Working Altitude	<4500m
30. Size	2U, 19-inch standard 483mm(W)×88mm(H)×440mm(D)
31. Weight	16KG