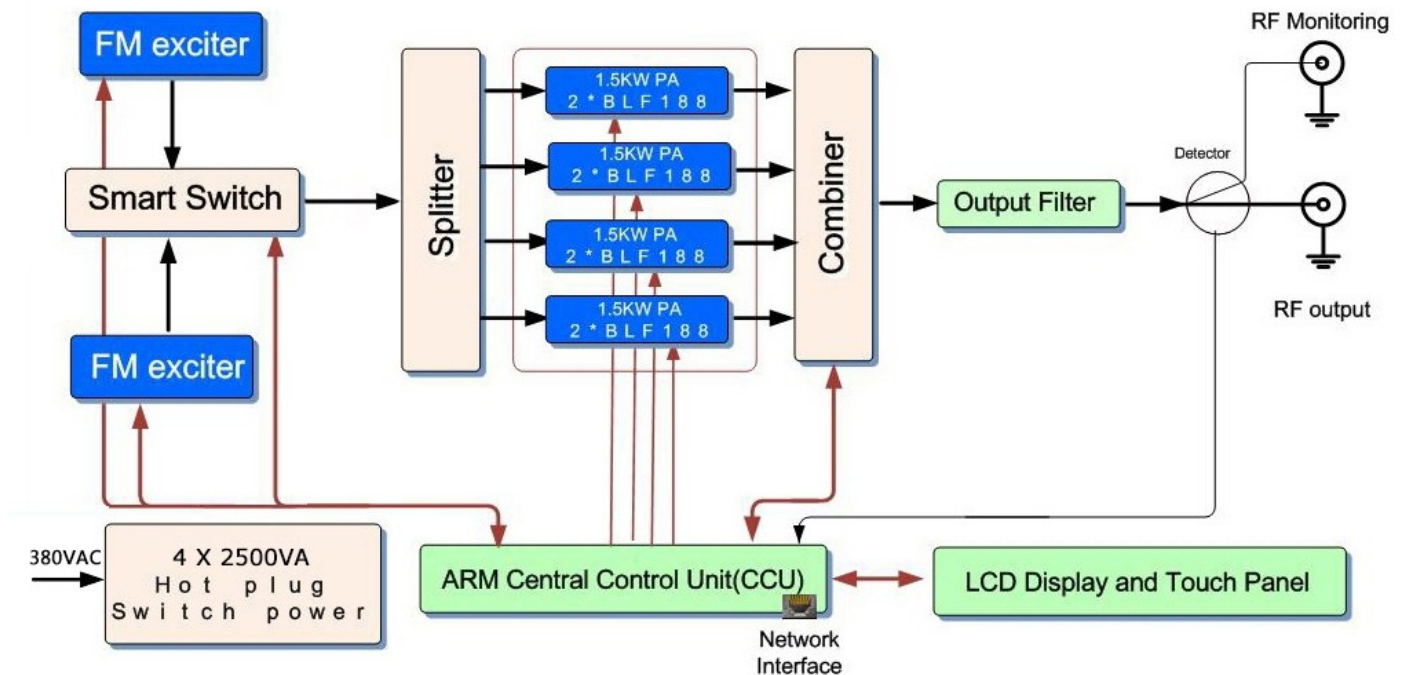


5KW FM Stereo Transmitter

The 5KW FM Stereo Transmitter (Hot-plugin) is a high-performance broadcast-grade stereo FM broadcast transmitter for wireless coverage of professional broadcast stations. Considering the high reliability of the transmitter, in the design concept, the transmitter adopts redundant design in key parts in order to achieve long-term stable operation of the transmitter. Because of the hot-plugin structure, the transmitter's components can be repaired and restored without stop working.





ZHC618F-5000W 5KW FM transmitter block diagram

Features:

1. Redundant of output RF power: It is efficiently synthesized by four 1.5KW [hot-plugin modules](#), and four 2500VA hot-plugin switching power supplies.
2. Stable output power: The intelligent [automatic power control technology \(AGC\)](#) is adopted to ensure that the output power does not change with the startup time and the ambient temperature. The power stability is controlled within 10W.
3. Dual-exciter configuration: adopting [dual-exciter intelligent automatic switching](#) (spare exciter and switcher are optional), which can further improve the reliability of the whole machine.
4. Digital FM Exciter: It adopts a fully [digital CD-level FM exciter](#), which can directly receive digital audio signals ([AES / EBU](#)), and the listening effect is close to the CD level.
5. Friendly man-machine interface: [8-inch true-color touch LCD display](#), real-time display of various parameters in the machine, without any training, you can operate under the screen prompts.

6. Complete **protection functions**: with over-power protection, over-reflection power protection, over-temperature protection, over-voltage protection and over-current protection; and can intelligently adjust the output power when some power amplifier modules fail, while maintaining the maximum safe power broadcast, It can also guarantee that the fault will not be enlarged.

7. True **hot-plugin function**: under any circumstances, the power amplifier module and power module can be plugged in without stopping, and the transmitter can be repaired and restored without stopping.

8. Timing automatic adjustment of output power: Through on-site settings, the transmitter can automatically adjust the output power at different times of the day, bringing convenience to the economic operation of the radio.

9. Advanced **remote-control telemetry** interface: you can access any parameters inside the transmitter through RS232 / RS485 or interface TCP / IP network interface.

Technical Specifications:

1. RF frequency range	87MHz~108MHz (other frequencies can be customized), stepping 10kHz
2. Output power	0~5000W continuously adjustable
3. Allowable deviation of output power	< $\pm 10\%$
4. Output power stability	< $\pm 3\%$
5. Output impedance	50 Ω
6. RF Output Interface:	1-5/8" Flange
7. Residual wave radiation	< -75dB
8. Parasitic amplitude modulation	< -50dB
9. Carrier Frequency precision:	$\pm 200\text{Hz}$
10. Analog audio input	-12dBm ~ +8dBm
11. Input audio Level Gain	-15dB~+15dB Step 0.1dB
12. Analog audio input impedance	600 Ω balance
13. AES input impedance	110 Ω balance
14. AES input level	0.2~10Vpp
15. AES sampling rate	30kHz ~ 96kHz
16. RDS input	Unbalanced (optional) BNC type connector
17. Pre-emphasis:	0 μS , 50 μS , 75 μS
18. Audio response:	$\pm 0.01\text{dB}$ (30Hz~15000Hz)
19. Left and right channel level difference	<0.01dB (100% modulation)
20. Stereo separation	$\geq 70\text{dB}$ (30Hz ~ 15000Hz)
21. Stereo signal-to-noise ratio	$\geq 90\text{dB}$ (1KHz, 100% modulation)
22. Distortion	< 0.01% (30Hz ~ 15000Hz)

23. Cooling method	Forced convection
24. Temperature range	-5 °C ~ + 45 °C
25. Chassis dimensions	19 inches wide (777mm) × height (1523mm) × depth (950mm)
26. Transmitter weight	400kg