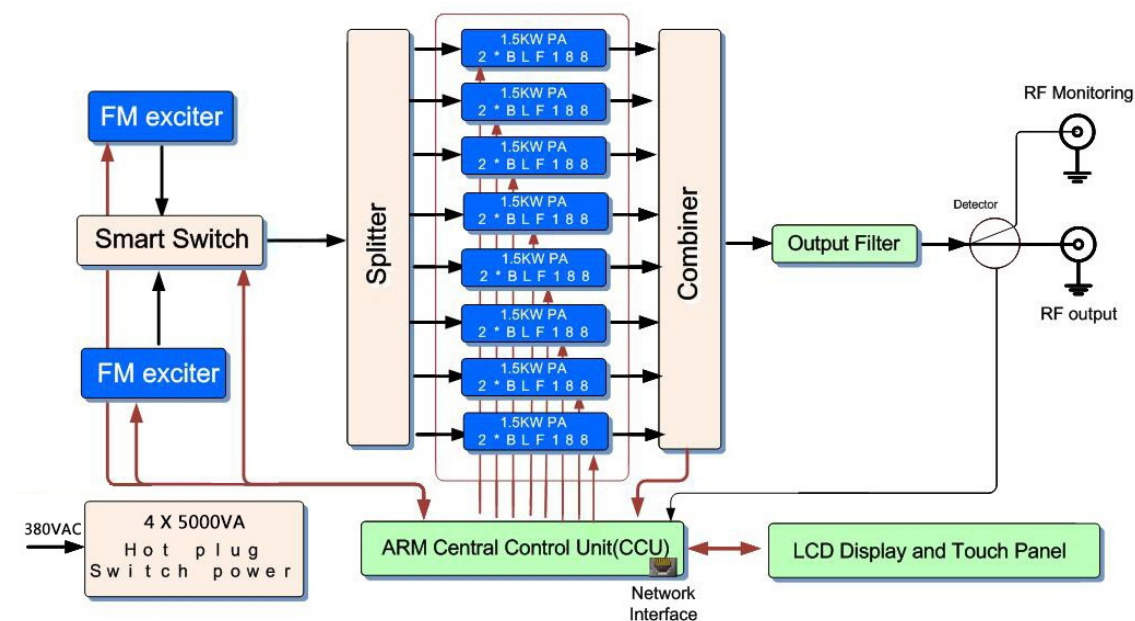


10KW FM Stereo Transmitter

The 10KW 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-10000W 10KW FM transmitter block diagram

FEATURES

- **Redundant Large Power:** 8pcs 1.5KW hot-plug RF Amplifier modules combined **high efficiently**; Maximum Output Power is 11KW. It uses the new high-efficiency LDMOS Transistors, the full RF output power can reach 70%.
- **Redundant Power Supply:** 4pcs 5000VA switched power supply modules are working in parallel. It can provide large **redundant power capacity**.
- **High-performance Low Pass Filter** which can minimize unwanted emission.
- **Output Power Stable:** Total output power is extremely stable by AGC (Automatic Gain Control). Ensure the output power would not change with the boot time and ambient temperature, power stability is less than 10W.
- **Dual-Exciter:** Two exciters (DSP+DDS) with automatically changeover switcher, increase entire transmitter stability.
- Analog and **Digital (AES/EBU)** audio signal input directly; Hearing similar to CD.

- **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.
- **Intelligent protection** functions by centre control module, like Over Forward Power, Over SWR, Over Temperature, Over Voltage, Over Current. It can adjust output power intelligent, keep the maximum safe output power and keep fault not expanding.
- **Best dustproof performance:** All inlets are made of high-quality filters which can filter out dust in the air to keep stability of transmitter.
- **Best lightning protection:** high quality lightning protection SPD from Germany for the whole power supply.
- **Real Hot-Plug structure:** the Amplifier modules and Power Supply modules can be repairing at non-stop condition in any case.
- **Timing automatically adjusts the output power:** After setting, the transmitter can automatically adjust the output power at different times of the day, convenient for economical radio broadcasting.
- **Advanced Remote Telemetry Interface:** RS232/RS485 or TCP/IP Internet Communication interface is ready for remote control system which can read all detail parameters from transmitter.

Technical Specifications:

- | | |
|--|---|
| 1. RF frequency range | 87MHz~108MHz
(other frequencies can be customized), stepping 10kHz |
| 2. Output power | 0~10000W continuously adjustable |
| 3. Allowable deviation of output power | < ± 10% |
| 4. Output power stability | < ± 3% |
| 5. Output impedance | 50Ω |
| 6. RF Output Interface: | 3-1/8" Flange |
| 7. Residual wave radiation | < -80dB |
| 8. Parasitic amplitude modulation | < -50dB |
| 9. Carrier Frequency precision: | ±200Hz |
| 10. Analog audio input | -12dBm ~ +8dBm |
| 11. Input audio Level Gain | -15dB~+15dB Step 0.1dB |
| 12. Analog audio input impedance | 600Ω balance |
| 13. AES input impedance | 110Ω 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 μ S, 50 μ S, 75 μ S
18. Audio response:	\pm 0.01dB (30Hz~15000Hz)
19. Left and right channel level difference	<0.01dB (100% modulation)
20. Stereo separation	\geq 70dB (30Hz ~ 15000Hz)
21. Stereo signal-to-noise ratio	\geq 90dB (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 (850mm) × height (1970mm) × depth (1200mm)
26. Transmitter weight	550kg