

50W~100W Digital TV Transmitter

Overview

This transmitter is composed of various standard terrestrial digital TV exciter modules (DTMB, ISDB-T, DVB-T/T2, ATSC or full standard) using FPGA+DDS technology, and is a terrestrial digital TV transmitter that complies with a single standard or full standard.

This product adopts a powerful 4-core ARM microprocessor+FPGA+SOC joint control system to ensure excellent performance and stable operation. Adopting a silky graphical interface, [users can operate the transmitter like a mobile phone](#), realizing the design concept of operating this product without reading the user manual.

This product uses AMPLON's latest generation of high-efficiency, high linearity, and anti standing wave ratio LDMOS tubes as power amplifier components, equipped with a highly reliable power amplifier power supply with over 100% redundancy, striving to implement the design concept of extremely high reliability.

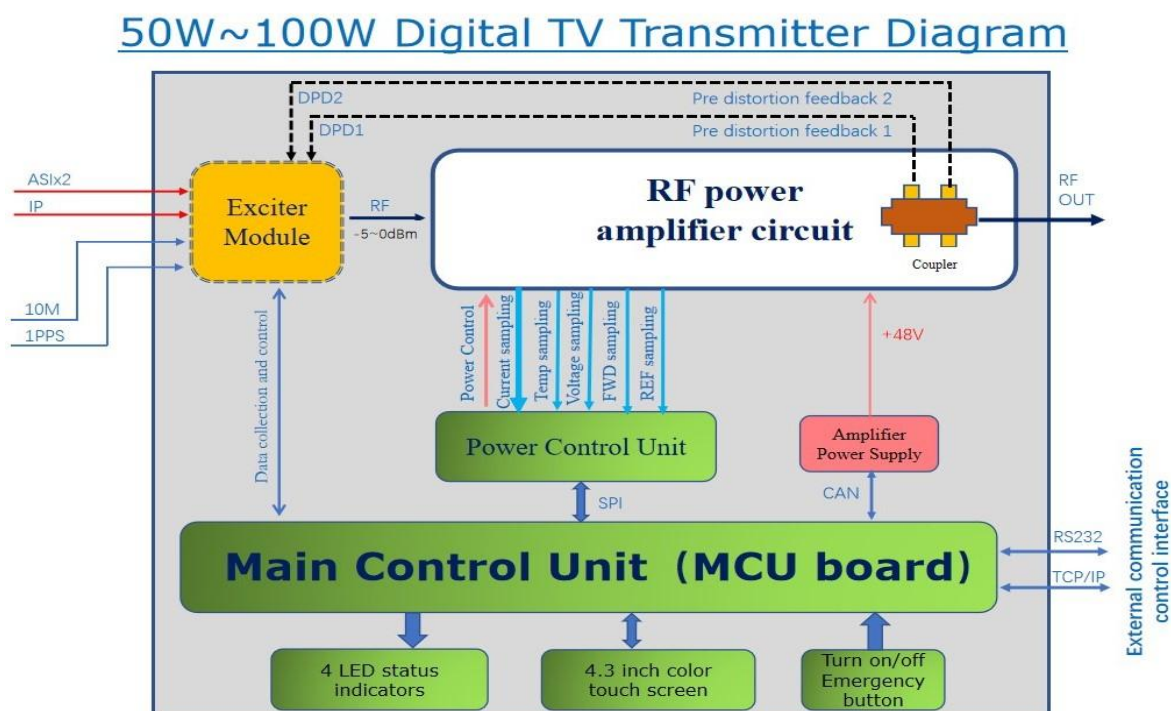
Product model: 50W and 100W. ZHC518D-[50W](#), ZHC518D-[100W](#)



Features

- A high-performance incentive module that meets a single standard or a full standard, achieved through **FPGA+DDS technology**.
- The **4.3-inch color touch screen** displays the main parameters and operating status of the exciter module, power amplifier, single frequency network timing device, etc., and various parameters can be set through the screen.
- All solid state** digital TV transmitter, using the latest generation of high linearity, high efficiency, and high standing wave ratio resistant LDMOS transistors.
- Adopting Huawei's high-efficiency hot-plugin switch power supply for front-installation, easy for maintenance and repair.
- Combined with the adaptive pre-distortion correction technology of the incentive module, **high efficiency** for the entire transmitter.
- Equipped with a **built-in timer for automatic power on/off**, it can achieve timed automatic power on/off.
- Set emergency power button, which can be turned on and off with one click.
- Visualized human-machine interface, **operate the transmitter like a phone**.
- Multiple alarm and protection functions (overvoltage, overcurrent, overheating, overpowering, over SWR, etc.).
- Networked telemetry and remote control, which can be monitored by web page.
- High reliability design, capable of working continuously for 24 hours.

Diagram



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Technical Specifications

1. Working channel: VHF or UHF
2. Output power: Two power levels 50W or 100W
3. Channel bandwidth: 8MHz or 6MHz
4. RF output impedance: 50Ω
5. RF output interface: N or 7/16" female
6. Output load reflection loss: Normal operation:- 26dB
Allowed working:- 20dB
7. Power input level: -5dBm~0dBm
8. Out of band useless emission: ≤ 60dB (with an external bandpass filter)
9. In band fluctuation: ≤ ±0.5dB
10. Shoulder on: better than 40dB
11. MER: better than 36dB
12. ASI stream input interface: BNC female
13. IP stream input interface: RJ45 female
14. Network communication interface: RJ45 female
15. RS232 communication interface: RS232 female
16. Power supply voltage: AC220V/50Hz
17. Operating environment temperature: -10℃~45℃
18. Relative humidity: <95%
19. Altitude: <2500m (<4500m optional)
20. Dimensions: 88mm (height) x 483mm (width) x 460 (depth)
21. Weight: 13Kg

All other specifications meet the technical requirements and measurement methods for terrestrial digital television broadcast transmitters (GB/T28435-2012)