

TY-13200D 200W VHF Digital Transmitter

Technical Specification V3.01

Chengdu Tengyue Electronics Co., LTD.

Add: 518 5F, E-trade Building, 126 Yihuan Road East 2nd Section, Chengdu City, 610052, China
TEL: 86 (28) 84303287 FAX: 86 (28) 84310769
E-Mail: catherine@rftye.com Skype: tye.catherine WEB: http://www.rftye.com

1. 200W VHF DIGITAL Indoor TV Transmitter



1.1 Outline

Thanks for your interested in our products.

TY-13200D works on VHF band (170-230MHz), output power is 200W. VHF series digital transmitter is a kind of product (meet with euro- standard) that specially designed to supply common or pilot frequency coverage and subsidiary station by consuming small and medium power for terrestrial digital TV transmission. It applies to modulation modes like DVB-S, DVB-S2, nQAM, DVB-T, DVB-T2 and DTMB-T and so on. It is applicable to built-up areas, basement, tunnel and remote mountainous areas. Its main advantages include installation convenience and simple process in debugging and maintenance, etc. And in any combination of multiple antenna-feeder system it can supply local coverage and subsidiary station of wireless digital signal in the blind area.

1.2 Main features

- Wide-band frequency response and low noise design
- Design of low power consumption and linearization advances emitting power of the transmitter and reduces nonlinear distortion.

- Very low group delay feature, suitable for digital signal transmission
- ALC keeps output of constant power, output VSWR detecting protection
- Apply to single-channel or multi-channel VHF digital television transmission system
- Be used in the Wide-band frequency repeating of HFC, AML, or MMDS digital TV signal
- Realize wireless network coverage of digital TV at a low cost.
- Modular design simplifies installation, field services and upgrade.
- Automatic and manual switching backup systems available.
- Build-in lightning protector with current-dividing series power prevents lighting surge and instant overvoltage.
- Indoor type with large LCD panel system real time working condition, maintenance and management of system can be achieved easily.

| RF Output Frequency | 170~230MHz(frequency band carrier signal takes could be set arbitrarily) |
|---------------------------------|--|
| Output Power | 200W |
| Bandwidth | 6MHz/7MHz/8MHz or multi-channel system Maximum Bandwidth≤24MHz |
| Modulation Mode | COFDM/16QAM/32QAM/64QAM/QPSK,etc. |
| Shoulder Ratio | ≥40dBc(COFDM/64QAM) |
| RF Output Interface | 50Ω/N connector Return Loss: 20dB |
| RF Frequency Response | BW: 60MHz Passband Fluctuation: ≤2.0dB Any Within 10MHz: ≤1.0dB |
| Group Delay Characteristi cs | ≤40nsec |
| IF Input Level | -25~-10dBm |
| Input Frequency | 170~230MHz |
| IF Input Interface | 75Ω/F connector Return Loss: 15dB |

1.3Technical Specification

| In-band Spur Restraint | -60dBc(relative digital signal level) |
|-------------------------------|---|
| Automatic Level Control | ≥20dB |
| Coin Modulation Error | Gain Control: 0~20dB,error≤±0.5dB |
| Gain Modulation Error | Gain Control: 20~31dB,error≤±0.75dB |
| Gain Control Range | 0~31dB, 1.0dB stepping |
| | Working Temperature Range: -20°C~+45°C Humidity: no condensation Relative Humidity: 0~95% nonsaturation |
| Working Voltage | AC 220V±10%,50/60Hz |
| Package Dimensions (L*W*H) | 87*59*46cm |
| Package Weight(Kg) | 65Kg |

2.TYE Series Transmitters

| Item | Product name | Frequency Range | Output Power | System |
|------|--|--------------------|-----------------|--|
| 1 | VHF Analog TV Transmitter | 170MHz-230MHz | 20W-2KW | PAL/NTSC/SECAM |
| 2 | VHF Digital TV Transmitter | 170MHz-230MHz | 5W-300W | DVB-T/T2/S/S2/C,QAM Omnidirectional transmission |
| 3 | VHF Live/Mobile Transmitter | 300MHz-350MHz | 5W-30W | Point to point transmission |
| 4 | UHF Analog TV Transmitter | 470Mhz-860MHz | 20W-2KW | PAL/NTSC/SECAM |
| 5 | UHF Digital TV Transmitter | 470Mhz-860MHz | 10W-1KW | DVB-T/T2/S/S2/C,QAM Omnidirectional transmission |
| 6 | L Band TV Transmitter | 1.3GHz-1.5GHz | 20W-50W | DVB-T/T2/S/S2/C,QAM Omnidirectional transmission; Point to point transmission |
| 7 | S Band (MMDS) Digital TV Transmitter | 2.0GHz-2.9GHz | 10W-500W | DVB-T/T2/S/S2/C,QAM Omnidirectional transmission; Point to point transmission; PAL/NTSC/SECAM(Analog signal) |
| 8 | 8GHz TV Transmission Module Set | 7.8GHz-8.3GHz | 500mW-2W | DVB-S/S2(8PSK/QPSK) Omnidirectional transmission; Point to point transmission |

| 9 | Ku Band MVDS) TV Transmitter | 10.7GHz-12.0GHz | 200mW-24W | DVB-S/S2(8PSK/QPSK) Omnidirectional transmission |
|---|---------------------------------|-----------------|-----------|---|
| | | | | Point to point transmission |