

DVB-T Terrestrial Digital TV Transmitter



Function and Characteristics:

Working frequency band: 470-806MHz, agile frequency channel output. Working RF bandwidth: 6/7/8 MHz optional. Easily convert among different digital TV system; and it suitable for different terrestrial digital TV standards, such as DTMB(CTTB) and DVB-T. All-solid-state circuit design, power amplifier unit has superlinearity, broadband characteristics. It is modularized designed with high gain LDMOS high-power FET, which has high redundancy, perfect self-check function and easy to install and maintain; the hot-plug power units could backup each other, ensure that there is no single fault of transmitter. Local or remote control, friendly man-machine interface by microcomputer unit, eight inch color touch display screen, it can display and control the operating mode excitors, power amplifier units and transmitter, with GSM message autoalarm module, and fixed timing starting up and shutdown functions. With over-voltage, over-current, over-heat, over-excitation, low-voltage, short-circuit and over-VSWR auto-protective functions. With multiple-measure of thunder-proof, it could run securely. Adopting digital output band-pass filter, and high-power synthesis technology, that lower insertion loss and high out-of-band suppression. Wide voltage stability range and high efficiency of power supply. Forced air cooling design with low power consumption and low noise. All technical specifications can meet or exceed the national standards(GB20600-2006).



Technical Specification:

» Channel Processing	
» Network Mode	» SFN&MFN
» Bandwidth	» 8MHz/7MHz/6MHz
» Inverse Fast Fourier Transformation	» 2k 8k
» Protective Interval	» 1/4 1/8 1/16 1/32
» Forward Error Correction	» 1/2 2/3 3/4 5/6 7/8
» Sub-carrier Modulation Mode	» QPSK 16QAM 64QAM
» Hierarchy	» Alfa1.2.4
» Input Interface of Exciter	
» Interface	» (Dual ASI MPEG2 TS input), BNC, 75Ω
» SFN Standard Clock Input Interface	» F=10MHz; Level: -5dBm~+10dBm; 50 Ω
» SFN Standard Time Input	» BNC, F:1pps,(Level)0~5V, (Forward trigger), 50 Ω
» IF Input Interface of Exciter	
» Interface	» BNC
» IF	» 30~40MHz(Modulation between)(step)1Hz
» Frequency Stability	» (Inner clock):1PPm,(or sync with outer GPS)
» Spectrum Polarization	» Forward or inverse
» Output Level	» 8dBm~-2dBm(Modulation between)
» Output Level Flatness	» 0.2 dB
» Return Loss	» 26 dB
» Output Signal Shoulder and Out-of-band Rejection	» 50 dB@ IF±4.2 MHz
» Out-of-band Harmonic and Hybrid Wave Suppress	» -60dB
» Modulation Error Ratio	» 45db
» RF Output Interface of Overall Transmitter	
» Interface	» N type 7/8" or 1 5/8 or 3 1/8" Flange; 50 Ω
» Output frequency Range	» IF 474MHz 858MHz(Can be specified as any channel)
» Spectrum Polarization	» Forward or inverse
» Output Power	» 30Wrms~3KWrms
» Output Flatness	» ±0.5dB
» Return Loss	» 16 dB
» Output Signal Shoulder and Out-of-band Rejection	» >38 dB@ IF ±4.2 MHz
» Out-of-band Harmonic and Hybrid Wave Suppress	» 60dB
» Amplification Class	» A+AB
» Environmental Factors	
» Working Temperature	» -10~+50
» Storage Temperature	» -30~70
» Relative Humidity	» 95% (Non condensation at 25
» Cooling	» Forced air cooling with built-in fan
» Atmosphere Pressure	» 86~106Kpa
» Power Supply	» Single-phase ,AC,176V~264V,40~63Hz 3-phase ; AC 330V~456V;40~63Hz
» Machine Room	» Few dust, No oscillation and impact
» Dimensions	» 3KW/2KW: 1800(H)×1800(W)×1000(D)mm3; » 1.5KW/1KW: 2000(H)×600(W)×1000(D)mm3; » 800W/500W: 1800(H)×600(W)×1000(D)mm3; » 100W~300W :266(H)×448(W)×650(D)mm3