

1KW UHF/VHF All Solid-state TV Transmitter



Function and Characteristics:

With All Solid-state circuit design, video/audio combined transmission, convenient to upgrade to digital TV Transmitter. New type of dual exciters with broadcasting quality; adopt advanced RF non-linear correction technology, which is able to make the whole equipment work under super-linear state; with small RF distortion in signal transmission. With super-linearity and broadband amplifier unit; modularized design power amplifier, and adopt high gain LDMOS high-power FET, with great redundancy and perfect self-diagnostic function, easy to install and maintain. With multiple amplifiers united redundant design, acting as backup for each other; hot plug replacement to ensure no single point of failure of the transmitter. Adopt new type of output filter, high-power synthesis technology, low insertion loss, high out-of-band suppression. Local/remote control, user-friendly interface; embedded microprocessor display and control units which can display and control the working status of exciter, amplifier and the whole equipment; With timing power on/off function and GSM short messages auto-alarm function; LED displays all status. With transmitter power auto-protective function when there is no video. The power will be recovery automatically when video

is available. With over-voltage, over-current, over-heat, over-excitation, low-voltage, open-phase, short-circuit and over-VSWR auto-protective functions; with multiple lightning protection measures. This equipment has perfect protection devices. Intellectual property; the exciter, amplifier, power synthesis distributor and monitoring system are all developed by ourselves. Adopt switch regulated power supply; with wide voltage range and high efficiency. Adopt forced-air-cooling design, with low power consumption and noise. All performances and indicators of this equipment are better than national standard and ministry standard.



Technical Specification:

	» UHF	» VHF
» Rated Output Power	» 1KW	
» RF Specifications		
» Television Standards	» PAL-D (or other standards)	
» Frequency Range	» 470MHz~806MHz(Select one channel)	» VHF 1, 3 (Select one channel)
» Video/Audio Ratio	» 10:1	
» RF Output Impedance	» 50Ω	
» Output Interface	» 7/8"Flange	
» Carrier Offset	» ±300Hz/3months	
» Output Power Variation	» ±0.25dB	
» Inside-band Intermodulation	» ≤-52dB	
» Stray Output In Adjacent-channel	» ≤-60dB	
» Stray Output Out Adjacent-channel	» ≤-40dB	
» Video Specifications		
» Input Level	» 1 Vp-p	
» Input Impedance	» 75Ω	
» Input Return Loss	» ≥34dB(0MHz~5.5MHz)	
» Modulation Mode	» AM, negative polarity	
» Percentage of Modulation	» ≤87.5%	
» Field-time Waveform Distortion	» ≤2 %	
» Line-time Waveform Distortion	» ≤2 %	
» 2T Sine-squared Pulse Distortion	» ≤2 %	
» Luminance Non-linearity Distortion	» ≤10%	
» Blacking Level Variation	» ≤±2.5 %	
» Differential Gain	» ±5%	
» Differential Phase	» ±5°	
» C/L Gain Inequality	» ≤10%	
» C/L Delay Inequality	» ±30ns	
» Stochastic Sundry Wave S/N Ratio	» (Root-Mean-Square Value, unweighted): ≥50dB (Root-Mean-Square Value, weighted): ≥58dB	
» Periodic Disturbance S/N Ratio	» (Peak-to-peak value): ≥50dB	
» Audio Specifications		
» Input Level	» 0dBm±6dB	
» Input Impedance	» 600Ω (Bal.) or ≥2KΩ (Unb.)	
» Modulation Mode	» FM	
» Pre-emphasis	» 50μs	
» Frequency Deviation	» ±50KHz	
» Harmonic Distortion	» ≤1% 30Hz~15KHz (100% Modulated)	
» Amplitude-Frequency Characteristic	» ±1dB 30Hz~15KHz, 50us (50% Modulated)	
» FM S/N Ratio	» ≥60dB (1KHz, 100% Modulated)	
» AM Noise	» ≤-50dB (Unmodulated)	
» Inner-carrier Noise	» ≤-45dB (100% Modulated)	
» Sync parasitic Am Modulation S/N	» ≥40dB	
» Video to Audio Intermodulation	» ≤10 %	

	» UHF	» VHF
» Environmental Factors		
» Working Temperature	» -10~+45 C	
» Relative Humidity	» 95% No condensation at 25 C	
» Atmosphere Pressure	» 86~106Kpa	
» Cooling	» Forced air cooling	
» Power Supply	» single phase AC 220V \pm 15% 50Hz \pm 10%	
	» 3 phase AC 380V \pm 15% 50Hz \pm 10%	
» Machine Room	» Few dust, No oscillation and impact	
» Dimensions	» 1400(H) \times 600(W) \times 900(D)mm ³	