



DFT-7313 FM Audio Broadcast Transmitter



Outline

DFT-7313 (1K Watt) is Dexin's newest generation of FM audio transmitter with low and medium power.

It adopts advanced third generation of FM modulation technologies: digital signal processing (FPGA) and digital frequency synthesis technology (DAC). DFT-7313 takes use of the advantage of digital audio processing technology to provide users a CD quality hearing experience with high linear and high gain LDMOS tube amplifier module.

Key Features

- **Fully complying with national standard (GB/T4311-2000) and industrial standard (GY/T169-2001)**



All the specifications are subject to change without any further notice. All rights reserved.

- **Adopt high gain and high linear LDMOS tube amplifier module design**
- **Adopt international advanced digital signal processing technology (FPGA) for audio encoding**
- **Support AGC function with sustained power output ($\pm 0.1\text{dB}$) to ensure the transmitter a good stability and reliability**
- **Adjustable output power as needed (50W~1000W)**
- **Low power consumption and super linear design to improve the transmission power, and reduce the nonlinear distortion**
- **LED on the front panel supporting alarm and signal monitor**
- **High-efficiency power supply with wide range of voltage (AC100~264V), suitable for different working condition**
- **Equiped with multiple lightning protection measures**
- **Support fault self-diagnosis and self-protection**
- **Air-cooled system with low consumption and low noise**
- **Multi lightning protection measures, good protection for whole equipment**
- **Full digital front panel control, easy operation**
- **24-hour working unmanned, user friendly design**

Technical Specifications

S/No.	Item	Unit	Technical Index	Industrial Standard	Remark
1	Output Power	W	1000	--	
2	Frequency	MHz	87~108	--	
3	Carrier frequency allowable deviation	Hz	≤ 500	± 1000	
4	Sparious Radiation	dB	$< -60\text{dB}$ and $< 1\text{mW}$	$< -60\text{dB}$ and $< 1\text{mW}$	



All the specifications are subject to change without any further notice. All rights reserved.

5	parasitic amplitude modulation noise		dB	≤ -60	≤ -50	
6	Pilot frequency deviation		Hz	± 1	± 1	
7	Deviation (100% modulation)		kHz	± 75	—	
8	pre-emphasis		μs	50	—	
9	Distortion (100% modulation)	L	%	< 0.2	< 0.5	
		R				
10	Frequency response (without emphasis, de-emphasis)	L	dB	± 0.2	± 0.5	
		R				
11	Frequency response (with emphasis, de-emphasis)	L	dB	± 0.2	± 1	
		R				
12	SNR (100% modulation)	L	dB	≥ 70	≥ 60	
		R				
13	L/R Separation	L \rightarrow R	dB	> 60	> 40	
		R \rightarrow L				
14	L/R level difference		dB	< 0.2	< 0.4	

Specifications and Environment Conditions

Item	Item	Technical Requirements	Remark
Output and Input Specifications	Input interface	XLR	
	Output interface	L29-50K	
Environment condition	Working temperature	$-20 \sim +50^{\circ}\text{C}$	
	Storage temperature	$-30 \sim +75^{\circ}\text{C}$	
	Relatively humidity	$< 95\%$ (25°C no condensation)	
	Cooling mode	inside forced air cooling	
	atm press	$86 \sim 106\text{kPa}$	
	power supply	AC, $100 \sim 264\text{V}/50\text{Hz}$	
	machine room	Less dust, shock-free	
	Demission	$454 \times 440 \times 129.5\text{mm}$ (L×W×H)	19 Inches

System Principle

