



DFT-72XX FM stereo Broadcast Transmitter



Outline

DFT-72XX series products are Dexin's newest generation of FM stereo Broadcast 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-72XX series transmitters take use of the advantage of 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)
- Adopt high gain and high linear LDMOS tube amplifier module design



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- **Adopt international advanced 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 (10W~10kW)**
- **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**
- **Equipped 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**
- **Two Transmitters can be connected simultaneously by coaxial switch, and one for back up**

Technical Specifications

S/No.	Item	Unit	Technical Index		Remark
1	Output Power	W	500		
2	Frequency	MHz	1kW \leq	65.5~87; 87~108	
			1kW $>$	87~108	
3	Frequency deviation	Hz	≤ 500		

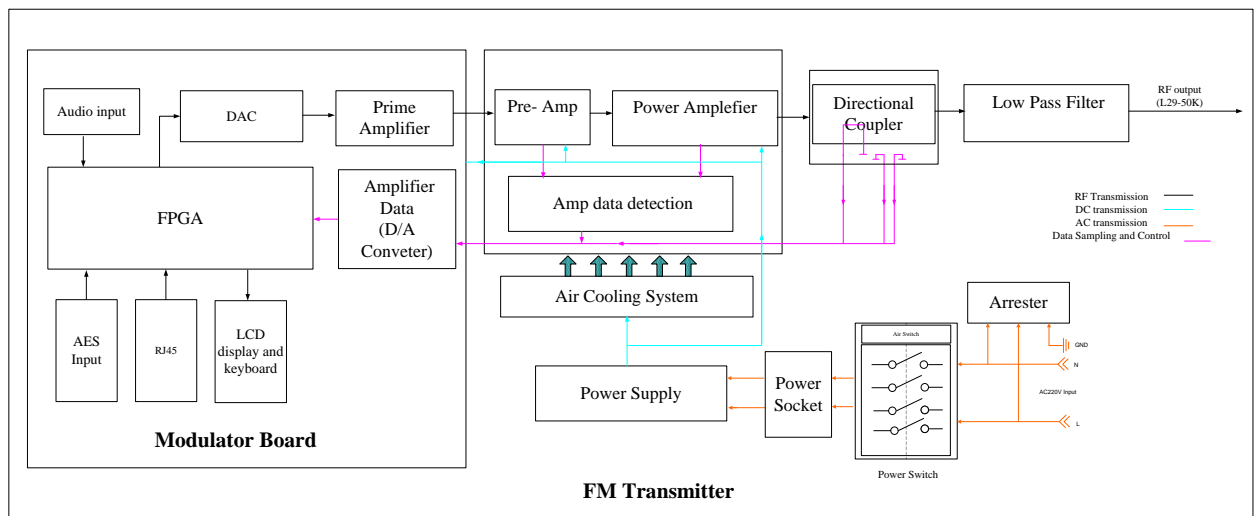
4	Sparious Radiation		dB	≤ -70	
5	parasitic amplitude modulation noise		dB	-60	
6	Pilot frequency deviation		Hz	± 1	
7	S signal 38kHz Residual component		dB	< -40	
8	Deviation (100% modulation)		kHz	± 75	
9	pre-emphasis		μs	50	
10	Distortion (100% modulation)	L	%	< 0.2	
		R			
11	Frequency response (without emphasis, de-emphasis)	L	dB	± 0.2	
		R			
12	Frequency response (with emphasis, de-emphasis)	L	dB	± 0.2	
		R			
13	SNR (100% modulation)	L	dB	≥ 75	
		R			
14	L/R Separation	L \rightarrow R	dB	> 70	
		R \rightarrow L			
15	L/R level diffrence		dB	< 0.1	

Specifications and Environment Conditions

Item	Item	Technical Requirements	Remark
Output and Input Specifications	RDS input	BNC interface(57KHz)	
	Input interface	XLR, AES/EBU(Optional)	
	Output interface	L29-50K	
Environment condition	Working temperature	$-20 \sim +50^{\circ}C$	
	Storage temperature	$-30 \sim +75^{\circ}C$	
	Relatively humidity	$< 95\%$ ($25^{\circ}C$ no condensation)	
	Cooling mode	inside forced air cooling	
	atm press	86~106kPa	
	power supply	AC, 100~264V/50Hz	
	machine room	Less dust, shock-free	

Demission (L×W×H)	10~30W	482×420×44mm
	100W	482×420×88mm
	300~1kW	482×560×176mm
	3kW	600×800×1080mm
	5kW	600×1050×1695mm
	10kW	650×1050×1695mm

System Principle



Order Information

DFT-7211: 10W	DFT-7212: 100W	DFT-7213: 1kW	DFT-7214: 10kW
DFT-7231: 30W	DFT-7232: 300W	DFT-7233: 3kW	
DFT-7251: 50W	DFT-7252: 500W	DFT-7253: 5kW	