



FTC50

50 W FM TRANSMITTER



The FTC50 FM transmitter is designed to provide more reliable FM transmitters using the extremely rugged LDMOS power transistor for the FM broadcast market.

Less weight and dimensions of Compact transmitters provide less transport cost.

Main Features

- Very compact case (3U rack)
- Direct to channel digital exciter with built in RDS encoder
- Very Efficient LDMOS Amplifier
- Excellent audio performance
- Measurement and display of the transmitter's working parameters
- High Reliability Use Of Microstrip Technology
- Forward power, reflected power, heatsink temperature, transistor current and voltage protections





FTC50

50 W FM DIGITAL EXCITER

Technical Parameters

GENERAL DATA	Output Power Range	0 - 50 W
	RF Output Connector	Nf
	Operating Band	87.5 - 108.0 MHz
	Dimensions: W-H-D	48.5-55-13.5cm (3U Rack Unit)
	Weight	13 kg
	RF Power Stage Technology	LDMOS
	Automatic Power RF Control	Stabilized output power value on the set value
	Overall Output Power RF Stability	± 0.1dB
	Cooling System	Forced air-cooling
	Remote Control	Yes. SNMP. Optional
	RS232 / RS485	2xRS485 (RJ45), 1xRS232 (DB9). RS232 only for printer. RS485 for communication with other devices
	Points of Measure	RF Sample
AUDIO & RF DATA	L/R Input Level	0dB m (0.636Vpk)
	L/R Level Adjustment	Soft adjust from back panel via trimmer
	L/R Input Impedance	600 ohm balanced, 10K ohms unbalanced
	MPX Input Level	+15/-10 dBu for 75 KHz standard deviation
	MPX Input Impedance	5 K unbalanced
	AES/EBU input resolution	24 bits
	AES/EBU input sample rate	32, 44.1, 48, 96, 192 KHz automatically selected
	AES/EBU input level	-20 dBFS - 0 dBFS
	AES/EBU input impedance	110 Ohm unbalanced
	SCA/RDS input level	0 dBu for 10% deviation
	PILOT Tone Frequency	19 KHz
	PILOT Tone Frequency Stability	± 1 Hz
	THD+N (stereo/mono operation)	< 0.03% or better with 75 KHz frequency deviation at 30 Hz to 15 kHz
	THD+N (Mpx operation)	< 0.01% or better with 75 KHz frequency deviation at 30 Hz to 15 kHz
	Pre-emphasis	50/75µs selectable
	Pre-emphasis Tolerance	± 0.1 dB
	FM S/N CCIR Mono/Stereo	>80dB weighted >80dB unweighted @400Hz, 75KHz deviation, quasi-peak detector, 50us de-emphasis
	FM S/N MPX	85 dB 20 Hz to 23 KHz @ 53 KHz - detector RMS
	Amplitude-frequency characteristic	± 0.15 dB, 30 Hz to 15 KHz
	Linear crosstalk	> 70 dB 20 Hz to 15 kHz
	Intermodulation distortion	<0.05% Measured with two of tones 1 kHz & 1.3 KHz, ratio 1:1 at 100% modulation
Class of Emission	F3	
Stereo Emission	According to ITU-R recommendation 450 (pilot tone)	
PLL Lock Time	110 ms	
Frequency Deviation	± 75 KHz	
Maximum Frequency Deviation	± 150 KHz	
Frequency Stability	± 1ppm from -5 to 45°C.	
RF Frequency Steps	100 KHz	
INSTALLATION REQUIREMENTS	AC Voltage	180/264 V AC- 47- 63 Hz
	Power Consumption	80 VA
	Current consumption @220V AC	0.4 A
	Overall Efficiency	67%
	Power Factor	>0.95
ENVIRONMENT	Temperature Range (operating)	- 5/ +45°C, 23 / 113°F
	Humidity Range (operating)	90% @ 40°C, 104°F
	Altitude Range (operating)	< 2000 meters / <13125 Feet