



FTC50-D

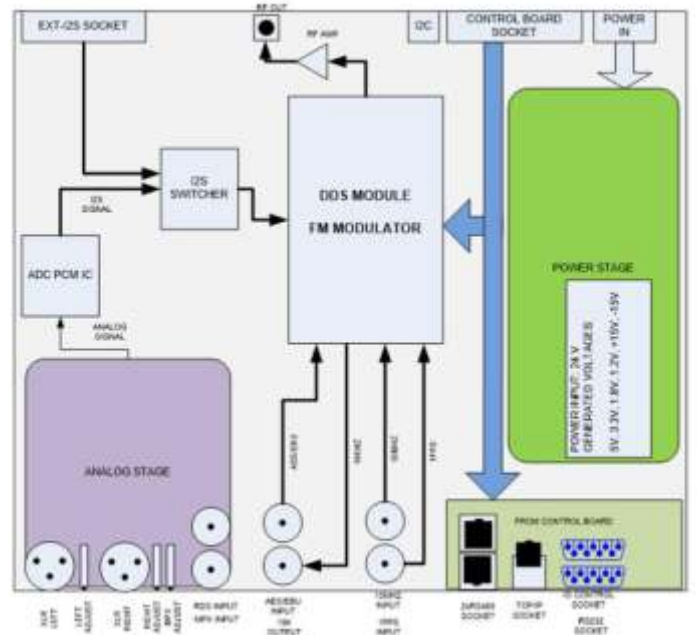
50 W FM DIGITAL EXCITER



FTC50-D FM digital exciter is designed to provide all requested specifications in a single box. Analog&digital audio signals are converted to digital signals and modulated in a FPGA with excellent software algorithms to FM band with extremely low noise level. It is manufactured to the highest performance needs.

Main Features

- Direct to channel digital modulator (DDS) with built in RDS encoder
- High audio performance is ensured by advanced digital signal processing technology (24-bit analog converter)
- Measurement and display of the transmitter's working parameters
- Built-in silence detector (adjustable time)
- Built-in automatic audio source selector
- Ready for N+1 redundancy system
- Automatic start/stop for air conditioner
- Ready for SFN
- RDS Alarm contact
- Event logs can be seen on display or printed out with date&time of event
- All parameters can be remotely controlled by TCP/IP





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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 - 58 - 13.5 cm (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	± 0.1 dB
	Cooling System	Forced air-cooling
	Air outlet	On the rear. Cooling low 2200/2400 m ³ /h (depending on environment)
AUDIO & RF DATA	L/R Input Level	-3 to +9 dBm
	L/R Level Adjustment	Soft adjust 0.1 dBu steps from front panel
	L/R Input Impedance	600 ohm balanced, 10K ohms unbalanced
	PILOT Tone Frequency	19 KHz
	PILOT Tone Frequency Stability	± 1 Hz
	THD+N (stereo/mono operation)	0.03% @ 400 Hz
	Pre-emphasis	50/75 μ s selectable from front panel
	Pre-emphasis Tolerance	± 0.1 dB
	FM S/N Mono	63 dB
	FM S/N Stereo	58 dB
	Amplitude-frequency characteristic	± 0.15 dB, 30 Hz to 15 KHz
	Stereo Crosstalk (typical)	Main to Sub -35 dB 30 Hz to 15 KHz
	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	± 90 KHz	
Frequency Stability	± 1 ppm 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