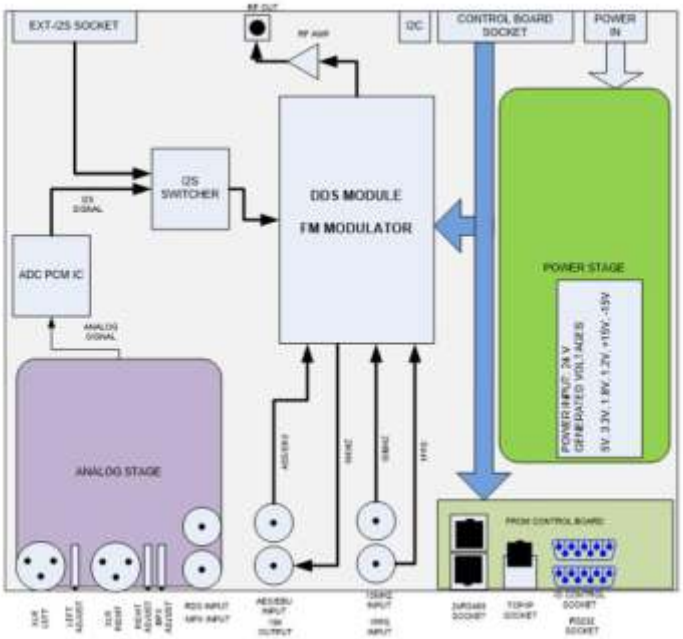
FTC1K5-D

1.5 KW FM DIGITAL TRANSMITTER

FTC1K5-D FM digital exciter is designed to provide all requested specifications in a single boxAnalog&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



LDMOS Technology

Self Managing System

MADE IN TURKEY

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Yukarı Dudullu Mah. Necip Fazıl Bulvarı Keyap Sitesi D-1 Blok No:44/56, Umraniye Istanbul TURKEY

FTC1K5-D

1500 W FM DIGITAL TRANSMITTER

Technical Parameters		
GENERAL DATA	Output Power Range	0 - 1500 W
	RF Output Connector	7/16
	Operating Band	87.5 - 108.0 MHz
	Dimensions: W-H-D	48.5 - 55 - 13.5 cm (3U Rack Unit)
	Weight	25 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	-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
	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 recomendation 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	1950 VA
	Current consumption @220V AC	8.8 A
	Overall Eficiency	72%
	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

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