

# FM STEREO TRANSMITTERS, WIDE BAND NO RETUNE REQUIRED

## 10 FREQUENCY MEMORIES - 87.5 Mhz a 108.0 Mhz

### MFT 50 / MFT 150 / MFT 250



The **MFT 50/150/250** stereo FM transmitters has been designed to meet the high standards required for the international market.

The wide band design allow to program from the keyboard the operating frequency or select one of the ten stored in memory and put the transmitter on the air immediatly without any readjustment.

The design of the frequency synthesizer allow to get a very low distortion in the modulation and a high dynamic range. This features combined with a digital compensation system of the modulation, guarantees minimum differences in the modulaci3n level across the full band.

All the parameters can be selected, changed and stored in memory from the keyboard. The main functions are protected by an user key to prevent the modification accidentally or by unauthorized personnel.

The **MFT 50/150/250** stereo FM Transmitters has been designed with the latest technology in processors, radio frequency and surface mount. The RF PA includes DMOS and LDMOS devices. The power supply is a switching type and universal AC range.

#### Programming from the control panel

- transmitter enable / disable
- current frequency and memories frequencies
- current mode, stereo / mpX / mono
- pilot enable / disable
- pre enfasis select
- output power level
- modulation level
- display language, english / spanish
- password

#### Available meditions

- direct and reflected power in Watts (1 Watt resolution)
- modulation level in Khz (1 Khz resolution)
- input attenuator in dB (- 10 dB to + 10 dB, 1 dB resolution)
- power supply voltage (0.1 V resolution)
- power supply current (MFT150 & 250, 0.1 A resolution)

**Inputs:** right, left, mono, mpX, aux

## TECHNICAL SECIFICATIONS FOR THE MFT 50/MFT150/MFT250

Frequency generation	Direct, PLL.
Modulation type	Direct FM, two point modulation.
Frequency range	87.5 - 108.0 Mhz in 100 KHz steps.
Frequency programing	From keyboard or memory in 100 KHz steps, key protected.
Maximum deviation	± 75 KHz @ 100 %.
Frequency acuracy	± 2.5 ppm after 30 minutes power on.
Frequency stability	± 5 ppm from -10°C to +50 °C. ± 2.5 ppm from -10 °C to + 60 °C, optional.
Temperature range	0 to 45 °C.
Maximum output power	MFT50 : 55 W, 50 W typical. MFT150: 160 W, 150 W typical. MFT250: 275 W, 250 W typical.
Maximum ROE admissible	1.5:1 .
Out of band emissions	< - 65 dB.
Signal to noise ratio mono/estéreo	> 65 dB, @ 1Khz @ ± 75 KHz, w/filter 15 KHz.
Signal to noise mpx	> 60 dB, @ 1Khz @ ± 75 KHz, c/filter 80 KHz.
Inputs	Stereo : 600 Ohms ± 5% bal/unbal, XLR. Mono : 600 Ohms ± 5% bal/unbal, XLR. Mpx : 2 K ± 5% unbal, BNC. Aux : 10 K ± 5% unbal, BNC.
Input level	Stereo : -10 to + 10 dBm (0.25 a 2.5 Vef) @ ± 75 KHz dev. Mono : -10 to + 10 dBm (0.25 a 2.5 Vef) @ ± 75 KHz dev. Mpx : -10 tp + 10 dBm (0.45 a 4.5 Vef) @ ± 75 KHz dev. Aux : 3.5 Vef @ ± 7.5 KHz dev.
Frequency response	Stereo : ± 0.2 dB, 30 - 15000 Hz referred to the standard pre emphasis curve. Mono : ± 0.2 dB, 30 - 15000 Hz referred to the standard pre emphasis curve. Mpx : ± 0.1 dB, 30 Hz - 100 KHz. Aux : ± 0.2 dB, 30 Hz - 100 KHz.
Distortion	Estéreo : < 0.15 %, 30 - 15000 Hz, @ ± 75 KHz desv. Mono : < 0.1 %, @ 1 KHz, @ ± 75 KHz desv. Mpx : < 0.1 %, @ 1 KHz, @ ± 75 KHz desv. Aux : < 0.2 % @ 7,5 KHz de desv.
Modulation dispersion	± 0.2 dB, @ 1Khz, @ ± 75 KHz dev, across the band, referred to the center of the band.
Pre emphasis	0, 25, 50, 75 useg.
Indications	PLL & transmitter status, by leds
Meditions	Forward and reflected power, modulation level, input attenuador level power supply voltage, power supply current (MFT150 & MFT250).
Programming from the control pannel	Frequency, operación mode, modulation level, output power, dipslay language, password.
Cooling	Power supply: forcef, RF PA: forced.
Antenna	50 Ohms unbal, "N" female.
Power request	100/130 Vca - 180/240 Vca - 47/63 Hz, switching power supply, jumper select.
Power drain	MFT50 : 110 W. MFT150: 260 W. MFT250: 400 W.
Dimensions	Height: 2U - Wide: 430 mm - Deep: 330 mm.
Weight	MFT50 : 9.0 Kg - 20 lbs MFT150: 10.0 Kg - 22 lbs MFT250: 10.0 Kg - 22 lbs

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**Specifications may change without notice.**