

# FM transmitters

## TYPE

FM Transmitter 250 W  
FM Transmitter 500 W  
FM Transmitter 1 kW  
FM Transmitter 2 kW  
FM Transmitter 3 kW  
FM Transmitter 5 kW  
FM Transmitter 10 kW



## Complete transmission solutions for today's FM broadcast operators

ELTI FM transmitters are designed to provide high on-air reliability. The operating efficiency is supported by MOSFET technology and DC/DC switching mode power supply. The option of comprehensive remote management and control is provided by CPU controlled functions and an interface for control of both exciter and/or external power amplifier.

## the advantage

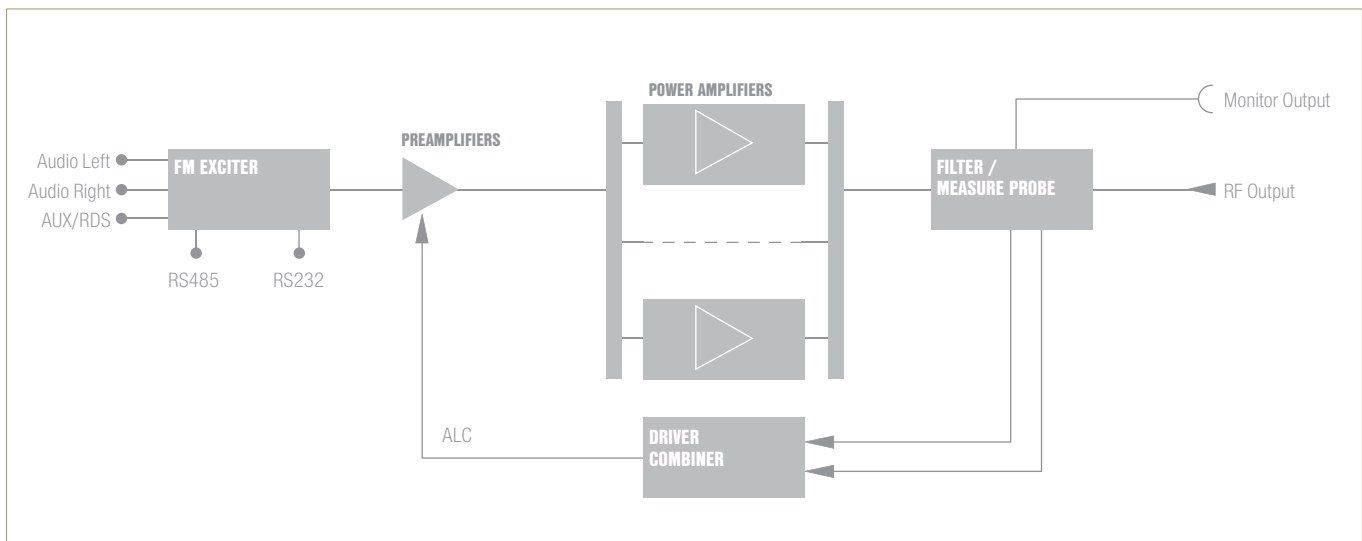
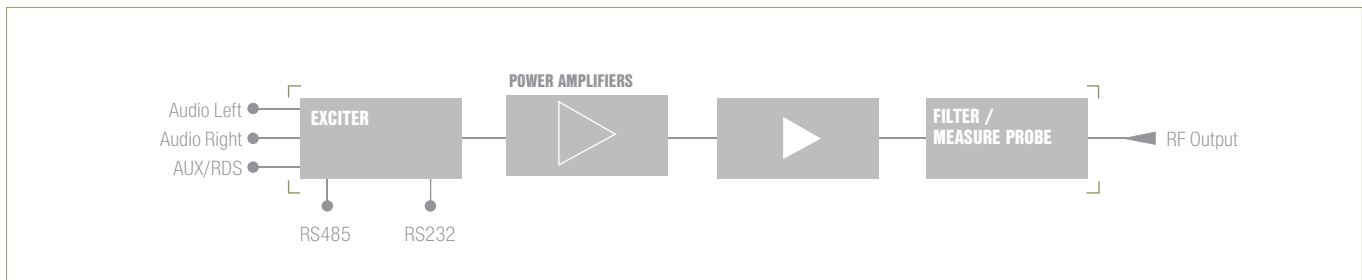
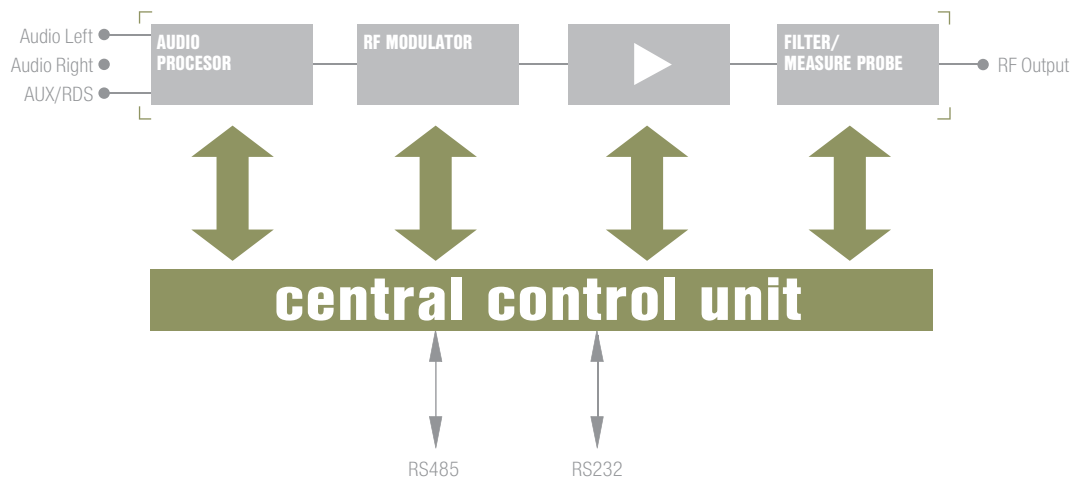
- Modular and compact designs
- MOSFET technology
- Switch mode power supply
- Remote control
- Protection circuits

## exciter

The exciter generates a frequency modulated RF signal for external amplifiers feeding. The LCD display and integrated CPU allows for management and control of important parameters such as audio input level, SCA (RDS) input level, modulation, pilot-tone, output and the reflected power of exciter; the serial interface allows for management of the external power amplifier.

## power amplifier

Broad-band power amplifiers of 500 W and 1 kW are available as external units in 4U and 5U 19" rackmounted units. The built-in LCD display offers management and control of all important parameters, and the serial interface provides connectivity to the exciter. The power amplifiers have an internal alarm memory and a set of protection circuits which guarantees minimal transmitter down-time.



## specifications

## FM transmitter

GENERAL DATA	
Frequency range	87.5 – 108 MHz or 65.9 – 74 MHz
Setting mode	in 10 kHz step
Frequency stability	± 1.0 ppm
Spurious and Harmonic suppression	≤ - 70 dBc, with bandpass filter
Residual AM	≤ 0.10 %, synchronous
	≤ 0. 15%, asynchronous
S/N ratio	Mono: ≤ - 82 dB, ref. to ± 75 kHz dev.
	Stereo: ≤ - 77 dB, ref. to ± 75 kHz dev.
Pre-emphasis	50 µs ± 0.1 dB
Amplitude response	Internal stereo L-R: ± 0.2 dB, 30 Hz to 15 kHz
	MPX: ± 0.1 dB, 30 Hz to 100 kHz
	SCA 2,3 : ± 1 dB, 30 Hz to 100 kHz
Total harmonic distortion	≤ 0.05 % up to 7 kHz
Stereo separations	≤ - 56 dB, 30 Hz to 15 kHz
	≤ - 65 dB @ 1 kHz
Pilot tone	19 kHz ± 0.5 Hz
19 kHz output	1 V <sub>pp</sub> , load ≥ 2 kΩ, BNC
INPUTS	
Input connectors	600 Ω, XLR female - balanced
Level range	0 ± 6 dB, 15 kHz filter
SCA (RDS) 3 inputs	0 ± 12 dB, 10 kΩ ± 10 %, BNC
RF OUTPUT SPECIFICATIONS	
Output connector	N, DIN 7/16", EIA 7/8", EIA 1 5/8" - 50 Ω
Output power	up to 10 kW (ALC) ± 0.5 dB, adjustable
OPERATING CONDITIONS	
Nominal temperature range	0 °C to + 45 °C
Relative air humidity	90 %
Cooling	Forced air
CONTROL AND MONITORING	
Remote control	All settings and control by remote PC
	Exterior FM power amplifier's monitoring
MAINS CONNECTION	
Single phase supply	230 V ±10 % 50/60Hz
Triple phase supply	3/N/PE 400/230V ±10% 50Hz