



FMX11+ 10W FM EXCITER

ELECTRONICS PTY LTD



SPECIFICATIONS

Output power	>10W continuous
Carrier frequency	87.5 to 108.0 MHz
Channel spacing	100 KHz
Carrier stability	<1000Hz from nominal
Modulation	Mono FM 75KHz peak deviation
Audio response	10Hz to 15KHz
Pre-emphasis	50uS
Distortion	<0.1%
Audio SNR	80dB typical
Line voltage	90-270VAC
Line power	<70VA
Audio input level	-10dBm to +10dBm
Input impedance	10K, unbalanced
Protection	Over temperature Over line voltage Over SWR
Dimensions	Width 500mm Depth 250mm Height 90mm
Weight (approx)	<8Kg
Cooling	Convection
Audio connector	RCA female
Input line connector	IEC male
Output RF connector	N female
Telemetry connector	DB9 female

The FMX11+ is a solid state 10W FM exciter designed for FM broadcast service.

The heart of the FMX11+ is a microprocessor controlled, low phase noise, phase locked loop. This gives excellent audio performance whilst allowing total carrier frequency flexibility.

The signal from the PLL is amplified up to in excess of 10W by a broadband MOSFET stage. One advantage of this technique is a high level of tolerance to reflected power.

The audio input processor incorporates a Bessel anti-alias filter as well as a peak limiter. The peak limiter ensures that deviation in excess of +/-75KHz does not occur, so minimising adjacent channel interference.

Extensive telemetry functions allow output power and peak deviation to be read or programmed remotely. Reflected power, channel frequency and amplifier temperature can also be read, as well as allowing the front panel to be locked for non-secure locations.

Over line voltage, over SWR and over temperature protection are all standard.

Careful output filtering ensures that no harmonics exceed -75dBc, so ensuring freedom from interference issues often associated with transmitters of other manufacture.

Each FMX11+ comes complete with extensive documentation covering installation, use, maintenance and trouble shooting.

The FMX11+ is designed and manufactured in Australia and comes with a 3 year warranty.

