

FMT-101(NL) 27MHz REMOTE CONTROL DIGITAL TRANSMITTER

The FMT-101 transmitter with the battery and a push button, are self-contained in an attractive high impact black plastic case.

The FMT-101(NL) has a case which comes without the ELSEMA imprint on the front cover of the casing. This enables the customers to use their own label. The dimension of the label slot is 42.5 X 26.5 mm.

The transmitter is activated by pressing a button, which is optically verified by a LED (Light Emitting Diode).

When the push-button is not pressed the unit requires no power, which means the useful life of the battery should reach its shelf life.

The superior Frequency Modulation (FM) has been used for improved reliability especially in electrically noisy areas.

The radio signal sent out by the transmitter is crystal controlled and operated within the 27MHz band.

The transmitter has a digital coding system with a built-in 12-way code switch that allows a selection of 4096 different codes.

An operating distance (in conjunction with our FMR series receivers) of 550 metres is possible.

The operating distance depends upon the receiver antenna and location. An independent test revealed the following ranges:

Range (Metres)	Receiver Antenna	Receiver Type
100	250 mm Long Wire	FMR-...
400	1000 mm Long Wire	FMR-...
>550	ANT27M	FMR-...

Range tests were done in an open area test site with line-of-sight operation and the receiver antenna wire was fixed vertically, away from any metal objects.

When operating near its range limit, some improvements may be obtained by pointing the transmitter towards the receiver. This is due to its slightly directional properties.

The case of the transmitter has been designed to accept Elsema's leather covers. The leather covers have a belt clip.



TECHNICAL DATA ON FMT-101

POWER SOURCE :	9 Volt Battery Carbon : approximately 1 year shelf life (6F22) Alkaline: approximately 2-year shelf life
SUPPLY VOLTAGE :	7.5 to 9 VDC
CURRENT CONSUMPTION :	60mA (Typical) at 8VDC supply while transmitting
OPERATING FREQUENCY :	27.145 MHz (Other frequencies available on request)
CARRIER FREQUENCY TOLERANCE :	Crystal controlled 30 parts per million (0 to 50° C)
RADIATED FIELD STRENGTH :	78.0 dB μ V/m at 3 metres (+-3dB)
ANTENNA :	Built in 50mm long ferrite rod
TYPE OF EMISSION :	Narrow-band-width Frequency Modulation (5K00F1D)
FREQUENCY DEVIATION LIMITING :	1000 - 1400 Hz non-return to zero
TYPE OF MODULATION :	Manchester format 1.08 ms per bit (15% tolerance)
BITS PER SECOND :	926 bps
SPURIOUS TRANSMISSION :	At least -40dB/carrier
NECESSARY BAND WIDTH :	+ - 2.5 kHz
DIGITAL CODING SYSTEM :	On board 12-way coding switch (4096 channels)
DIMENSION :	95 X 55 X 24 mm
WEIGHT :	120g including battery
USEABLE OPERATING RANGE :	550 metres. Depends on receiver antenna and location
COMPATIBLE RECEIVERS :	All Elsema type FMR-... series

Due to its popularity, ELSEMA PTY. LTD stocks the Carbon Battery 6F22. The indicated shelf life is only approximated and can vary greatly depending on the freshness and type of brand used.