

# FMT15104H, FMT15108H

151MHz Handheld Transmitter

## Features

- Portable, handheld 151MHz transmitter, easy to carry.
- Operates up to 800 metres.
- Uses standard 9-Volt battery.
- Includes pre-tuned antenna.
- Not affected by electrical interference, suitable for industrial applications where there is normally a high level of interference.
- Simultaneous channel transmission is possible; i.e. more than one channel can be activated at the same time.



## Application

- Pump Control
- Long distance panic button
- On/Off functions in agricultural and industrial devices
- Security alarms

## Description

The FMT15104H and FMT15108H are handheld transmitters that has an operating range of up to 800 metres. With 100mW transmission power and only using 85mA during transmission makes it ideal for the standard 9 volt battery.

Each transmitter button is individually transmitted to the receiver making it possible to do simultaneous channel transmission. This means that up to 8 different functions can be done at the same time. Each button can operate any FMR151... series receivers making it possible to transmit each button to different single channel receivers or to multi channel receivers.

The transmitter uses a frequency of 151MHz and a modulation type of Narrow Band Width FM which makes it suitable for industrial applications where you would have a high level of electrical interference. This transmitter is not affected by man made or electrical interference.

The transmitter uses a specially programmed micro-controller which ensures the highest reliability, low standby current consumption (10uA) and greater flexibility. The greater flexibility allows customers to contact Elsema and request custom written software for special functions.

## Products in the Range

			
<b>FMT15101E</b> – 1 channel	<b>FMT15102E</b> – 2 channel	<b>FMT15104E</b> – 4 channel	<b>FMT15108E</b> – 8 channel
			
<b>FMT15101</b> – 1 channel (No Case version)	<b>FMT15102</b> – 2 channel (No Case version)	<b>FMT15104</b> – 4 channel (No Case version)	<b>FMT15108</b> – 8 channel (No Case version)
			
<b>FMT15104H</b> – 4 channel	<b>FMT15108H</b> – 8 channel		

### Coding Instructions

The 12 way dip switch on the transmitter sets the 12 bit unique code for the system. This has to be matched to the receivers 12-way dip switch.

### Operating Frequency

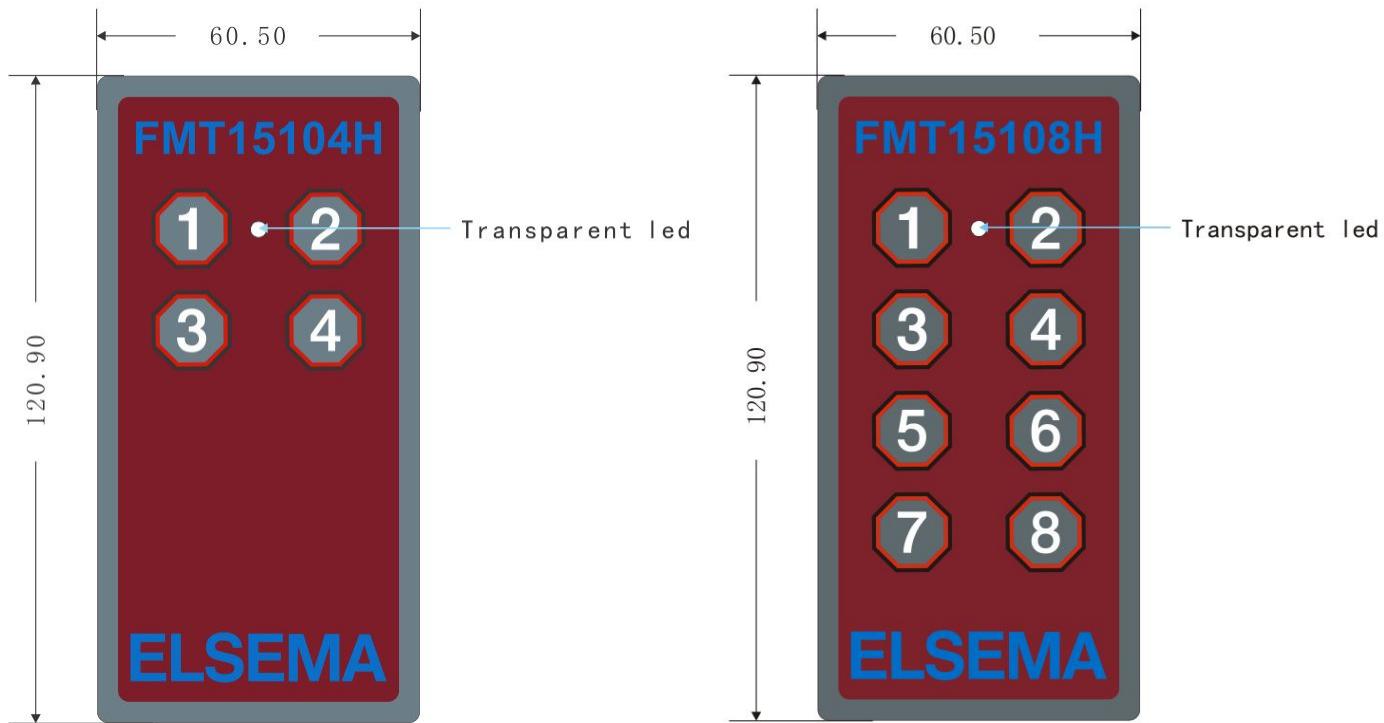
There are 7 selectable frequencies available. The black 3-way dipswitch changes the frequency. If two separate systems are installed in the same location it is recommended to set each system to a different frequency. The default setting is 151.600 MHz (All 3 dipswitches “ON”). Following is a table with the Dipswitch settings and the corresponding frequencies.



Frequency	1	2	3
151.600 MHz	On	On	On
152.375 MHz	Off	On	On
151.775 MHz	On	Off	On
151.400 MHz	Off	Off	On
151.175MHz	On	On	Off
151.025 MHz	Off	On	Off
150.900 MHz	On	Off	Off
150.825 MHz	Off	Off	Off

## Technical Data

Power Supply	9V DC. Alkaline battery
Current Consumption	85mA at 9VDC (Only when transmitting)
Standby Current	Less than 10uA.
Operating Frequency	151.6MHz (8 selectable frequencies. See table above)
Oscillation System	VCO with 10ppm Crystal Controlled reference Oscillator.
Operating Temperature Range	0 - 50°C
Frequency Deviation	+/- 5kHz
Type of Emission	Narrow-band-width Frequency Modulation
R.F. Output Power	100mW, into 50 ohms SMA socket
Baud Rate	40 to 4800bps.
Spurious Transmission	< -40dBm (100nW)
Digital Coding System	On-board 12-way Code Switch
Antenna	151MHz tuned antenna included with the transmitter
Dimension	130 x 67 x 27mm
Weight	60g
Useable Operating Range	Up to 800 metres, depending on installation
Compatible Receivers	All Elsema type FMR151... series

**Label Dimensions**

Customers who wish to have their own membranes can contact us with their designs on (+61) 2 9609 4668

You can have your own company logo and specific text printed on the membranes. e.g. Up, Down, Right and Left or Start, Stop etc.

The minimum quantity for custom membranes is 50 pieces per order.

**Manufactured by**

**Elsema Pty Ltd**  
31 Tarlington Place, Smithfield  
NSW 2164  
Ph: 02 9609 4668  
Fax: 02 9725 2663  
Website: <http://www.elsema.com>

**Distributed by**