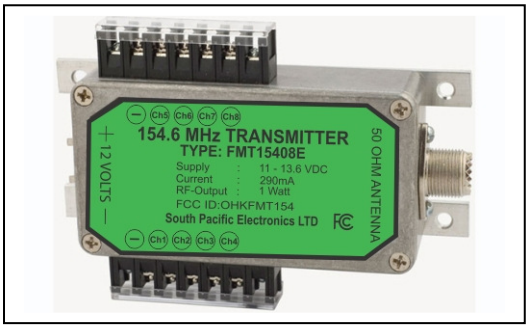
FMT15402E, FMT15404E, FMT15408E
FMT15408NC (No Case version)

154.6 MHz Transmitter



Features

- Long range – up to 5km.
- 1 Watt Transmitter
- Not affected by Natural or man-made electrical interference
- Specially programmed micro-controller
- Simultaneous channel transmission is possible; i.e. more than one channel can be activated at a time.

Application

- Pump Control
- Long distance panic button
- On/Off applications in agricultural devices
- Security alarm
- Basic Telemetry eg. Water level indication

Description

The FMT154… has a transmission power of 1000mWatt. It gives a controlled range of up to 5km. The controlled operation can be any electronic or electrical operated device when used with the FMR154… series of receivers

The channels are activated via screw type terminals onto which the user can connect reed switches, toggle switches, push buttons or any form of normally open **(NO)** contact.

The transmitter uses a frequency of 154MHz 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. This makes FMT154... an ideal choice for use in heavy industrial environment.

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 FMR154… series receivers making it possible to transmit each button to different single channel receivers or to multi channel receivers

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 us and request custom written software for special functions.

External supply connection and SO239 antenna socket is provided with the transmitter.

Antenna:

- ANT154M - 1m 154MHz Antenna

Technical Data

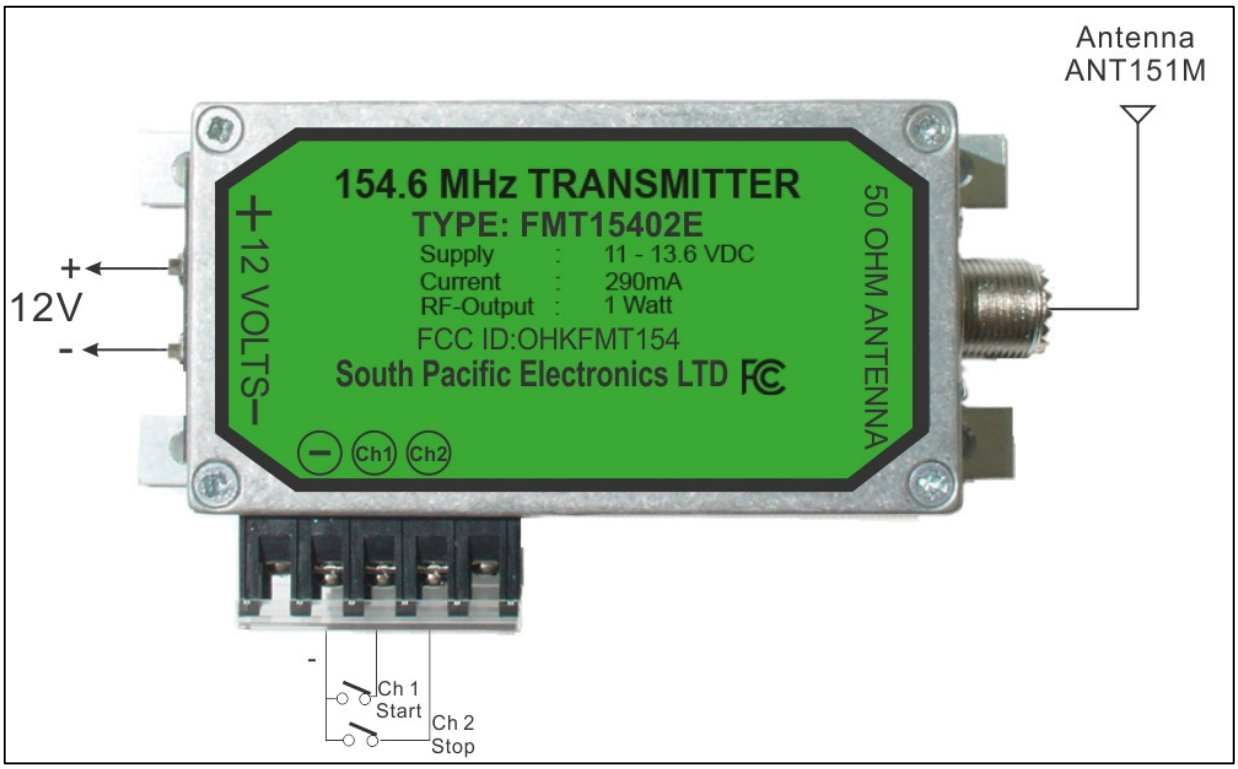
Power Supply	11 to 13.6 VDC (for constant RF-Output), screw type terminal. Absolute maximum 14VDC.	
Current Consumption	Nominal 290mA at 12VDC supply (Transmitting) Nominal 12mA on standby (10uA on sleep mode, all inputs off)	
Operating Frequency	154.6MHz	
Operating Temperature Range	0 - 50°C	
Type of Emission	Narrow-band-width Frequency Modulation (F1D)	
R.F. Output Power	1Watt	
Digital Coding System	On-board 12-way Code Switch	
Antenna	SO239 socket is provided. Optimum performance use ANT154M antenna	
Dimension	90 X 56 X 15 mm (PCB Assembly)	140 X 60 X 34 mm (Enclosed).
Mounting Hole Size	4.00 mm or 5/32 " (PCB Assembly)	4.76 mm or 3/16"
Mounting Hole Spacing	Length 76 mm (3.00") Width 45 mm (1.77") (PCB Assembly)	Length 125 mm (4.92") Width 45 mm (1.77") (Enclosed).
Weight	85 grams (PCB Assembly)	225 grams (Enclosed).
Useable Operating Range	Up to 5000 meters, depending on installation and type of antenna used. Recommended Antenna is ANT154M	
Compatible Receivers	All FMR154... series	

Ordering Codes

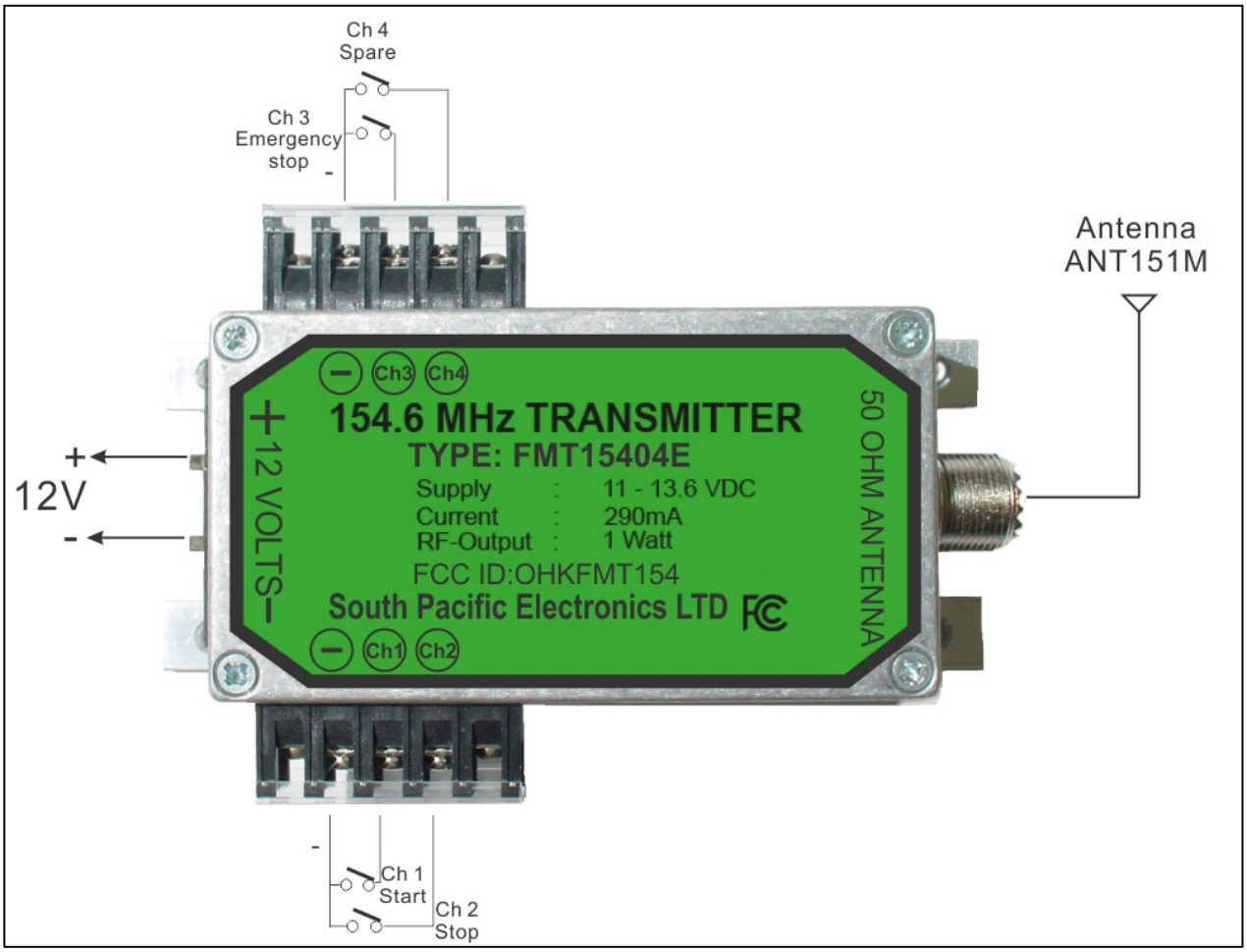
Part Number	Description
FMT15402E	**154MHz Transmitter enclosed in a case with 2 external inputs**
FMT15404E	**154MHz Transmitter enclosed in a case with 4 external inputs**
FMT15408E	**154MHz Transmitter enclosed in a case with 8 external inputs**
FMT18408NC	**154MHz Transmitter PCB assembly only with 8 external inputs**

Wiring Diagrams

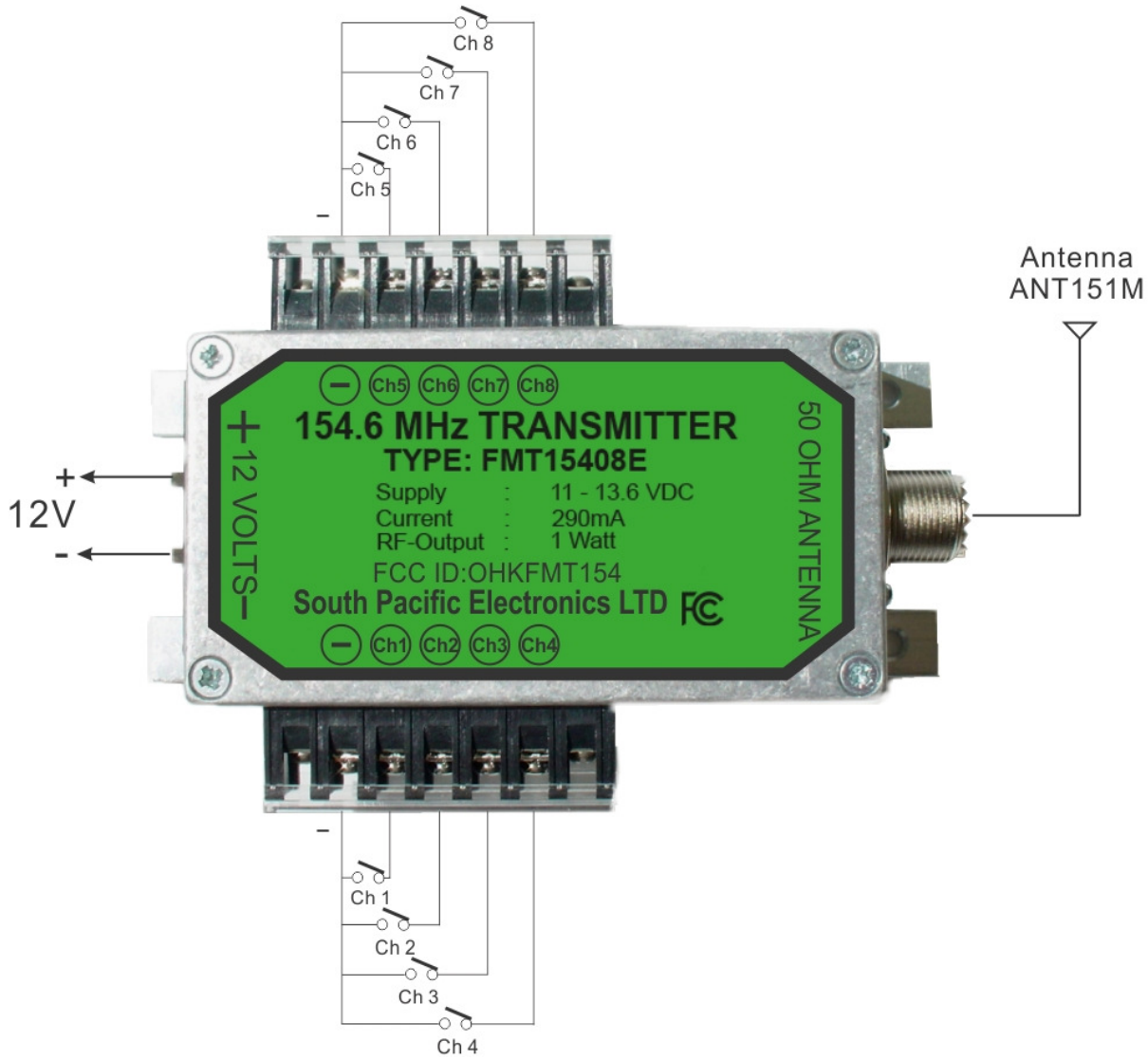
FMT15402E



FMT15404E



FMT15408E


Ch 8
Ch 7
Ch 6
Ch 5
Antenna
ANT151M
Ch5 Ch6 Ch7 Ch8
154.6 MHz TRANSMITTER
TYPE: FMT15408E
Supply : 11 - 13.6 VDC
Current : 290mA
RF-Output : 1 Watt
FCC ID:OHKFMT154
South Pacific Electronics LTD
12 VOLTS
50 OHM ANTENNA
12V
Ch1 Ch2 Ch3 Ch4
Ch 1
Ch 2
Ch 3
Ch 4

REGULATORY COMPLIANCE STATEMENTS

American Users

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference and
(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Notice
This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.