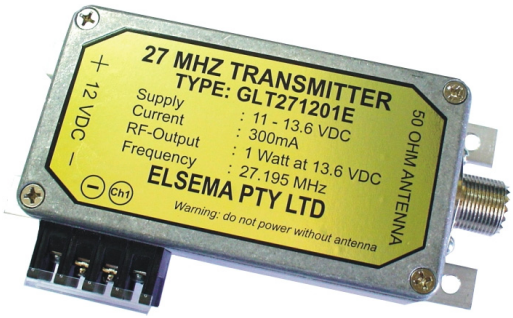
GLT271201E, GLT271202E, GLT271204E, GLT271208E, GLT271208NC

27MHz, 1Watt Transmitter



Features

- Range up to 3km
- Over 4 billion code combinations
- High reliability, low current consumption, great flexibility
- Durable alloy enclosure available upto 8 channels.

Applications

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

Care should be taken not to transmit without an antenna

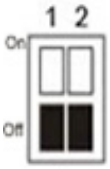
Description

These **1Watt 27MHz** transmitters are designed to give a controlled range of up to **3 kilometres** (LOS). The controlled operation can be either electronic or electrical operated device when used with the GLR-…. series of receivers.

The transmitter uses a specially programmed MICRO-CONTROLLER, which ensures the highest reliability, low current consumption on sleep mode (10uA) and greater flexibility. The GLT271208NC is a transmitter without a case, while the GLT271201E, GLT271202E, GLT271204E, GLT271208E transmitters are enclosed in an alloy metal case, which has external supply terminals, channel input terminals and a SO239 antenna socket provided.

Please note that transmitting without a proper 27MHz 50Ω antenna may damage the transmitter.

The transmitter modes are user selectable by simply setting the 2-Way dip-switch on the transmitter board. Below is a summary of the modes.

	***Off Delay 2 – 62 seconds*** Transmitter will transmit a 1.5 second transmission burst and then stop for the "off delay" time selected. The "off delay" time is user selectable between 2 to 62 seconds by adjusting the trimpot of the transmitter board. If another channel is activated during the "off delay" period the new channel will be transmitted immediately. When the "off delay" time lapses, transmitter will transmit another burst. The transmitter will cycle (transmission and off delay) indefinitely, if at least one channel is activated and the supply is connected.
	***Off Delay 1 – 10 minutes*** Same as mode 1 except the "off delay" is user selectable between 1 to 10 minutes.
	***Continuous Transmission**** Transmitter will transmit continuously, if at least one channel is activated and supply is connected. A transmission limit of five minutes is used to comply with local radio regulations. To activate a receiver longer than 5 minutes, use a delay off feature in the receiver (GLR2701) and transmitter. The delay off feature in the receiver needs to be set more than the transmitter. This ensures that the transmitter keeps resetting the off delay in the receiver.
	***1.5 – 10 seconds one burst transmission*** Transmitter will transmit one burst and then go to standby or sleep mode. Adjusting the trimpot will vary the burst length. When the code is changed and supply is connected, transmitter will emit one new burst of the new code.
Sleep mode (10 uA) is activated when all 8-channels are OFF, this applies to all four modes.	

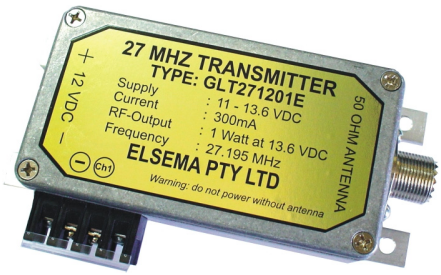
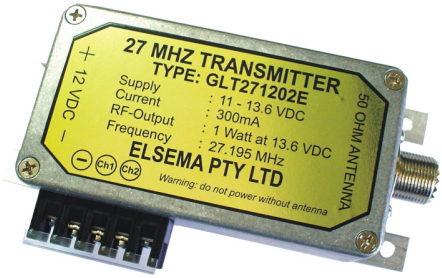
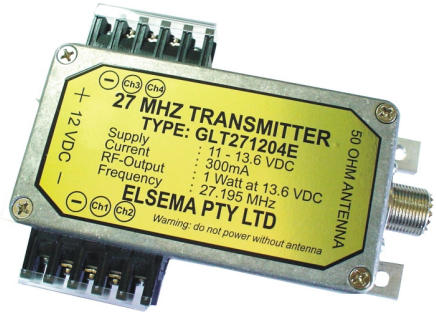
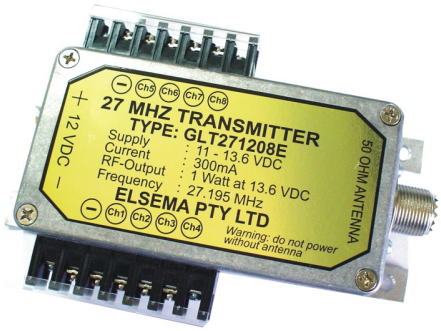
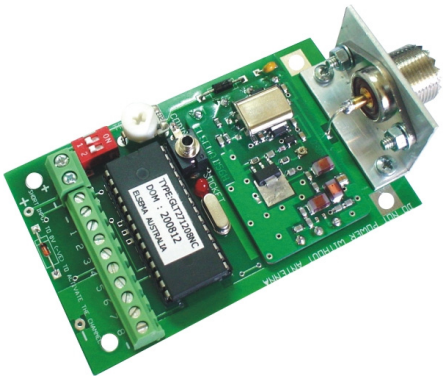
(Grey illustrates the position of the DIP switches)

* Refer to the website for further details. http://www.elsema.com/contitrans.htm

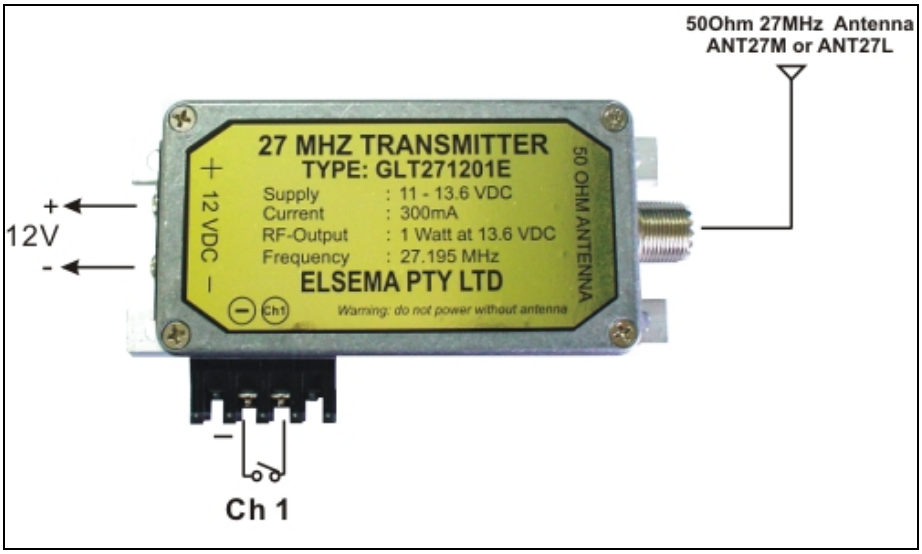
Technical Data

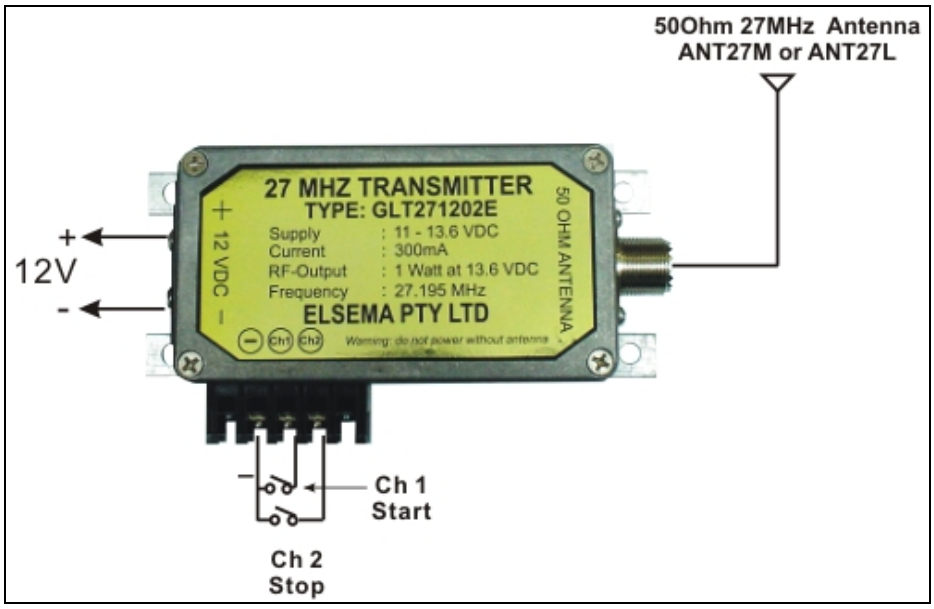
Power Supply	11-13.6VDC (for constant RF Output), screw type terminal. Absolute max 14VDC	
Current Consumption	Nominal 300mA at 12VDC supply (transmitting) Nominal 12mA on standby Less than 10uA on Sleep Mode (only when no channel are activate otherwise it is on standby)	
Operating Freq	27.195MHz (Other frequencies available: 27.045, 27.145 & 27.455MHz. NB. 27.455MHz is available for Europe Only)	
Carrier Freq Tolerance	Crystal controlled 30 parts per million	
Operating Temperature Range	-5 to 50°C	
RF Power Output	1Watt, into 50 ohms SO239 socket @ 13.6VDC	
Antenna	SO239 Socket is provided. Optimum performance use Elsema ANT27L antenna	
Type of Emission	Narrow-bandwidth Frequency Modulation (5K00F1D)	
Freq Deviation Limiting	1600 - 1900Hz non-return to zero	
Modulation Freq	1.8kHz (0.56 ms/bit) (15% tolerance)	
Spurious Transmission	-13dBm	
Necessary Bandwidth	±2.5kHz	
Digital Coding System	Microcontroller based 96-bit word	
Code Combination	4,294,967,296	
Dimension	90 X 56 X 15 mm (No Case)	140 x 60 x 34mm (With Metal case).
Mounting Hole Size	4.00 mm or 5/32 " (No Case)	4.76 mm or 3/16" (With Metal case).
Mounting Hole Spacing	Length 125 mm (4.92") Width 45 mm (1.77")	Length 125 mm (4.92") Width 45 mm (1.77")
Weight	GLT271208NC - 60g GLT2712xxE - 250g	
Useable Receivers	GLR... series	
Useable Operating Range	Up to 3000m, depending on installation and type of antenna used. Recommended Antenna is Elsema ANT27M or ANT27L	

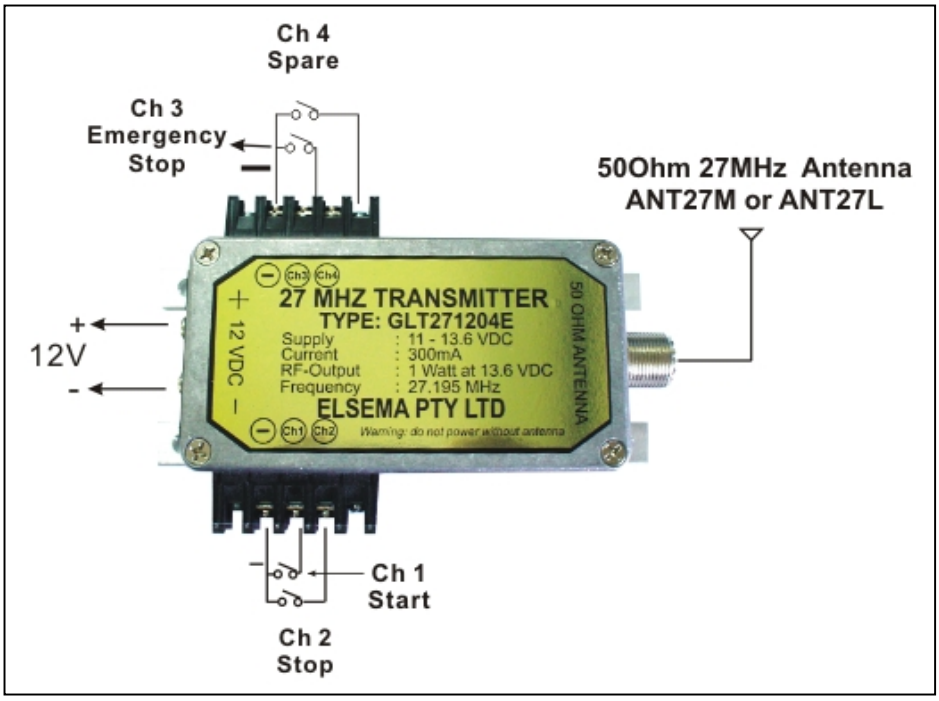
Products in the Range

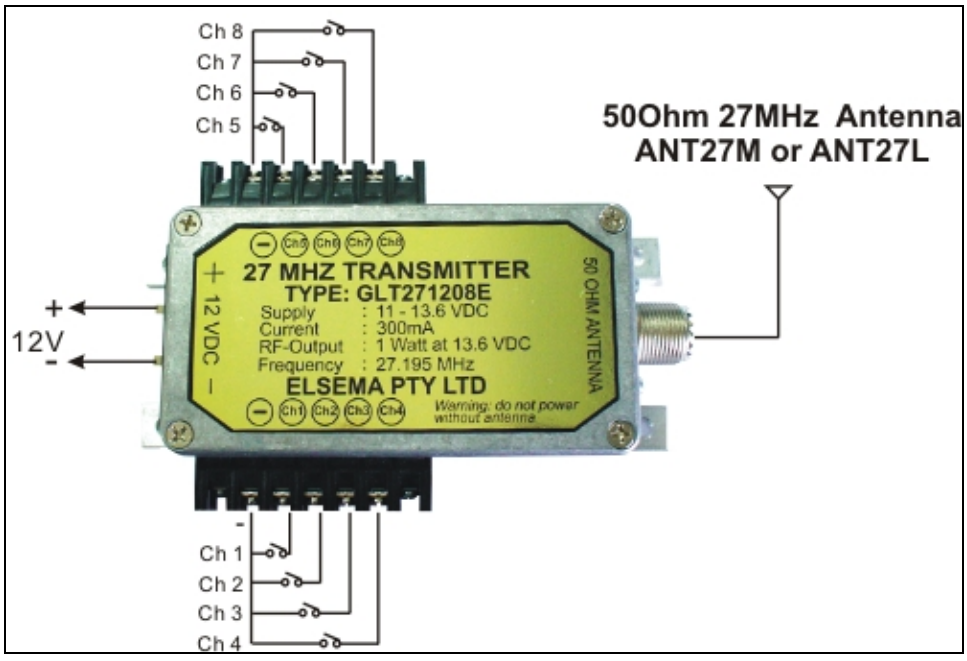
		
GLT271201E 1-Channel, Enclosed	**GLT271204E** 4-Channel, Enclosed	**GLT271208E** 8-Channel, Enclosed
		
GLT271208E 8-Channel, Enclosed	**GLT271208NC** 8-Channel No Case	

Wiring Diagram






Ch 4
Spare
Ch 3
Emergency
Stop
50Ohm 27MHz Antenna
ANT27M or ANT27L
+
12V
-
27 MHZ TRANSMITTER
TYPE: GLT271204E
Supply : 11 - 13.6 VDC
Current : 300mA
RF-Output : 1 Watt at 13.6 VDC
Frequency : 27.195 MHz
ELSEMA PTY LTD
12 VDC
50 OHM ANTENNA
Ch 1
Start
Ch 2
Stop


Ch 8
Ch 7
Ch 6
Ch 5
50Ohm 27MHz Antenna
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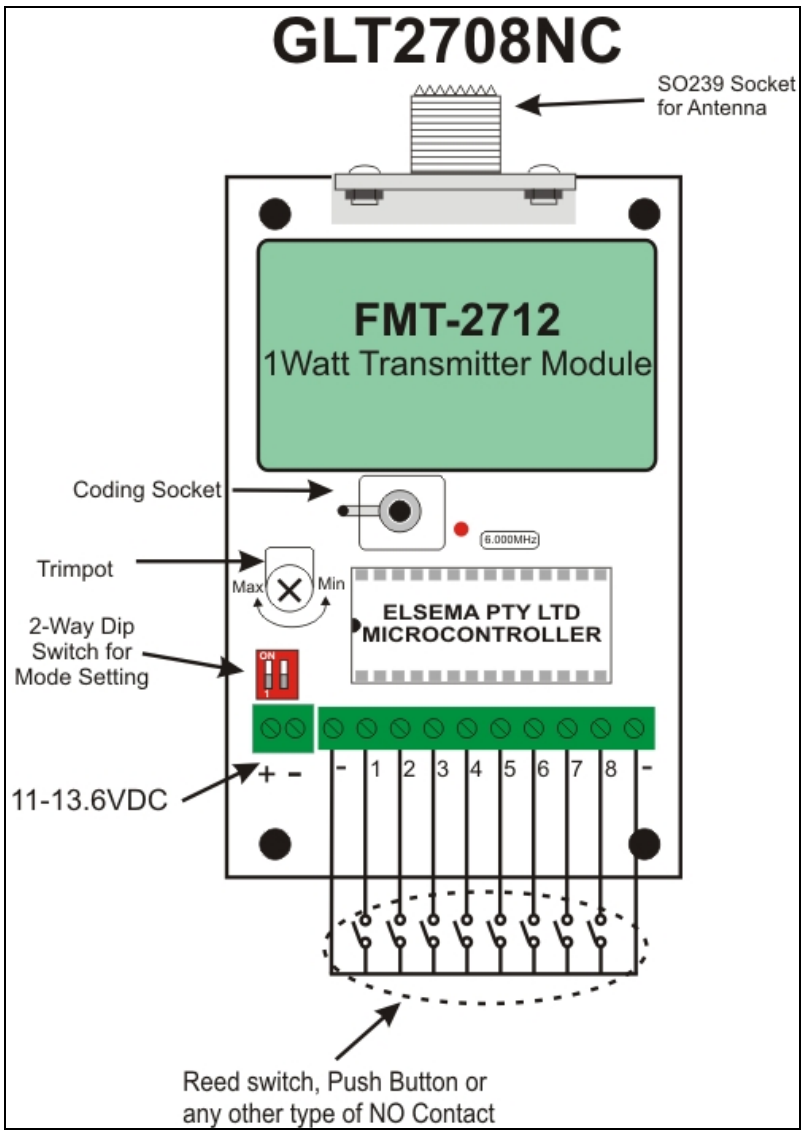
12 VDC
50 OHM ANTENNA
Ch 1
Ch 2
Ch 3
Ch 4



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