



# Tag

**Product Code: L-TG700**

## Description: KeyFob Tag

---

The Wavetrend KeyFOB Active Tags are powered by an internal battery. The Tag will, for the duration of its life, transmit a Radio Frequency (RF) signal at a pre-set time-interval. The KeyFOB can also be operated in silent mode, with transmissions only occurring upon the press of the button. The Tag life is estimated at 4.8 years at a transmission time interval of approximately 1.5 seconds.

Button pressed transactions will either be logged when out of reader range, or be reported immediately when within reader range. The lifespan of the Tag ends when the battery life is exhausted. Battery status can be inferred by interrogating the internal Tag Age Counter Value.



The transmitted Tag data includes Customer Site Code (CSC), Tag ID, Tag Age Counter Value, Button Alarm status. For protection against adverse environmental conditions, the Wavetrend KeyFOB Tag is encapsulated in a moulded Nylon case. The Tag can be configured to accommodate Wiegand interfacing.

## Features:

---

- Configurable settings, including Site / Vendor ID, Tag ID and Transmission Repetition Interval.
- Low power consumption. Tag life is estimated at 5 years when transmitting at a 1.5-second interval.
- Randomised time-slots (Standard percentage deviation) minimise collisions.

## Applications:

---

Wavetrend KeyFOB Tags can be used in applications where door/safe keys need to be tracked. Institutions such as prisons, hospitals and government institutions would find this beneficial. The KeyFob Tag is also used in personnel tracking and vehicle immobilising / driver identification applications, where it replaces the Wavetrend personnel tag. For people safety applications in dangerous industrial and construction environments, such as mining, the tag can be used both as a tracking device and a distress-signalling device in case of emergency situations.





## Specifications:

---

### Environmental

Operational temperature	- 10° C to + 60° C
Storage temperature	- 20° C to + 70° C
Humidity	5% to 90% (non condensing)

### Physical

Size	85 mm x 70mm x 9 mm
Weight	< 25 grams
Colour	Grey (Clariant 04-600 2%)
Type of material	ABS (ultrasonically sealed) IP 65

### RF Specifications

TX Frequency	433 Mhz
Field strength	< 1600 $\mu$ V/m
Modulation	ASK
Stability	Saw Stabilised

### Electrical Specifications

Power	Internally powered Lithium Battery
-------	------------------------------------

## Certification

---

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.

The following standards applied in accordance with Article 5 of the directive, 1999/5/EC:

EN 300 220-1 V1.2.1 (1997-11)

ETS 300 683 (1997-03).





## Summary of tests

Effective radiated power	25MHz - 4GHz
Range of modulation bandwidth for wideband equipment	
Frequency stability under low voltage conditions	
EN55022	Radiated emissions 30MHz – 1GHz
EN61000-4-3	Radiated immunity 80MHz – 1GHz, excl 433 MHz $\pm$ 20MHz
EN61000-4-2	Electrostatic discharge

**Wavetrend (UK) Ltd**

Parkshot House  
5 Kew Road  
Richmond  
Surrey  
TW9 2PR  
England  
Tel +44 (0) 20 8334 8400  
Fax +44 (0) 20 8334 8401  
[www.wavetrend.net](http://www.wavetrend.net)  
[sales-uk@wavetrend.net](mailto:sales-uk@wavetrend.net)

**Wavetrend Technologies, Inc.**

11350 Random Hills Road  
Suite 800  
Fairfax  
VA 22030  
United States of America  
Tel +1 703 934 6013  
[www.wavetrend.net](http://www.wavetrend.net)  
[sales-usa@wavetrend.net](mailto:sales-usa@wavetrend.net)

**Wavetrend (Pty) Ltd**

Wavetrend House  
Hammets Crossing Office Park  
Selborne Rd  
Fourways  
Johannesburg  
South Africa  
Tel +27 (11) 462 2633  
Fax +27 (11) 462 6316  
[www.wavetrend.net](http://www.wavetrend.net)  
[sales-usa@wavetrend.net](mailto:sales-usa@wavetrend.net)

