



# Tag

**Product Code: L-TG501 / L-TG501 MS**

## Description: Secure Card

---

An internal battery powers The Link-it™ series of Active Tags. The Tag will, for the duration of its life, transmit a Radio Frequency (RF) signal at a pre-set time-interval. The Tag life is estimated at 5 years at a transmission time interval of approximately 1.5 seconds. 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, Movement Alarm and Tamper Alarm status.

For protection against adverse environmental conditions, Link-it™ Tags are encapsulated in a moulded plastic case, which is ultrasonically sealed during the manufacturing process.

The Slimline Tag is generally used for personnel tagging, although it may be used in other applications such as asset monitoring. The mounting and affixing of a Tag depends on the type of application. The standard method is by VHB type double-sided adhesive tape.

The Tag can be configured to accommodate Wiegand interfacing.

Link-it™ Tags can be mounted on a variety of items. Where permanent fixing is required VHB double-sided tape is used, otherwise, the tags may be worn on a necklace or clipped to clothing.



## Features

---

- Configurable settings, including Site / Vendor ID, Tag ID, Transmission Repetition Interval and Alarm functions (these are programmed at order placement stage).
- Low power consumption. Tag life is estimated at 5 years when transmitting at a 1.5-second interval.
- Housing incorporates a clip-slot for convenient wearing.
- Sealed to IP65 standards.
- A Collision avoidance algorithm is used to disperse the transmissions around the mean repetition interval.





## Specification

---

### Environmental

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

### Physical

Size	86mm x 54mm x 5mm (Slimline Enclosure)
Weight	15 grams
Colour	Grey (Clariant 04 -600 2%)
Type of material	ABS (ultrasonically sealed) IP 65

### RF Specifications

T <sub>x</sub> Frequency	433 Mhz
Power Output	< 1600 μV / 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 ± 20MHz
EN61000-4-2	Electrostatic discharge
RTCA / DO-160C sec 21 cat Z	Aircraft safety specification

**Wavetrend (Pty) Ltd.**  
Wavetrend House  
Hammets Crossing Office Park  
Selbourne Rd  
Fourways  
Johannesburg  
South Africa  
Tel +27(11)462-2633  
Fax +27(11)462-6316



**Wavetrend Inc.**  
13912 NE 31<sup>st</sup> Place  
Bellevue, WA  
USA

Tel +1-206-949-6394

sales@wavetrend.net

**Wavetrend UK Ltd.**  
7 Mallard Court, Mallard Way,  
Crewe Business Park, Crewe, Cheshire  
England  
CW1 6ZQ

Tel +44-1270-214-433  
Fax +44-1270-214-420

