

# ACTIVE RFID



# ACTIV DUO

## Windshield Tag

### TG501-A-WH



The ActivDuo TG501-A-WH Windshield Tag is a low-profile, active RFID asset tag based on the popular TG501-A tag. It comes in a white housing with improved heat-resistance properties and is designed to be fitted inside a vehicle's windshield for vehicle identification or access control applications. It continuously transmits a unique ID number to Wavetrend® readers at ultra long range. The tag immediately transmits alerts upon movement and offers an industry leading longer battery life vs. rates of transmissions generated.

- **Beacon tag transmitting a unique ID & data at pre-set intervals**
- **Low profile design for vehicle & personnel identification**
- **Ultra low power consumption provides exceptional battery life**
- **Low battery warning**
- **Anti-tamper alert option**
- **Instant movement alert**
- **Signals less frequently when at rest**
- **Can incorporate popular Access Control RFID chips**

KEY FEATURES	BUSINESS BENEFITS	AVAILABLE L-Series	Best Usage Guide
Tag can hold standard 26-bit or 32-bit Wiegand ID numbers <b>Configurable settings include:</b> <ul style="list-style-type: none"> <li>▪ Site/Vendor Code (CSC)</li> <li>▪ Tag ID</li> <li>▪ Wiegand Site Code (WSD)</li> <li>▪ Wiegand ID (WID)</li> <li>▪ Tag Age Counter</li> <li>▪ Various transmission repetition intervals (default 10 seconds)</li> <li>▪ Movement Alert Sensor &amp; reduced transmission repetition intervals when in alert mode</li> </ul> Tamper Alarm (Option) Collision avoidance algorithm Ultra low power consumption White ABS & Polycarbonate housing	Allows tag to be used with existing access control systems in addition to active RFID systems. <ul style="list-style-type: none"> <li>▪ A unique code that can be allocated by Wavetrend to each site or vendor on request.</li> <li>▪ Readers can be set to ignore tags with incorrect site codes.</li> <li>▪ 4.2 Billion Tag ID's are available per site code.</li> <li>▪ Tag can be configured to hold the 26- / 32-bit Wiegand site / facility code of your choice.</li> <li>▪ Tag can be configured to hold the 26-/32-bit Wiegand ID number of your choice.</li> <li>▪ The Age Counter allows for advance notification of the end of battery life and for the unique identification for each transmission made by the tag. Aids detection of counterfeit tags.</li> <li>▪ Different status transmission intervals allow tags to be used in diverse applications while offering the best battery life spans in the market.</li> <li>▪ Provides instant notification of an attempt to move a tag through rapid alert transmissions for 5 seconds.</li> </ul> Provides instant notification of any unauthorized attempts to remove a tag from an asset. Requires use of TA501-AT Tag Attachment Kit (sold separately). Reduces loss of data caused by simultaneous transmissions from multiple tags. Life span of 5+ years possible when transmitting at the standard or greater interval. (* see over) Greater heat resistance than standard Wavetrend tags and ideal for in-vehicle use.	<input checked="" type="checkbox"/>  <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  2 Intervals (10 / 30 sec)  3 Alert Intervals (0.4 / 0.8 / 1.5 sec)  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>	 <p>Personal Use</p>  <p>Track Assets</p>  <p>Use on Metal</p>  <p>Indoor Use</p>  <p>Outdoor Use</p>  <p>Windshield Use</p>

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### Typical Applications

The ActivDuo TG501-A-WH Windshield Tag is generally used for applications such as hands-free long-range access control applications where the tag is fitted to the inside of a vehicle windshield, or for personnel or non-metal asset monitoring & tracking where the assets are used or located **indoors**. The TG501-A-WH Windshield Tag is fitted using the TA501 tag attachment kits or the integral clip slot. **The tag must not be fixed directly onto metal surfaces.**

#### Model Range

The tag is available in one model and can be ordered using the part number listed below:

#### L-Series

L-TG501-A-WH : Windshield tag

#### Air Interface Protocols

'L-Series' refers to one of two different proprietary communication protocols used between Wavetrend® tags and readers. Any one of the available L-Series readers must be used with Wavetrend® L-Series tags.

L-Series tags provide ultra long read range and are ideal for use in low tag density applications where less than 50 tags can be expected to be in range of any L-Series reader at any one time, and where the Alert Tx interval is set to the default 1.5 seconds. The tag is thus suitable for applications such as personnel tracking, small-scale asset management applications and long range access control systems for vehicle or personnel access.

*\* (from front page) **Battery life calculations assume: Operation at room temperature with the actual default status transmission interval of 12.5 seconds that is applicable at room temperatures. The default alert transmission interval of 1.5 seconds. Total tag movement will occur for less than 40% of the total battery life span period (i.e. the tag will not be in motion for more than 9.5 hours in total, in each 24 period).***

### Specifications

<b>Environmental</b>	
Operating temperature	: +14°F (-10°C) to +167°F (+75°C)
Storage temperature	: -4°F (-20°C) to +167°F (+75°C)
Humidity	: 5% to 90% (non-condensing)
<b>Physical</b>	
Size	: 86 x 54 x 5 mm
Weight	: 24g
Color	: White only
Material	: ABS & Polycarbonate (ultrasonically sealed), IP62
<b>Radio Frequency</b>	
Transmit Frequency	: 433.92 MHz
Power Output	: 72dBµV/m @3m, 4300 µV/m
Modulation	: ASK
Bandwidth	: <1 MHz
Stability	: SAW Stabilized
Range	: 1 to 300+ feet / 100+ meters (actual range is determined by the choice of reader & antenna used to detect the tag and the environment it is used in)
<b>Electrical</b>	
Power	: Internally powered by lithium battery
<b>Accessories</b>	(All sold in packs of 10)
TA501	: Tag attachment kit
TA501-AT	: Tamper alerting tag attachment kit

#### Extending Access Control:

The L-TG501-A-WH tag can be used to provide ultra long range / hands free access control authorization for vehicles, such as for accessing gated communities. Existing or new access control systems can be extended to offer ultra long gate/door control by use of the **L-RX201 reader** and the **L-PA101 Wiegand Converter II**, both available from Wavetrend.

In addition, the L-TG501-A-WH can be fitted with some of the smaller, popular passive / proximity RFID chips commonly used in access control systems, allowing dual use on both Wavetrend active RFID systems and standard access readers where close-range tag reads are desired (e.g. for individual door access control.) Contact Wavetrend for more information.

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Certifications



#### Ordering & Further Information

For more information on purchasing the ActivDuo TG501-A-WH Windshield Tags please email Wavetrend's Sales team:

[sales@wavetrend.net](mailto:sales@wavetrend.net)

For more information on Wavetrend® visit our website.