

ACTIVE RFID

The ActivDuo TG100-A Domino Tag is a popular, versatile active RFID tag for non-metal assets. It regularly transmits its unique ID number, which can be detected by Wavetrend® readers. An internal battery powers the tag and Wavetrend's patented ultra low power use design ensures industry leading longer battery life at higher rates of transmissions than other active tags. The tag immediately transmits alerts upon movement.



- **Beacon tag transmitting a unique ID & data at pre-set intervals**
- **Low cost, small tag design for non-metallic assets**
- **Ultra low power consumption provides exceptional battery life**
- **Ultra long-range transmitter**
- **Low battery warning**
- **Anti-tamper alert option**
- **Instant movement alert**
- **Signals less frequently when at rest**

KEY FEATURES	BUSINESS BENEFITS	AVAILABLE	
		L-Series	W-Series
Tag can hold standard 26-bit or 32-bit Wiegand ID numbers	Allows tag to be used with existing access control systems together with the RFID system.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Configurable settings include:			
▪ Site / Vendor Code (CSC)	▪ A unique code that can be allocated by Wavetrend to each site or vendor on request.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	▪ Readers can be set to ignore tags with incorrect site codes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Tag ID	▪ 4.2 Billion Tag ID's are available per site code.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Tag Age Counter	▪ 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.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Product Unique Code (PUC)	▪ Factory set ID for the tag that can function as its unique ID instead of Site Code/Tag ID combo.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Various transmission repetition intervals (default 10 seconds)	▪ Different status transmission intervals allow tags to be used in diverse applications while offering the best battery life spans in the market.	2 Intervals	11 Intervals
▪ Movement Alert Sensor & reduced transmission repetition intervals when in alert mode	▪ Provides instant notification of an attempt to move a tag through rapid alert transmissions for 5 seconds.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tamper Alarm (Option)	Provides instant notification of unauthorized attempts to remove a tag from an asset. Requires use of TA100-AT Tag Attachment Kit (sold separately).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tamper Latch (Option)	Provides continual notification of a previous tamper alert with every further transmission.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Collision avoidance algorithm	Reduces loss of data caused by simultaneous transmissions from multiple tags.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ultra low power consumption	Life span of 5+ years when transmitting at the standard or greater interval. (* see over)	<input checked="" type="checkbox"/>	enhanced
Sealed to IP64 standards (at minimum)	Splash proof. Can be repacked for applications requiring Intrinsic Safety certification.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Best Usage Guide



Personal Use



Track Assets



Use on Metal



Indoor Use



Outdoor Use



Windshield Use

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Typical Applications

The ActivDuo TG100-A Domino Tag is generally used for indoor asset monitoring & tracking applications, and can be used for alerting on door opening events through use of the anti-tamper function. The mounting & attachment method for the tag depends on the type of application it is used in. **The tag must not be fixed directly onto metal surfaces.**

Model Range

The tag is available in two models. Each model operates with a different air interface protocol. The tags can be ordered using the part numbers listed below. The W-TG101-A will be available to order later in 2010.

L-Series

L-TG100-A : Standard tag

Improved W-Series

W-TG101-A : Standard tag

Air Interface Protocols

'L-Series' and 'W-Series' refer to two different proprietary communication protocols used between Wavetrend® tags and readers. The L-Series reader must be used with Wavetrend® L-Series tags. The W-Series reader must be used with Wavetrend® W-Series tags. Both types of reader can operate on the same reader network infrastructure.

L-Series tags provide ultra long read range and are ideal for use in low tag density applications (<50 tags per reader, with the Alert Tx interval set at 1.5 seconds) such as

** (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

Environmental

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

Physical

Size : 64 x 30 x 9 mm
External Antenna : 56 mm
Weight : 16g
Color : Grey (L-Series) and Black (W-Series)
Material : ABS (ultrasonically sealed) IP64

Radio Frequency

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)

Electrical

Power : Internally powered by a lithium battery

Accessories

(All sold in packs of 10)
TA100 : Tag attachment kit
TA100-AT : Tamper alerting tag attachment kit

personnel tracking, small asset management applications and access control systems.

W-Series tags are more dynamic and flexible in the data they can transmit, offer improved data compression capabilities and are ideal for high tag density applications (>50 tags per reader) and provide an ideal active tag platform for applications requiring advanced data customization.

W-Series tags can be set to transmit up to 25 characters of user-specified information in addition to, or in replacement of, the standard tag information.

W-Series tags can be customized on request to incorporate digital sensory devices, such as a thermometer, sending the dynamic sensory information with every transmission.

IP Information

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Ordering & Further Information

For more information on the ActivDuo TG100-A Domino Tag or for purchase information please email Wavetrend's Sales team: sales@wavetrend.net

For more information on Wavetrend® visit our website.

