

Description

The TieWrapTag ASD RFID tag is the size of a wristwatch, yet much lighter. This tag is designed to be secured around an asset, especially assets that cannot have regular tags affixed to them. For example, this tag can be secured to the arm of an antique chair or through a diamond ring. The tie wrap is made such that if anyone cuts or breaks the band, the tag will send an alarm to the system.

TieWrapTag can be configured for use in Access Control, Tracking, Inventory Control, or hybrid applications.

TieWrapTag can be used to track and monitor people or assets in an office, warehouse, or any other type of facility. For example, TieWrapTag can be configured to track items in a retail store, locate shared instrumentation in a hospital or inventory in a warehouse, or monitor the movement of expensive equipment throughout a campus – basically any application that requires system monitoring of assets. When TieWrapTags are used on both people and assets, all movement of valuable assets without the assigned owner will generate system alarms and can lock exit doors.

TieWrapTag can be configured to remain in sleep mode until it enters a Radio Frequency (RF) field generated by an ActiveWave Field Generator. Sensing the RF field, the tag will awaken and transmit its identification number and data to an assigned system Reader.

The tag can also be configured to automatically wake up for every pre-defined period, transmit its

information to the system, then go back to sleep to conserve battery life.

Unique anti-collision algorithms are used to ensure that all tag data is received accurately, even when several tags are transmitting at the same time.

Several TieWrapTag tag models are available, each supporting an RF wake-up frequency of 433 MHz and tag transmission frequency of 916.5 or 868 MHz. An optional temperature sensor can send periodic temperature readings to the system. When the temperature of the device attached to the tag exceeds predefined thresholds, the tag can automatically send alarms to the system. Also optional on the tag are a system-controlled LED and the amount of user-definable memory per tag. More options may be added to satisfy your application needs.

To accommodate different users and application needs, the Field Generator's strength can be adjusted to produce an effective tag wake-up range of 1 to 33 meters (~3.3 to 108 feet). The Reader's sensitivity can also be adjusted to produce an effective tag read range of 1 to 85 meters (~3.3 to 279 feet).

ActiveWave's RFID technology allows real-time security of personnel, equipment, inventory, and other assets. Please visit our web site at www.activewaveinc.com for further details and example of more applications.

Product Summary

Type:	ActiveWave Active Single-Directional Tag
Applications:	Access Control, Tracking, Inventory Control
Part Numbers:	See Tag Selection Guide

Specifications

Functionality	Transmit at 916.5 MHz or 868 MHz and receives at 433 MHz
Memory (bits)	0 to 256 Kbits
Multi-Tag Read Capability	Yes
Operating Frequency	916.5 MHz or 868 MHz, depending on tag model
Wake-Up Frequency	433 MHz
Typical Read Range, Field Initiated	1 to 33 meters (~3.3 to 108 feet), depending on RF field strength
Typical Read Range, Tag Initiated	1 to 85 meters (~3.3 to 279 feet), depending on Reader sensitivity
Signal Penetration	Tag signal can be read through virtually all nonmetallic materials
EMC (Electro-Magnetic Compatibility)	Tag data and configuration setup are not affected by normal electromagnetic x-rays
Power Source	3 Volt lithium battery with low battery detection
Operating Temperature	-35° C to + 70° C (-31° F to 158° F)
Storage Temperature	-40° C to + 85° C (-40° F to 185° F)
Dimensions	3.4 cm x 3.0 cm x 1.2 cm (1.3 in x 1.2 in x 0.5 in)
Weight	11.3 grams (0.4 ounces)
Case Material	ABS (Acrylonitrile Butadiene Styrene)
Optional Tag Features	- Temperature sensor: alarms if temperature exceeds set limits - Tamper switch: alarms if tag removed - LED: configurable blink rate - Memory storage size - Replaceable battery

ActiveWave, Incorporated

902 Clint Moore Road, Suite 118

Boca Raton, FL 33487

Telephone: 561-999-9422

Fax: 561-999-9428

NOTE: The information in this datasheet is subject to change without notice.
Visit our web site at www.activewaveinc.com for more information on ActiveWave products.