

**MASTIFF™ Tag**  
**Miniature Active RFID Tag**  
**for**  
**Tracking and Monitoring**



**Product Brochure**

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## Document Revision History

Revision No.	Date	Description/Changes
1.0	21/09/2012	Initial Release

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## Table of Contents

Confidential and Proprietary Information .....	2
Document Revision History .....	3
1. Introduction .....	5
2. Device Specifications .....	5
2.1. Environmental Specifications.....	5
2.2. Physical Specifications .....	5
2.3. Electrical Specifications .....	5
2.4. RF Specifications .....	6
3. Application Areas .....	6
4. Ordering Information.....	6
5. Contact Us.....	6
12.1. Technical Support .....	6
12.2. Sales Support.....	7

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## 1. Introduction

Mastiff™ Coin Tag is a miniature active RFID tag ideal for monitoring personnel, assets, cargo or any moving or stationary objects. Enterprises can use this tag to do real-time tracking and monitoring of assets, cargo in fleets or items in a warehouse. This tag can also be used to monitor and track students, employees, visitors or contract workers inside schools, hospitals, high security offices or in construction sites or in moving vehicles. The periodic data sent by the tag can be captured by a compatible Mastiff™ active RFID reader. The captured data is sent to software for reporting or analytical reasons.

The tag comes along with the user configuration utility which allows configuration of many parameters of the tag wirelessly. The utility is an easy to use software interface, through which the user can read and write the configuration data to the tag. Configuration data includes the tag ID, time interval of transmission, RF data rate, active/sleep mode and the signal strength of the transmission.

The tag is completely sealed inside a rugged ABS plastic enclosure and certified with IP67 protection which will protect it from water and dust. It has an optional internal memory up to 128 KB which can store additional information about the students as per the customers' requirements. The miniature design of the tag makes it easier to mount on the assets and its tamper alert is ideal to locate any unauthorized movement of assets.

The tag design has been optimized for very low power consumption to give a higher battery life of up to 5 years. The tag sends a low battery warning to the software which will enable us to replace the tag before it dies down. The tag is a low power transmitting device complies with all regulatory requirements and certified as safe to use on people or assets.

## 2. Device Specifications

### 2.1. Environmental Specifications

- Operating Temperature -20°C to + 50°C

### 2.2. Physical Specifications

- Dimensions 31.79 x 10 (Diameter x Thickness) in mm
- Color Purple, White, Black etc.
- Casing Material ABS Plastic

### 2.3. Electrical Specifications

- DC Source 3VDC, 1000mAH Battery
- Battery Life 5 Years\*

## 2.4. RF Specifications

- Operating Frequency 865 to 870 MHz and 902 to 928 MHz
- Modulation GFSK
- Sensitivity -109 dBm
- Data Rate 100 kbps (Default)
- Air Protocol Proprietary-Reindeer Technologies Pvt Ltd
- RFID Tag Compatibility Personal, Asset, Vehicle
- Range 60 meters line of sight

*\* Indicates operating the tag at a RF baud rate of 100 kbps within the acceptable temperature range and with the tag transmit time interval of 10 seconds.*

## 3. Application Areas

- Real-time tracking of students, employees, workers and visitors
- Real-time tracking and monitoring of cargo in trucks
- Real-time tracking and monitoring of assets in warehouses, hospitals, enterprises etc.
- Student Attendance Management
- Employee In/Out Records
- Employee Productivity Management
- Visitor Management in high secure areas
- Access Control
- Safety and Security
- Emergency Response and Evacuation
- Energy Management

## 4. Ordering Information

Product part Number	Description
MASTIFF_CTAG	Miniature Coin Size Active RFID Tag for Tracking and Monitoring

## 5. Contact Us

### 12.1. Technical Support

Reindeer Technologies Pvt. Ltd. has built a solid technical support infrastructure so that you can get answers to your questions when you need them.

Our technical support engineers are available Mon-Fri between 9:30 am and 6:00 pm Indian standard time. The best way to reach a technical support engineer is to send an email to

[support@reindeersystems.com](mailto:support@reindeersystems.com). E-mail support requests are given priority because we can handle them more efficiently than phone support requests.

## 12.2. Sales Support

Our sales department can be reached via e-mail at [sales@reindeersystems.com](mailto:sales@reindeersystems.com) or by phone at 91-44-45022335/42606907.

Our sales department is available Mon-Fri between 9:30 am and 6:00 pm.

### **Reindeer Technologies Pvt Ltd**

*Excellence through Innovation™*

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