**VIZINEX** RFID
exactly the tag you need

MADE IN THE
**USA**

# Sentry Midrange



**A quantum leap in the performance and cost of one of our most widely used tags for large metal assets.**

## Industries
▸ Government/military
▸ Manufacturing
▸ Waste management
▸ Rental equipment
▸ Oil and gas

## Applications
▸ Reusable containers/special transport items
▸ Yard management/logistics
▸ Construction equipment tracking
▸ Tool and die tracking

## Why Vizinex?
▸ Innovative design
▸ High performance
▸ Best in industry service
▸ Made in the U.S.

## ▸ Sentry Midrange Overview

Improvements in RF chip design, and Vizinex's expertise at matching the new chips to highly efficient antennae, are improving the performance and reducing and the cost of RFID. The Midrange is the third generation of Vizinex's highly successful tag for tracking larger metal assets. The latest generation is 30% smaller than the original VX Mid, but it provides 30% better range and broader frequency response at a price that is 25% lower.

The new tag has a relatively small footprint of 39mm x 17mm. Despite this small package, it provides a read range of 33' (10m) when mounted on metal.

The smaller footprint and lower cost of the latest tag will enable the cost-effective tagging of a wide range of metal assets, from reusable containers to oil field assets to construction equipment. The optional cover provides extra protection for the RF device and the flexibility to use bolts, rivets or zip-ties for attachment.

The Midrange is also available in a multi-surface version that has a read range of 25' (7.5m) on metal and 21' (6.5m) off metal. All other specifications for the multi-surface version are the same as those for the on-metal version.

## ▸ Features & Benefits

• Read distances of 33' (10m) when mounted on metal

• Modest footprint of only 1.02 in$^2$

• Rugged: Tolerant of repeated exposure to high temperatures, vibration and impact



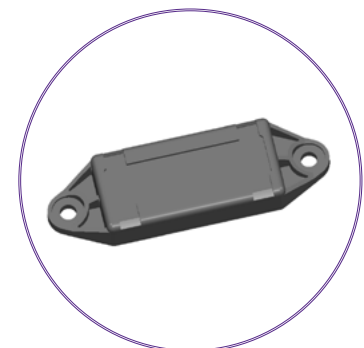**VIZINEX** RFID
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## ❯ The Sentry Platform

Vizinex RFID's Sentry line of high-performance, cost-effective and application-specific RFID tags is based on a printed circuit board platform. This well-established manufacturing process offers unsurpassed reliability and consistency in read range performance. At the core of the tag is a fiber-reinforced composite material that gives the Sentry tag its innate ruggedness. The innovative, patented tag design enables fast prototyping and affordable customization - essential to the expanding requirements of the RFID industry.

## ❯ Sentry Midrange Specifications

| Physical | Bare Tag | Covered Tag |
|---|---|---|
| Dimensions | 1.52 x 0.67 x 0.22 in<br>39 x 17 x 5.6mm | 2.50 x 0.69 x 0.25 in<br>63.5 x 17.5 x 6.4mm |
| Use Case | Mount on metal | |
| Attachment | High-performance, acrylic adhesive | 2 X #8 screws or rivets / optional adhesive |
| Weight | 6.4 g, 0.22 oz | 10 g, 0.35 oz |
| **Electrical/RF** | | |
| Read Range | 33 feet (10 meters) | |
| Frequency | US or ETSI - versions are separate parts | |
| IC Platform | Impinj 750 | |
| IC Memory | EPC of 96 bits with 32 bits of user memory | |

| Environmental | Bare Tag | Covered Tag |
|---|---|---|
| Ingress Protection | IP-68 | IP-69K, when mounted with screws |
| Operating Temperature | -50°C to 85° C | |
| Temperature Tolerance | **Standard:** 170C continuous, 200C minutes<br>**HT Version:** 200C continuous, 225C hours | |
| **Ordering Information** | | |
| US Frequency<br>• Bare tag<br>• Covered tag | AST1-174-0300<br>AST1-174-2300 | |
| EU Frequency<br>• Bare tag<br>• Covered tag | AST1-174-0310<br>AST1-174-2310 | |

### Can't find a standard RFID tag that meets your needs?

Vizinex custom RFID tags will fit your dimensional, material, environmental and/or functional requirements EXACTLY – because we design them that way. And we do it with your costs, product design and end customers in mind.

How are we able to design exactly the tag you need? It's not complicated. We do it by talking to you.

**Email sales@vizinexrfid.com or call 215-529-9440 to talk about your needs and requirements.**