

# **433MHz Active RFID TAG**

## **USER MANUAL**

**Victek VCT-1000 ISO Container TAG**

**Date : 31-Oct-2006**

**[www.victek.co.kr](http://www.victek.co.kr)**

**TEL) +82-31-631-7301**

**FAX) +82-31-631-7311**



# **Contents**

**1. Features**

**2. Description**

**3. Specifications**

**4. Tag Placement**

**5. Operation Area**

## 1. Features

- \* Tags can communicate data with all interrogators complied with ISO/IEC 18000-7 standards.
- \* Tags can monitor the cargoes in transit and storage in real time.
- \* Many tags can be monitored simultaneously by one reader
- \* Communication range can be up to 100 meters
- \* Tag's battery life is typically 5 years.

## 2. Description

Figure 1 Front view



Figure 2 Back view



Figure 3 Side view



### 3. Specifications

Specification	Description
Frequency	433.92 MHz
Antenna Characteristic	Omni-directional
Read Range	Up to 100m
Sensitivity	-95dBm (Typical)
Transmission Power	+5.6dBm Max
Data rate	27.78kbps
Modulation	FSK, Manchester
Deviation	+/- 50 KHz
Occupied Bandwidth	200 KHz
Operating Temperature	-40 ~ +80 °C
Battery Life	Typically 5 years(up to 10 years)
Dimension (W x H x D mm)	80 x 57 x 20
LF Receiver (option)	Frequency 125 KHz
	Range Up to 4m(12feet)
	Modulation ASK
	Data rate 2.731 Kbps
	Sensitivity 350 uVpp

#### **4. Tag Placement**

We recommend that you attach the VT-1000 Tag on the left-hand door(**about 2 m above the ground**) of the container using the double-coated foam adhesive tapes(provided).

#### **5. Operation Area**

It should be used on the commercial shipping containers and operations must be limited to commercial and industrial areas such as ports, rail terminals and warehouse

To prevent interference to Federal Government radar systems, operation is not permitted within 40 kilometers of the following locations:

DoD Radar Site	Latitude	Longitude
Beale Air Force Base	39°08'10" N	121°21'04" W
Cape Cod Air Force Station	41°45'07" N	070°32'17" W
Clear Air Force Station	64°55'16" N	143°05'02" W
Cavalier Air Force Station	48°43'12" N	097°54'00" W
Eglin Air Force Base	30°43'12" N	086°12'36" W

**Warning :** Changes or modifications not expressly approved by Victek co., ltd could void the user's authority to operate the equipment.

**Model : 433MHz Active Tag VCT-1000**

**FCC ID : UNZVCT-1000**

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions. 1) The device may not cause harmful interference and 2) this device must accept any interference received, including interference that may cause undesired operation.