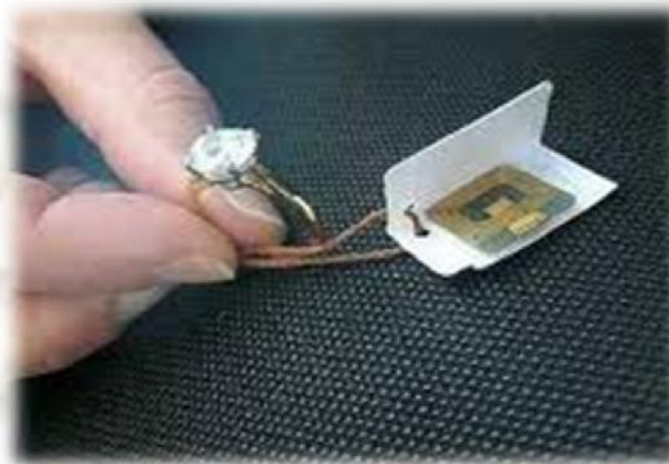# JEWELRY INVENTORY & TRACKING SOLUTION

Encircling your Gems

INTRODUCTION
"JWELERY TRACKING USING RFID"

Are you bothered about the inventory and tracking of your precious jewelry?

Jewelry inventory and tracking is a time taking process but with the help of RFID we can make it quick and reliable process.

Implementing RFID for jewelry inventory shortens the time to take inventory by 60 to 70%, thus producing a more safe secure environment for both customers and employees.

ADVANTAGES OF RFID SYSTEM

➤ **Boost up the Inventory & Stock taking process**

➢ **Inventory and tracking from the Production to the POS**

A 50,000 SKU jewelry stockpile needs to be inventoried.

4 employees and 2 days	2 employees and 2 hours
16 HOURS	2 HOURS

➢ **At POS:-**
Bill can be generated by just scanning the RFID tag of the jewelry.

➢ **Search the desired Jewelry in an instant of time**:-

Stop spending time looking for items. The search feature allows you to find an item or range of items. Multiple trays of products can be scanned and the program will notify you as soon as it finds the item you're looking for.

➢ **Fetch the history of the item:-**

Each item is assigned a unique ID, therefore each item will have the capability of reporting its own unique history of transactions. This allows for quicker resolution of lost items.

COMPONENTS

➤ RFID Jewelry Tags:-

• These RFID Tags are specially designed for Jewelry.

• Operating frequencies are 125 KHz/13.56 MHz/840-956MHz.

• These tags would be attached with the jewelry and can be read using both handheld and desktop based readers.

➤ RFID Handheld Reader:-

• This is a portable reader which is used to read the RFID Tag on Jewelry.

• The information corresponding to the tag will be displayed on the screen of the handheld reader.

➤ Desktop Based Reader:-

- ACR120 is a compact and cost-effective contactless reader and writer which supports Mifare cards, ISO 14443 A and B cards.
- It is designed for fast integration into different systems.
- It can be easily integrated into existing data collection applications such as portable terminals, ticketing, vending machine or access control.

➤ Application Software:-

An application software will be designed as per the requirements i.e. Jewelry Inventory, Tracking, Billing, searching etc.

➢ RFID Jewelry Tray:-

- The Jewelry trays are used to place a lot of jewelries together.
- When the trays of jewelry are removed from the safe room, they are scanned in multiples of 50 to 100 pieces of jewelry at a time, saving employees valuable time.
- The information is stored in the computer software system, and at the end of the day the trays are scanned again before storing them back in the safe room.

➢ RFID Smart Shelf:-

- A RFID smart shelf scanner is placed inside display cases in jewelry stores.
- Tracking takes place as a customer requests to see a piece of jewelry. With use of software, reports are sent through the scanner and stored in the software on the computer.
- The system alerts the manager if a piece of jewelry is missing or stolen.

Process Flow

Initialize an RFID Tag using Desktop based reader

Tag the Jewelry with a specific RFID Tag which consist of the information of that Jewelry

Tagged Jewelry can be read using Handheld Reader or desktop reader

The information will be updated in the central database