Apps*lite* ...innovative solutions to NFC challenges

Tracking test tubes in real time using NFC

The Challenge:

Automate tracking of individual test tubes to improve accuracy and provide real-time product identification.

Stakeholders:

Management team, test lab personnel, operators, quality control personnel, logistics & inventory control, etc.

Customer Challenges:

- Reduce handling time
- Improve accuracy / eliminate errors
- Automate product recognition
- Track in real time
- Withstand extreme temperature range
- Retain data long-term

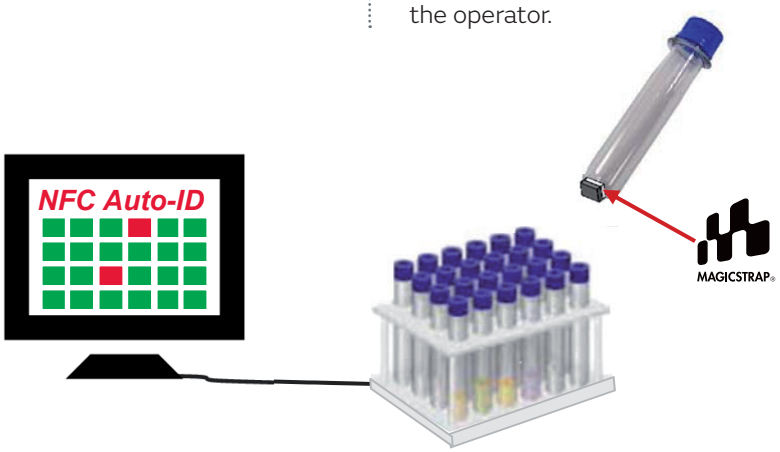
The Murata Solution:

The Product:

P/N – LXMS33HCNG-134
Ultra small MAGICSTRAP® Near Field Communication (NFC) RFID Tag

How It Works:

- MAGICSTRAP® is attached to or embedded in individual test tubes.
- Each MAGICSTRAP® has a unique identification number that can be used to ID each tube (additional data can be added to MAGICSTRAP's® user memory if required).
- When the tube is inserted into the NFC reader–equipped tray, each tube is easily and automatically identified for the operator.



NFC-enabled reader/writer base unit with matrix loop antenna network

Product Features:

- Complete design – RF antenna and IC is embedded within tag
- NXP ICODE SLiX, 896 bit user memory
- Ultra-miniature package size – 3.2 x 3.2 x 0.7mm
- Robust design, compatible with over molding embedding process
- Operating temperature -40°C to +85°C
- ISO15693 compliant
- Typical read range 15mm (200mW o/p power, 37 x 54mm antenna)
- 100% RoHS compliant

Applications / Use Cases:

- Medical, chemical, and biological test labs.
- Medication identification
- Equipment usage tracking
- Pharmaceutical research tracking

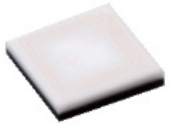
More info:

For further information about RFID solutions, please contact your local sales manager.

Data sheets and application notes for Murata Electronics products can be found at:

www.murata.com

MAGICSTRAP®



HF MAGICSTRAP®
P/N – LXMS33HCNG-134

To see more RFID solutions, visit www.murataamericas.com/rfid

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