

A roll of white UHF LED labels with a pink adhesive backing, partially unrolled to show the labels. The labels have small green LEDs on them.

UHF LED Label Edison Series



1. UHF LED Label Profile



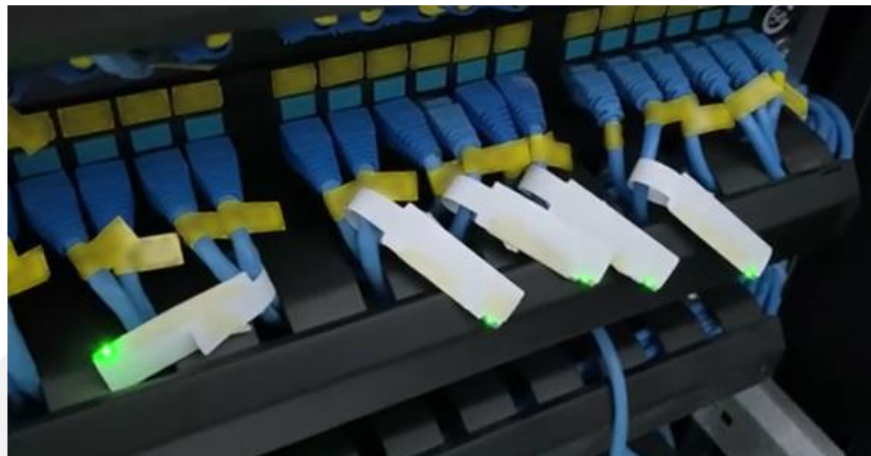
Some RFID applications require to find specific target from group items.

UHF LED label is ideal design for single item finding, also suitable to RFID printer's working.

With universal RFID device, reads & locates tag with specific TID, then remotely triggers LED on, realizes the fast query and locate the target item easily!

Assist to find item's location, greatly improve the searching efficiency and management level!

The perfect combination of UHF long-distance reading & LED lighting eliminates industrial pain points and makes RFID application more valuable!



Shanghai ReadFind IoT Co., Ltd



2. UHF LED Label Application



Archives



Cables



Items



Jewelry



Assets



Garments



Packages



Document



3. UHF LED Label Introduction



Feature

- ✓ Led light on the appointed label's TID from group items
- ✓ Outstanding performance: Bulk-reading, Quick Led On
- ✓ Universal Design: Capable to roll label converting
- ✓ Label Printable: Plain surface, support most RFID printers
- ✓ Customized inlay: Various sizes for tailor-made project
- ✓ Shipping form: Wet inlay, Label in roll
- ✓ Led lighting on distance: 3 meters *
- ✓ Label reading distance: Up to 8 meters *



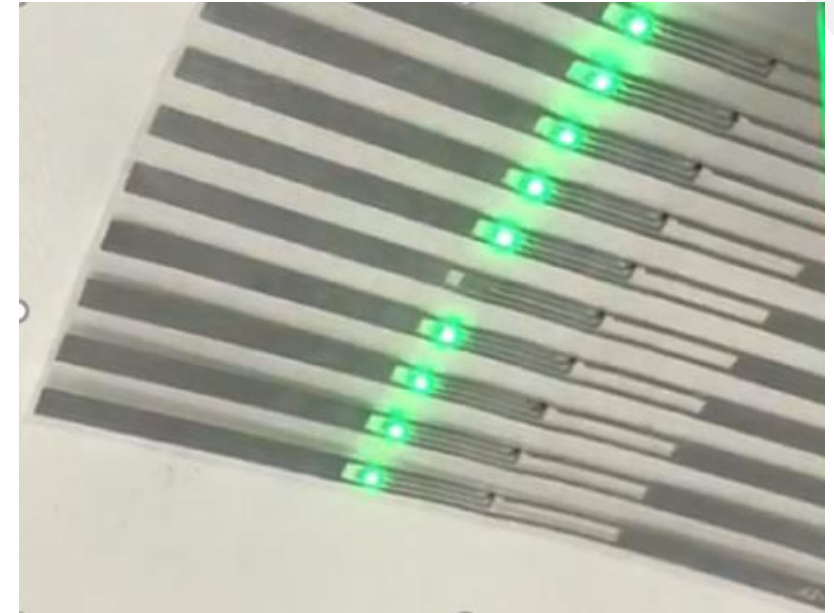
*Remark: Read distance depends on Inlay design, Reader's power, performance and related application scenario.



3. UHF LED Label Introduction

General Specification

- ✓ Inlay Structure: PET+ Aluminum Antenna +RFID Chip + LED
- ✓ Antenna Substrate: PET
- ✓ Antenna Tech: Aluminum Etching
- ✓ Inlay Dimension: 95x3mm or customizable
- ✓ Antenna Pattern Design: Customizable
- ✓ LED Position On Inlay: Customizable
- ✓ RFID, LED Working Mode: Passive (Battery free)
- ✓ LED: Green, Blue, Red





3. UHF LED Label Introduction

RFID Chip

- ✓ RF Protocol: ISO18000-6C EPC C1G2 (V1.2.0)
- ✓ Working Frequency: 840-960 MHz
- ✓ Memory Size: 2048 bits
EPC:160 bits, User: 1312 bits, TID: 96 bits,
Access and Kill Passwords 32 bits each
- ✓ Min. Read Sensitivity: -22.5 dBm
- ✓ Min. Write Sensitivity: -16 dBm
- ✓ Work Temperature: -35 ~ 85°C
- ✓ Storage Temperature: 0 ~ 25°C
- ✓ ESD (HBM): 3500 V
- ✓ Efficient Multi-labels anti-collision algorithm
- ✓ Ultra-low power reading and data writing
- ✓ Ultra-long Read/Write Working distance
- ✓ Low power super permanent memory
- ✓ Data duration over 10 years
- ✓ Tamper-proof and physically unerasable
- ✓ Memory: One Time Program. Data irreversible
- ✓ High reliability and high security
- ✓ LED Drive: Supported

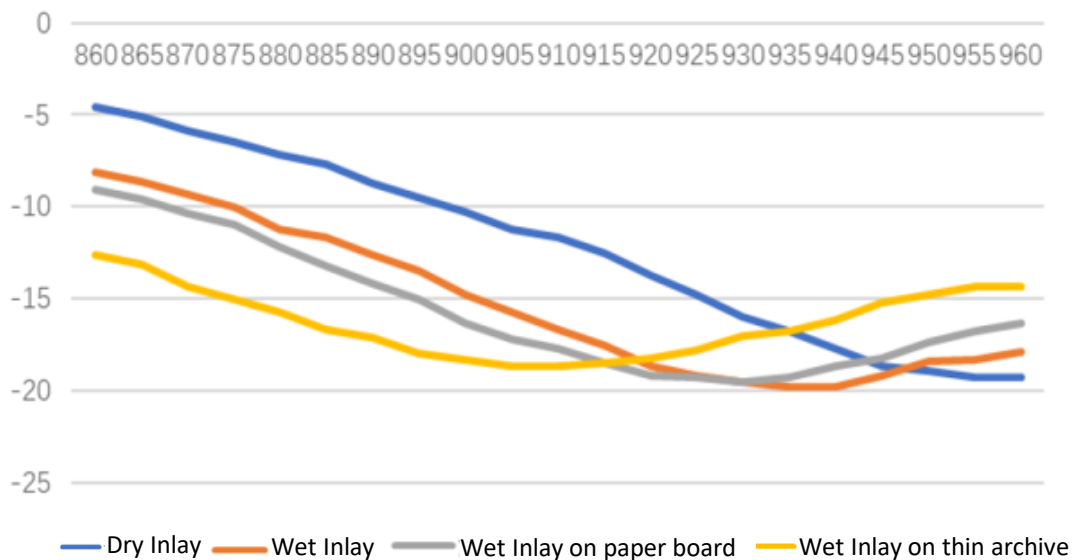


3. UHF LED Label Introduction

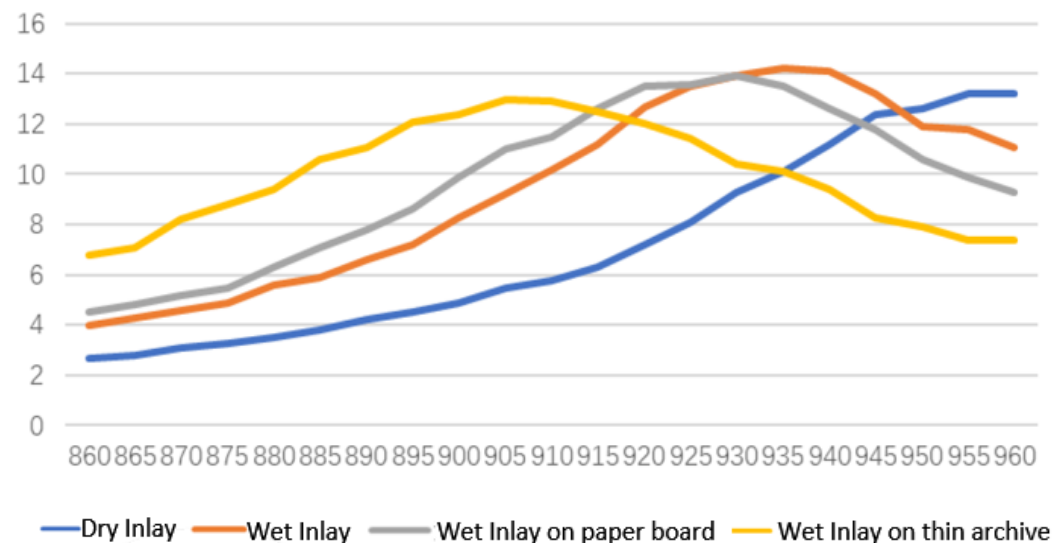


Performance and Test

Sensitivity



Reading Distance



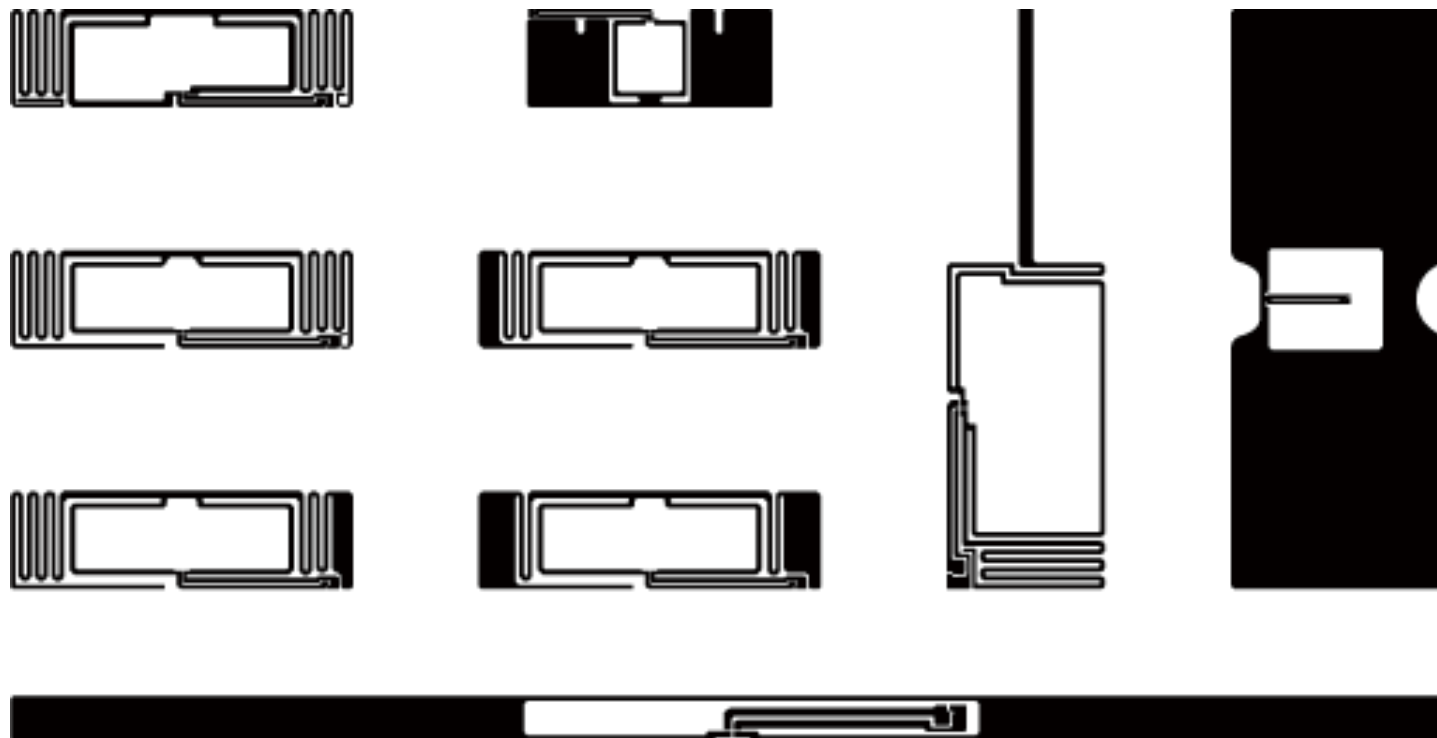
Inlay Model: RF-9503XBLGA Antenna Size: 95mm x 3mm



3. UHF LED Label Introduction

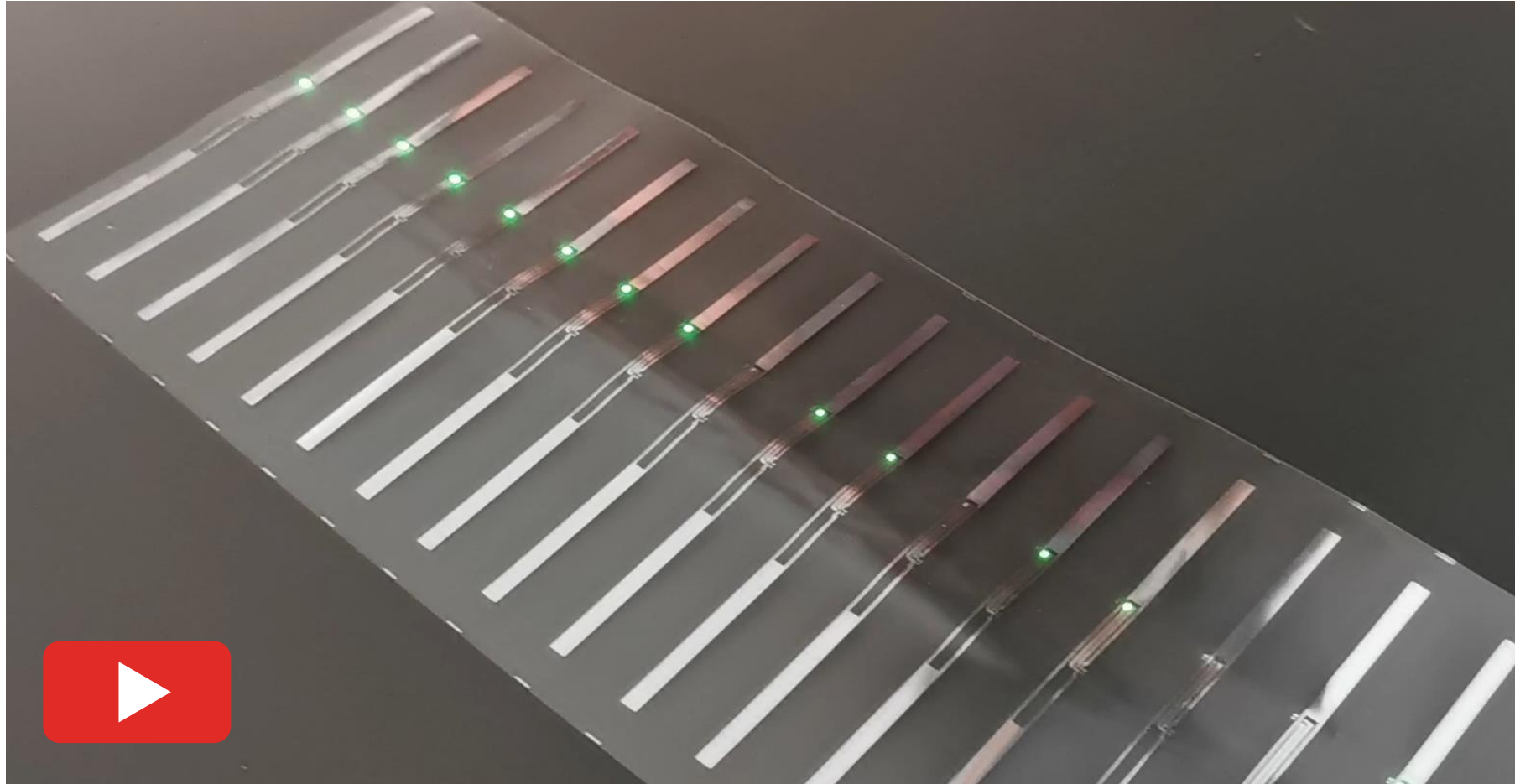


Variety of antenna design





4. UHF LED Label Test Video



Remarks: Test with 2W handheld device and maximum lighting distance is 3 meters.

Inlay Model RF-9503XBLGA

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5. Trigger LED Lighting on Assistance



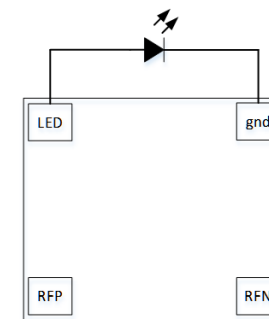
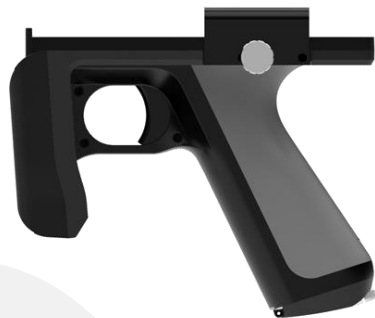
If you have handheld Reading Device/Reader

Will provide instruction how to send command from Reader to RFID label to trigger LED On.

Use the standard read command to read address 4 in the RFU zone, length 1, to trigger the voltage output of the LED Pad, output voltage range 0.8V-2.2V.



If you need handheld Reading Device or readers, glad to provide detailed info to assist your project moves quickly!



LED function connection method⁴



About RealSmart Technologies



Founded in 2005, headquarters in Shanghai, rooted in the smart card and RFID industry.

Focus on various RFID products research and development, manufacturing management and service.

Output excellent RFID products and solutions to customers over 60 countries.

Product and Service

- ✓ Industrial grade Super-mini UHF Tags
- ✓ Industrial grade On-metal UHF Tags
- ✓ RFID antenna, Inlay and label's design, manufacture and customization
- ✓ HF/NFC, UHF Inlay, Label and Smart Card Manufacture and service
- ✓ RFID Testing Tools' Promotion, Consultant and Training service
- ✓ Promote RFID new technology, product, solution and application landing