



**Joaneo**

Printing Smart Inlays

## UHF SMALL DIPOLE TAG

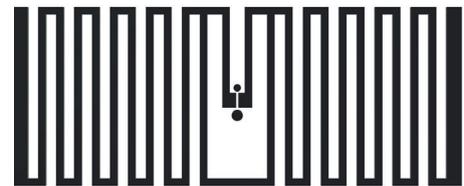


Joaneo paper-based UHF inlays are perfectly suitable for healthcare applications. They are designed to work near liquids and in close proximity with other inlays. They also can be used for purely paper based garment hang tags in apparel logistics and retail inventory tracking applications, where recycling of a pure paper tag matters.

These inlays ensure traceability, brand protection and security of data with a large user memory up to 2 kbit of data. The IC offers NXP's unique untraceable feature, often used in the defence and aeronautic industries.

### GENERAL SPECIFICATIONS

- Frequency: FCC 902-928 MHz / ETSI 865-868 MHz / ASIA 950-956 MHz (UHF)
- IC: NXP UCODE® 7xm. Alternative ICs: UCODE® 8, UCODE® 9
- Protocols: EPC Class 1 Gen2v2.1
- Substrate: Cast-coated white high-gloss paper 80 g/m<sup>2</sup>.  
Alternative substrates: High quality and environmentally friendly paper, high performance synthetic paper, PET and PP
- Product available as inlay or antenna only



### APPLICATIONS

Pharmaceutical,  
such as blood  
samples

Tracking and  
Tracing in  
in-vitro lab  
processing

Retail inventory  
apparel hang  
tags

Inventory  
management

## PRODUCT CHARACTERISTICS

- Antenna material: Conductive silver ink
- Finishing options: dry inlays, wet inlays to your specific adhesive requirements upon request
- Customization upon request
- Final Inspection: 100% tested, faulty tags marked

## RFID CHIP SILICON

EPC Memory: up to 96-bit  
 User Memory: up to 2k-bit  
 Operating temperature range: -40 °C up to +85 °C  
 Read sensitivity: -19 dBm  
 Write sensitivity: -12 dBm

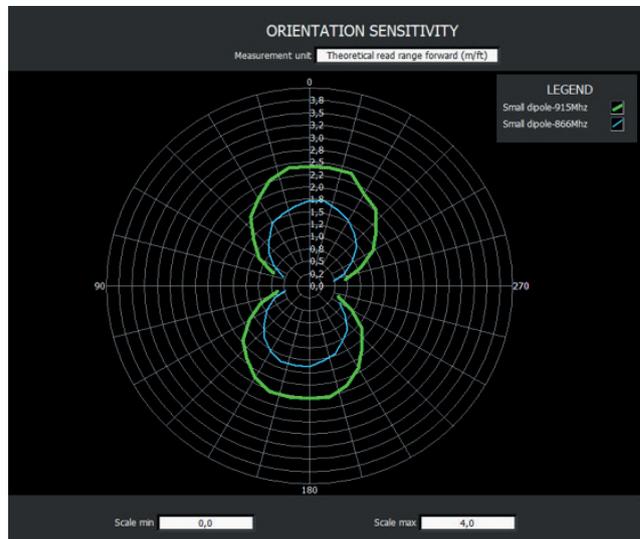
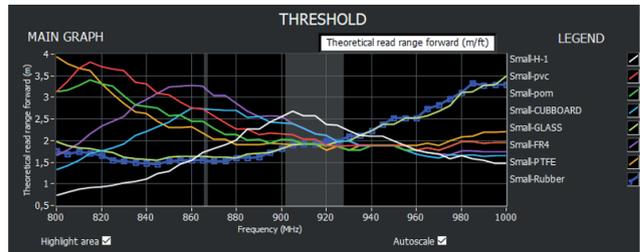
## MECHANICAL DIMENSION

Antenna Size: 30.0 x12.0 mm / 1.18 x 0.47 in  
 Label Size: 30.5 x 12.5mm / 1.2 x 0.49 in

## ABOUT US

Joaneo offers NFC and RFID antennas and inlays, printed on paper-based substrates, using an eco-friendly production process. All made in Luxembourg, from design to distribution.

## TAG READ PERFORMANCE



Type: Far-field radiation pattern (860-960 MHz)  
 Frequency: Min (860 MHz) – Max (960 MHz)  
 Gain: 2.3 dBi  
 HPBW: 116.4°

All graphs serve as indicators; actual performance in real-life applications may vary. The data has been determined based on calculations for transmitters with standard output power levels and corresponding IC selection.

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