NXP UCODE®8 UHF RFID EAS Smart Security Tag







1. Product Overview

The NXP UCODE®8 UHF RFID EAS Smart Security Tag is a rugged, reusable hard tag that combines UHF RFID and EAS technology for efficient inventory tracking and theft prevention. Built with durable plastic housing and powered by NXP UCODE®8, it offers a cost-effective solution for retail apparel management. Easily removed with a magnetic detacher, this dual-function tag enhances supply chain visibility while reducing shrinkage and out-of-stocks.

Key Features

Operating Frequency UHF 860-960 MHz

Chip Type
NXP UCODE®8

International Standard EPC Global Gen2v2

EPC Memory Up to 128 bits

Innovative Features

Self-Adjust
Memory Safeguard
Untraceable
Pre-serialization for 96-bit EPC
Integrated Product Status Flag (PSF)

2. Product Parameters

2.1 Physical Characteristics

SKU	AZT-EAS-U8-ABS-7331
Material	ABS
Dimension	72.5×30.75×20.75 mm
Weight	11.7 g
Customization	Logo, barcode/QR code, number printing, encoding, design, etc.
Mounting Method	Pin buckle
IP Rating	IP54



2.2 Technical Parameters

Operating Frequency	860-960 MHz
Communication Protocol	EPC Global Gen2v2

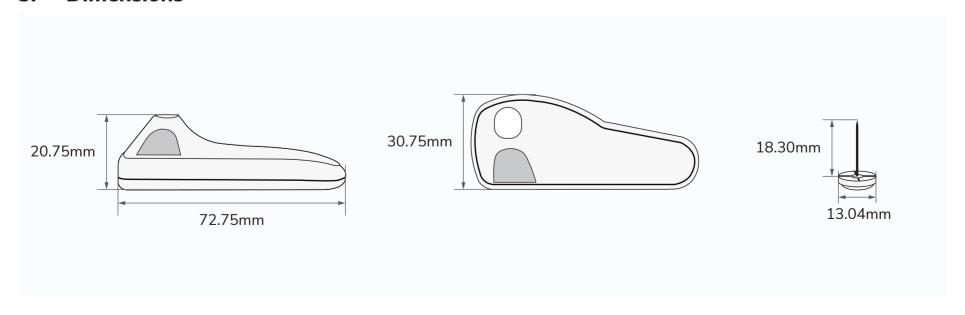
2.3 Chip Characteristics

Chip Manufacturer	NXP®
Chip Type	UCODE®8
EPC Memory	Up to 128 bits
TID Memory	96-bit Unique Tag Identifier
Unique Serial Number	48 bits
Encoding Speed	32 bits in 1.2 millisecond
Read Sensitivity	-23 dBm
Write Sensitivity	-18 dBm
Kill/Access Password	32 bits
Write Endurance	100,000 times
Data Retention	20 years
Innovative Features	Self-Adjust Memory Safeguard Untraceable Pre-serialization for 96-bit EPC Integrated Product Status Flag (PSF)

2.4 Additional Information

Operating Environment	-40°C~+85°C, 20%~90% RH
Storage Environment	+18°C~+28°C, 20%~90% RH
Application	Clothes security anti-theft, Apparel retail management, Clothes inventory management, Other items security controls

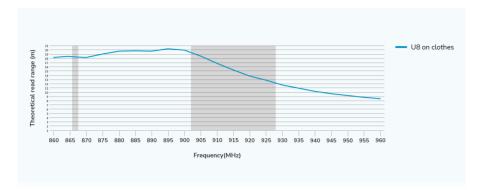
3. Dimensions





4. Testing Graphs

4.1 Reading range under different frequency



4.2 Tag power under different frequency

