# Ø30mm MIFARE Ultralight® C NFC On-Metal Mobile Tag











#### **Product Overview** 1.

This Ø30mm MIFARE Ultralight®C NFC on-metal mobile tag is a compact, high-performance NFC tag designed for on-metal use. It features NXP's MIFARE Ultralight® C chip with 3DES authentication for enhanced data security, making it ideal for applications requiring small size and secure communication. Compliant with ISO/IEC 14443-A and NFC Type-2 standards, this 30mm tag is discreet yet ensures reliable performance on metal surfaces, where many NFC tags fail.

Its specialized ferrite layer reduces metal interference, ensuring consistent readability. Optimized for mobile interactions, it works with all NFC-enabled devices like smartphones and is widely used in asset tracking, retail anti-counterfeiting, industrial equipment tagging, product authentication, access control, event ticketing and retail smart marketing.

## **Key Features**

**Operating Frequency** 

HF 13.56MHz

Chip Type

NXP MIFARE Ultralight® C

**International Standard** 

ISO/IEC 14443-A, NFC Forum Type 2

**User Memory** 

114 bytes

**UID Memory** 

7 bytes

Read Range

Up to 10 cm

#### 2. **Product Parameters**

## 2.1 Physical Characteristics

SKU	AZT-ULC-HPET-D30
Material	Hard PET
Size	Diameter 30 mm

## 2.2 Technical Parameters

Operating Frequency	13.56MHz
Communication Protocol	ISO/IEC 14443-A, NFC Forum Type 2
Reading Range	Up to 10 cm
Capacitance	16/50 pF
Operating Mode	Passive



# 2.3 Chip Characteristics

Chip Manufacturer	NXP®
Chip Type	MIFARE Ultralight® C
Data Retention	10 years
Write Endurance	100,000 times
Total Memory	192 bytes
User Memory	114 bytes
UID Memory	7 bytes
Reading Rate	106 kbit/s
High Data Integrity	16-bit CRC
Anti-Collision Function	Support
Anti-Cloning	Support
3DES Authentication	Support
Anti-Collision	Anti-collision algorithm, without interference from other cards in the vicinity
Fast Counter Transaction	<10 ms
Typical Ticketing Transaction	<35 ms
One-Way Counter	16-bit
One-Time Programmable	32-bit
ESD Voltage Immunity	MAX 2000V

# 2.4 Additional Information

Operating Environment	Tag attach: +10°C~+40°C, 20%~80% RH
	After tag attached: -20°C~+50°C, 20%~80% RH
Storage Environment	+18°C~+28°C, 40%~60% RH
Handling Precautions	1. Do not bend.
	2. Keep away from water and collision.



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