NXP UCODE®9xe Textile RFID Laundry Tag









1. Product Overview

Made from high-strength, abrasion-resistant, flexible, moisture-resistant, and easy-care polyester, this slim NXP UCODE®9xe RFID textile laundry tag is designed to endure and surpass 200 industrial wash cycles, guaranteeing remarkable durability throughout the washing process. Equipped with the cutting-edge RFID chip, NXP UCODE®9xe, this laundry tag delivers outstanding performance and an extensive read range, even in the most challenging laundry environments. Featuring an unique identifier(TID/UID), RFID readers can efficiently batch-scan these textile laundry tags to automatically monitor usage status and wash counts in various applications such as industrial laundry, linen rental, uniform management, hotel linen management, healthcare linen management, military laundry, and more.

Key Features

Operating Frequency UHF 860-960 MHz

Chip Type NXP UCODE®9xe

International Standard ISO/IEC 18000-6C, EPC Global Gen 2v2

EPC Memory 128 bits

TID Memory 96 bits

Washing Cycles
200 washing cycles or 3 years

2. Product Parameters

2.1 Physical Characteristics

SKU	AZT-U9XE-TXT-7015
Material	Textile
Tag Dimension	70×15 mm
Net Weight	0.4g
Surface Color	White
Mounting Method	Sewn into the hem, or sewn-in pouch(do not sew onto the metal wire or chip module during sewing)
Customization	Support logo printing, encoding, and tailored design

2.2 Technical Parameters

Operating Frequency	860-960 MHz
Communication Protocol	ISO/IEC 18000-6C, EPC Global Gen 2v2
Read Distance	Fixed Reader(2W ERP): US: >14m; EU: >14m Handheld Reader: US: >13.5m; EU: >9.5m



2.3 Washing Information

Washing Temperature	90°C(194°F)/15 minutes, 200 cycles
Pre-Drying in Tumbler	80°C(356°F)/30 minutes
Ironing	185°C(365°F)/10 seconds
Sterilization Process	135°C(275°F)/20 minutes
Water Extractor Press	60 bars
Suitable Washing Methods	Washing and drying
Chemical Resistance	Conventional detergents, fabric softeners, bleaching agents(oxygen/chlorine), and alkalis
Washing Cycles	200 washing cycles or 3 years(whichever reaches first)

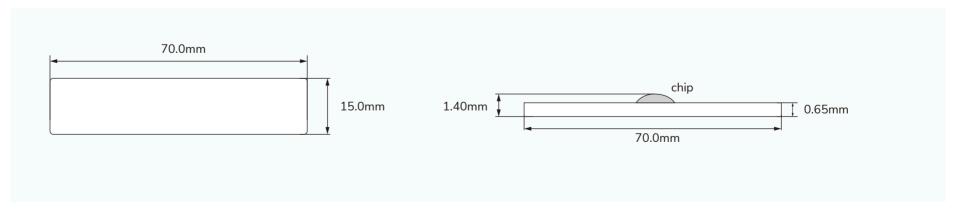
2.4 Chip Characteristics

Chip Manufacturer	NXP®
Chip Type	UCODE®9xe
TID Memory	96 bits
EPC Memory	128 bits
Unique Serial Number	48 bits
Kill Password	32-bit
Read Sensitivity	-24 dBm
Write Sensitivity	-22 dBm
Encoding Speed	16 bits in 0.6ms
Self Adjust	Support
Drop-in replacement to UCODE 9	Support
Memory Safeguard	Support
Block Write (32-bit)	Support
Write Endurance	100,000 times
Data Retention Time	20 years
Multi-Tags Reading	Support
Read/Write	Support

2.5 Additional Information

Operating Environment	-20°C~+85°C(-4°F~+185°F), 8%~95% RH
Storage Environment	+18°C~+28°C(+64.4°F~+82.4°F), 40%~60% RH
Applications	Industrial laundry, linen rental, uniform management, hotel linen management, healthcare linen management, military laundry

3. Dimensions





4. Testing Graphs

4.1 Reading range under different frequency

4.2 Tag power under different frequency

