NXP UCODE® 9 RFID Textile Laundry Tag









1. Product Overview

The NXP UCODE® 9 RFID Textile Laundry Tag is designed to endure and surpass 200 industrial wash cycles, ensuring long-lasting durability. Each tag undergoes 100% memory write testing, providing exceptionally stable performance. Widely used in uniforms management, linen leasing, industrial washing, textile management, and access control management, it offers reliable tracking solutions for various applications.

Key Features

Operating Frequency

UHF 865-868MHz(EU), 902-928MHz(US)

Chip Type

NXP UCODE® 9

International Standard

ISO/IEC 18000-6C, EPC Global Gen2V2

EPC Memory

96-bit

TID Memory

96-bit

Operating Temperature

-25°C to +110°C

Washing Cycles

200 washing cycles or 2 years

2. Product Parameters

2.1 Physical Characteristics

SKU	AZ-U9-LTW-7515
Material	Textile
Dimension	75×15×1.5mm
Weight	About 0.65g
Surface Color	White
Mounting Method	Sewn into the hem, or into the woven label (do not sew onto the metal wire or chip module during sewing)



2.2 Technical Parameters

Operating Frequency	865-868MHz (EU), 902-928MHz (US)
Communication Protocol	ISO/IEC 18000-6C, EPC Global Gen2V2
Antenna Polarization Mode	Linear Polarization
Reading Distance	Fixed Reader (2W ERP): Over 10 meters Handheld Reader (30dbi power): Over 7 meters

2.3 Washing

Washing Cycles	200 washing cycles or 2 years (whichever reaches first)
Chemical Resistance	All standard chemicals used in industrial washing processes.
Water Extractor Press	60 bars
Sterilization Process	275°F (135°C) / 20 minutes
Ironing	356°F (180°C) / 10 seconds, 200 times
Pre-Drying in Tumbler	356°F (180°C) / 30 minutes, 200 times
Maximum Temperature	194°F (90°C) / 15 minutes, 200 times

2.4 Chip Characteristics

Chip Manufacturer	NXP®
Chip Type	UCODE® 9
TID Memory	96-bit
EPC Memory	96-bit
Unique Serial Number	48-bit
Kill Password	32-bit
Read Sensitivity	-24 dBm
Write Sensitivity	-22 dBm
Encoding Speed	32 bits in 0.96 ms
Self Adjust	Support
Memory Safeguard	Support
Block Write (32-bit)	Yes
Permalock	One-time lock
Write Endurance	100,000 times
Data Retention Time	20 years

2.5 Additional Information

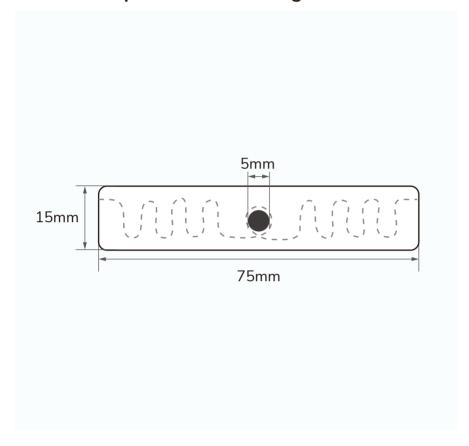
Operating Environment	-25°C to +110°C, 5% to 95%RH
Storage Environment	+18°C to +28°C, 40% to 60%RH (recommended)
Passed Tests	RoHS, MRI, GB18401, 100% Radio frequency compliance Testing
Application	Uniforms management Linen lease Industrial washing Textile management Access-control management, etc.



2.6 Packaging

Packing Format	Packed in carton
Packing Quantity	500 pcs/bag, 20 bags/carton G.W.: 6.18 Kg/carton
Carton Dimension	430×210×270mm

3. Size and Specification Drawing





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