

# NXP UCODE® 9

## RFID Textile Laundry Tag

AZ-U9-LTW-7010



### 1. Product Overview

NXP UCODE® 9 RFID textile laundry tag is an ultra-high frequency tag with a service life of more than 200 industrial washes, can withstand 60 Bars pressure, stable and reliable RF performance, and has passed comprehensive reliability verification and 100% power and write tests. In addition, the tag has an excellent read distance and is suitable for a variety of fields such as industrial laundry, linen rental, medical and military clothing management, providing reliable performance and long life.

### 2. Product Parameters

#### 2.1 Physical Characteristics

SKU	AZ-U9-LTW-7010
Material	Textile
Dimension	70×10×1.76mm
Weight	About 0.6g
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)

### Key Features

<b>Operating Frequency</b>
UHF 865-868MHz (EU), 902-928MHz (US)
<b>Chip Type</b>
NXP UCODE® 9
<b>International Standard</b>
ISO/IEC 18000-6C, EPC Global Gen2V2
<b>EPC Memory</b>
96-bit
<b>TID Memory</b>
96-bit
<b>Washing Cycles</b>
200 washing cycles or 2 years



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 5 meters

2.3 Washing

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

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

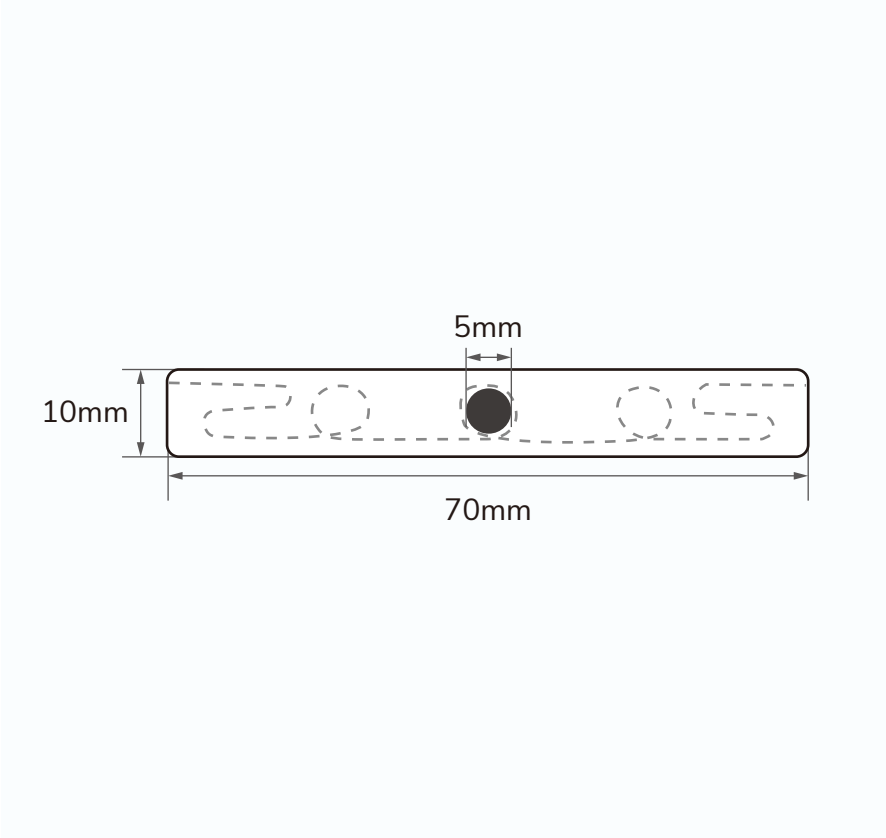
Operating Environment	-25°C to +110°C, 5% to 95%RH
Storage Environment	+18°C to +28°C, 40% to 60%RH (recommended)
Passed Tests	RoHS, MRI, GB18401, 100% Radio frequency compliance Testing
Application	Industrial washing   linen rental   medical and military clothing managemen, etc.



2.6 Packaging

Packing Format	Packed in carton
Packing Quantity	500 pcs/bag, 20 bags/carton G.W.: 5.38 Kg/carton
Carton Dimension	430×210×270mm

3. Size and Specification Drawing



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