

# NXP UCODE® 9

## RFID Textile Laundry Tag

AZ-U9-LTW-5815



### Key Features

<b>Operating Frequency</b>
UHF 860-960MHz
<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

## 1. Product Overview

NXP UCODE® 9 RFID textile laundry tag is an ultra-high frequency label with a service life of more than 200 industrial washes, can withstand 60 Bars pressure, and has stable and reliable RF performance. It is widely used in industrial laundry, linen rental, medical and military clothing management, etc., ensuring excellent performance in various harsh conditions.

## 2. Product Parameters

### 2.1 Physical Characteristics

SKU	AZ-U9-LTW-5815
Material	Textile
Dimension	58×15×1.5 mm
Weight	About 0.5g
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	860-960MHz
Communication Protocol	ISO/IEC 18000-6C, EPC Global Gen2V2
Antenna Polarization Mode	Linear Polarization
Reading Distance	Fixed Reader (2W ERP): Over 8 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

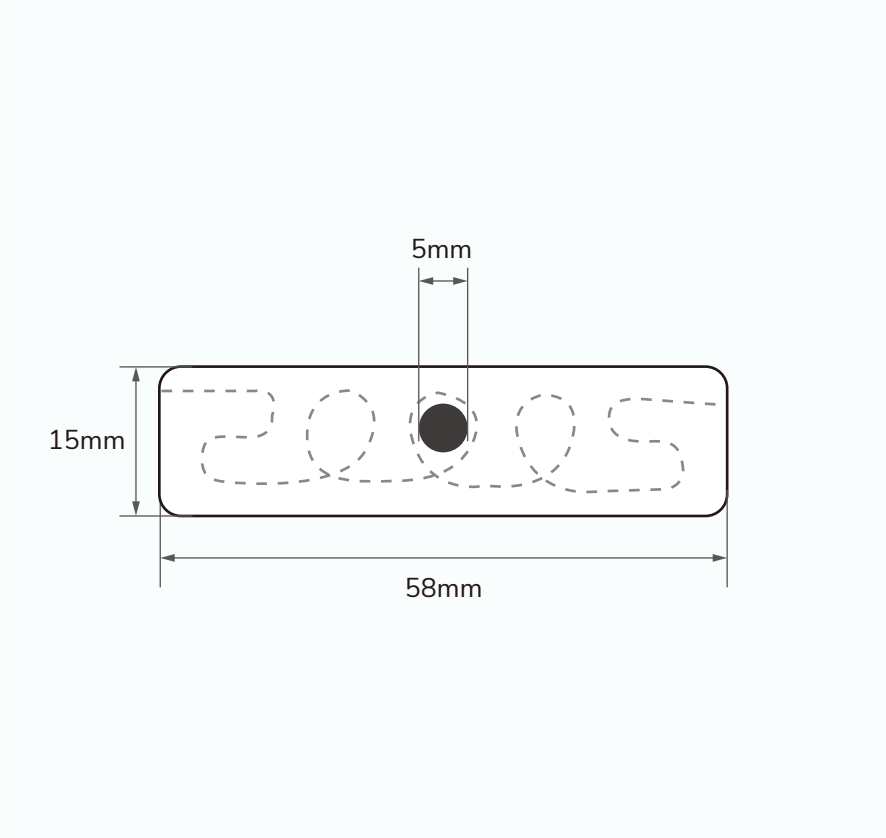
Operating Environment	-25°C to +110°C, 5% to 95%RH
Storage Environment	+18°C to +28°C, 40% to 60%RH (recommended)
Passed Tests	RoHS, MRI, 100% Radio frequency compliance Testing
Application	Industrial laundry   linen rental   medical and military clothing management, etc.



2.6 Packaging

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

3. Size and Specification Drawing



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