NXP NTAG® 213 NFC Ring









1. Product Overview

This NTAG® 213 NFC ring brings the power of NFC technology to your fingertips. The advanced NTAG® 213 chip provides fast and reliable performance and large memory capacity, capable of storing a variety of data, including URL links, digital business cards, etc. Whether paired with a smartphone, tablet, or other NFC-enabled device, it can easily achieve contactless operation, making it an ideal choice for applications such as mobile payment, smart home control, and smart access control management.

In addition, this ring is not only rugged and durable, but also incorporates fashion elements, making it the perfect accessory for modern technology enthusiasts. With the NTAG® 213 NFC ring, you can easily improve the convenience and innovation of your digital life.

Key Features

Operating Frequency HF 13.56MHz

Chip Type NXP NTAG® 213

International Standard ISO/IEC 14443-A, NFC Forum Type 2

EEPROM 180 bytes

User Read/Write Area 144 bytes

2. Product Parameters

2.1 Physical Characteristics

SKU	AZRI-N213	
Ring Size (US)	No. 6 No. 7 No. 8 No. 9 No. 10 No. 11 No. 12 (For specific size, please check 3. How to choose the NFC ring size?)	

Material



Wood



Tungsten Steel + Zirconia Ceramic



Zirconia Ceramic + Epoxy



Zirconia Ceramic + Epoxy (Ammonite)



Zirconia Ceramic + Epoxy (Black Temperature Sensitivity)



2.2 Technical Parameters

Operating Frequency	13.56 MHz	
Communication Protocol	ISO/IEC 14443-A, NFC Forum Type 2	
Communication Rate	106 kbit/s	
Operating Distance	Up to 10cm	
Input Capacitance	50 pF	

2.3 Chip Characteristics

Chip Manufacturer	NXP®	
Chip Type	NTAG® 213	
EEPROM	180 bytes	
Unique Serial Number	7-byte UID	
Initialized Capability Container	4 bytes	
User Read/Write Area	144 bytes	
Memory Access Protection	32-bit password	
Originality Signature	ECC-based	
Write Endurance	100,000 times	
Data Retention	10 years	
Organization	180 bytes organized in 45 pages with 4 bytes per page	
Anticollision	Support	

2.4 Additional Information

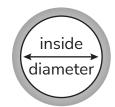
Storage Environment	+15°C to 25°C, 40% to 60%RH	
Operating Environment	0°C to 40°C, 30% to 80%RH	
Application	Public Transportation and Tickets Access Control Electronic Payment Electronic Business Cards Smart Homo Mobile App Launch, etc.	

3. How to Choose the NFC Ring Size?

Method 1: Measure current ring (You can print this document on an A4 paper)

Steps 1: Take a ring that properly fits the intended finger.

Steps 2: Place the ring over the circles below. Match the inside edge of the ring to the circle nearest in size. This measurement refers to the inside diameter of the ring.



Steps 3: If the ring falls between two sizes, order the larger size.

The sizes of the rings below are in US.



















Method 2: Measure finger size

To determine your size, we strongly advise that you measure the size of your finger rather than the size of your ring. Note: Measure at least 3 times to get the average value to reduce errors.



Step 1: Take a thin string without elasticity or a paper strip.



Step 2: Tighten the string or paper, wrap it around the finger where the ring will be worn, and mark it.



Step 3: Use a ruler to measure the length of the string mark, which is the circumference of the ring you should choose.

Choose the right size for you:

Finger Circumference (mm)	Ring Size (US)	Diameter (mm)
53	6	16.5
56	7	17.3
59	8	18.2
62	9	18.9
65	10	19.8
68	11	20.7
71	12	21.3

^{*}To ensure the ring fits comfortably, we suggest measuring your knuckle as well. We recommend selecting a size that will slide on and off your finger easily.

