



## NXP® NTAG® 213 Tag Tamper

# NTAG 213 Tag Tamper – One NFC tag for product authenticity, integrity & enhanced user experiences

Offering digital signature, tamper evidence, and current status awareness, this flexible, unobtrusive NFC tag lets brand owners protect product authenticity and integrity, while enabling advanced interactions, pre- and post-sale.

### KEY FEATURES

- ▶ Tamper detection with once-opened status (open loop)
- ▶ NXP originality signature (ECC-based, 32-byte), with option of brand-unique signature
- ▶ Unique 7-byte identifier (UID)
- ▶ NFC tap counter
- ▶ Creation of unique item URLs with flexible ASCII strings (based on UID, tamper status, and counter mirrors)
- ▶ Option of brand specific, programmable once-opened message for more security
- ▶ Current loop status detection (open/closed), via dedicated command, for extra dual-state applications
- ▶ 144-byte read/write memory - protection of tag memory by read-only mode (static & dynamic lock functions)
- ▶ Password (32-bit) protected tag memory including limits of false attempts
- ▶ ISO/IEC 14443-A 2-3 & NFC Forum Type 2 Tag compliant, for maximum interoperability with NFC infrastructure
- ▶ Fast Read command for quicker tag registration
- ▶ 50-pF capacitance for smaller antenna design
- ▶ Passive, battery-free operation

### KEY BENEFITS

- ▶ Verify authorized tags and their associated products using NXP's digital originality signature – also possible with brand-unique signature
- ▶ Detect unauthorized product opening – without a mobile app
- ▶ Give each product its own addressable digital profile in the cloud with unique on-chip URL creation
- ▶ Detect current status and enable smart dual-state applications
- ▶ Scale to high volumes with mass-market NFC solution

### TARGET APPLICATIONS

- ▶ Digital product authentication
- ▶ Tamper-proofing and refill fraud protection
- ▶ Contextually relevant messaging based on a product's status - for deeper consumer engagement pre/post retail
- ▶ Support for broad range of market segments: wine & spirits, specialty foods, cosmetics, personal care, household chemicals, pharmaceuticals, medical devices etc.
- ▶ Security sealing for retail and logistics packaging



The NTAG 213 Tag Tamper is the latest NFC tag innovation from NXP, the number-one supplier of semiconductor-based ID solutions. Used to power smart, connected products, this flexible, unobtrusive, and battery-free tag can deliver multi-application performance.

A digital signature and tamper evident feature support anti-counterfeiting and tamper-proofing, while the tag also enhances consumer experiences, by enabling relevant interactions based on product status. Connection to cloud services can support real-time monitoring of product usage and performance. The NTAG 213 Tag Tamper can be placed on the product's label, seal, closure, or container – and information can be accessed with a simple tap of any mobile NFC device, no app needed.

### STRONGER BRAND PROTECTION

The NTAG 213 Tag Tamper offers brand owners a strong defense against various attacks on the supply chain, from point of origin through retail to the consumer's hand. With just one technology, brand owners can engage with their distribution networks and their customers, all in real time.

- **Product authentication to help fight counterfeits:**  
Digitally verify that a product is genuine, anywhere and at any time, by letting consumers (or field inspectors) verify unique product identifiers and the originality signature – with a single tap of their NFC phone.
- **Tamper evidence to secure product integrity:**  
Detect whether a product has been interfered with or opened prior to sale. Consumers (or inspectors) can instantaneously access the product status and confirm that the tamper loop is intact, by just reading the tag with an NFC enabled device. A customer programmable, non-predictable once-opened message adds extra security.
- **Authentication for the supply chain:**  
Since each product can be assigned a geographic area and distributor, brands can verify the authenticity of the supply chain and detect any market or channel diversion.
- **Real-time location monitoring:**  
Information about location, time, and actions, based on unique tag identifiers, enables rich data analytics in the cloud. Brand owners can identify clusters of counterfeits or tampering, and groups of products at a wrong location, to take corrective action.

### BETTER BRAND EXPERIENCES

Brand owners can engage consumers through contextual content messages prompted by real-time product status. Interactions can include product specifics and helpful services, and can serve to create deeper, more lasting consumer relationships.

- **Pre- and post-sale messaging:**  
Before purchase, messages can include product information, reviews, use-by dates, provenance, vouchers, and more. The NTAG 213 Tag Tamper can also report on the state of the product or package seal (factory sealed or open), to verify the item has been handled properly. After purchase, messages can include services, loyalty rewards, access to social communities, e-commerce, and more – extending the dialog and building loyalty.
- **Dual-state applications:**  
Use the current status feature to support dual-state applications, triggered by the end user. Unlock a new character on a toy, prompt a Like on social media, or initiate a different sound bite.
- **Real-time usage monitoring:**  
Gather important information about customer interests and behaviors, and analyze product usage and performance by monitoring interactions in the cloud.

### VALUE-ADDED SOFTWARE – FOR FREE

NTAG 213 Tag Tamper comes with valuable software tools, to simplify development of rich NFC applications and get you to market faster. The TapLinx SDK is a plug-and-play software development kit for Android with an open API, and RFIDDiscover and TagXplorer are advanced PC-based tools to personalize tags for NFC applications.

### ORDERING INFORMATION

NTAG 213 Tag Tamper	Delivery Form	Input Capacitance	Part Type	12NC
	75 µm wafer on FFC	50 pF	NT2H1311TTDUF	9353 300 38003
	120 µm wafer on FFC	50 pF	NT2H1311TTDUD	9353 300 35003

