

Product number: 17163UN1

# NFC card PVC printed on one side - 85,6 x 54 mm - NTAG 424 DNA - 416 Byte - matt black - fully coloured | printed on one side



## Product information

The black NFC card made of PVC offers a high level of security thanks to its integrated NTAG424 DNA chip and thus extends the familiar NTAG functions (UID, UID mirror, etc.) with additional cryptographic mechanisms, which enable the storage of AES-128 protected data, the generation of signatures, encrypted UID or randomized ID, among other things. This type of chip is therefore ideal for lotteries, authenticity certification or use in IoT applications.

## Short description

- PVC material, rigid
- Format 85,6 x 54 mm
- Indoor and outdoor use
- Ambient temperature -25 to +70 degrees
- NXP NTAG 424 DNA - 416 bytes (NDEF: 256 bytes)
- Printed on one side
- 4-color printable
- Print finish: satin

## Product description

### NFC product

The black NFC card is made of PVC and has a format of 85.6 x 54 mm with a material thickness of 0.86 mm. It has a glossy, smooth surface and fits easily into standard wallet compartments for cards thanks to its typical credit card format. The PVC material of the card is waterproof and is therefore ideal for both indoor and outdoor use.

### Print

Our products are printed using a process that offers high resolution, colour accuracy and durability. This makes it possible to display images in photorealistic quality or to print even tiny font sizes legibly. This

environmentally friendly technology enables us to personalise your products on one or both sides and add logos, images, text or other designs from a wide range of colours. The applied colour layer is abrasion-resistant and resistant to water, sunlight and chemicals.

For your desired design, simply download our suitable [print template](#) and provide us with your desired print layout conveniently via our configurator.

## **NFC chip**

The black PVC NFC card is equipped with the NTAG424 DNA, which is the successor to the NTAG413 DNA, adds additional functions and is recommended for use in applications with increased security requirements. The chipset supports AES-secured authentication of content as well as the Secure Unique Message feature (SUN) for generating a unique character string (HASH) based on a secret key. The generated character string can be appended to a stored NDEF URL, for example, and can then be checked on the server side. The basis for this is the previously configured shared secret. The full potential of the chipset can therefore only be exploited with the appropriate infrastructure.

The NTAG424 has a total capacity of 416 bytes, which is divided into two usable memory areas (256 bytes + 128 bytes). The 256 byte memory area offers space for NDEF messages whereas the 128 byte area is intended for encrypted data. Each chip has a unique serial number (UID) consisting of 7 bytes (alphanumeric, 14 characters). The NFC chip can be written to up to 200,000 times and has a data retention period of 50 years. Of course, the NTAG413 also has the standard functions of the NTAG series in the form of the UID ASCII mirror feature, with which the UID of the tag can be appended to the NDEF message, as well as an integrated NFC counter, which increases automatically during readout. Encryption is based on the AES-128 standard. Other features include an encrypted UID, a randomized ID and an ECC signature. The extended functions are not activated by default. The NTAG424 is compatible with all NFC-enabled smartphones and all ISO14443 end devices.

- Total capacity: 416 bytes
- Free memory: 256 bytes + 128 bytes secure memory
- Usable memory NDEF: 249 bytes

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Do you need higher quantities?

[Contact us](#)

## Product properties

<b>Product number</b>	17163UN1
<b>Weight</b>	5,5 g
<b>Encryption</b>	AES-128 Encryption
<b>Frequency</b>	13.56 MHz
<b>Ambient temperature</b>	-25 to 70 degrees
<b>Data transfer rates</b>	106 kbit/s
<b>Number of write operations</b>	200.000 times
<b>Material</b>	PVC
<b>Storage temperature</b>	Min -55°C - Max +125°C
<b>Operating temperature</b>	Min -25°C - Max +70°C
<b>Chip standards / ISO Norm</b>	ISO/IEC 14443A
<b>Product form</b>	rectangular
<b>Colour category</b>	black
<b>Material thickness</b>	0,86 mm (T)
<b>Compatibility</b>	to NFC-enabled smartphones: 100%
<b>Chip</b>	NXP NTAG424 DNA
<b>Memory</b>	416 Byte (NDEF: 256 Byte)
<b>Antenna</b>	Aluminium
<b>Data retention</b>	50 years
<b>Type</b>	Card
<b>NFC Forum Type</b>	NFC Forum type 4
<b>Detail colour</b>	black matt

**Water resistance**

waterproof (IP67)

## More images