

Product number: 17257

# RFID/NFC Sticker PET - Dual Frequency - 63 x 33 mm - EM4425 - 2048 Bit - white

Produktbild Cover

## Product information

The RFID/NFC sticker with the EM4425 chip is the ideal solution for applications where long-range identification of products is required. Content such as web links or product information can be retrieved via NFC - ideal for industrial maintenance applications or digital product links. At the same time, the RFID function enables precise, automated recording and tracking of goods in logistics, for example for inventory controls or supply chain tracking.

## Short description

- PET material, flexible, self-adhesive
- Not suitable for metallic/conductive surfaces
- Format 63 x 33 mm
- Indoor use, limited outdoor use
- Ambient temperature from -40 to +85 degrees
- EM4425 - 2048 Bit

## Product description

### NFC product

The white dual frequency sticker is made of PET, a flexible plastic material that adapts well to slightly uneven surfaces. It has limited moisture resistance and is suitable for applications where occasional contact with moisture may occur. It is not completely waterproof, so use in dry environments is recommended. The sticker has a format of 63 x 33 mm with a material thickness of 0.2 mm. This compact size is ideal for highly visible labeling on a wide variety of surfaces.

### NFC chip

The EM4425 is an NFC and UHF transponder chip that has been designed for both NFC and HF as well as UHF applications. This means that it can be read by both NFC-enabled smartphones and RFID readers, for example. Both interfaces access a shared memory that can be flexibly divided. A shared IC serial number, which is contained in both the NFC UID and UHF TID, ensures that the transponder is uniquely identifiable for all end devices and is ideal for product authentication and inventory management, among other things.

As an additional security mechanism, the chip has configurable tamper detection. This enables the chip to detect the breakage of the antenna and make it available as information for the reader. AES-128 encrypted authentication and a digital signature to verify authenticity round off the security functions.

The EM4425 supports NFC Forum Type 5, ISO/IEC 15693, ISO/IEC 18000-3 Mode 1 as well as the UHF standards ISO/IEC 18000-63 and EPC Gen2v2. The dual-frequency capability allows flexible use with NFC-enabled smartphones as well as with industrial HF and UHF readers.

The memory structure of the chip comprises 2048 bits of configurable memory, which can be flexibly divided up for HF and UHF user memory, EPC/UII coding and digital signatures. In addition, the chip has a 64-bit UID (HF) and a 96-bit TID (UHF) for unique identification purposes.

The combination of NFC and RFID technology opens up a wide range of possible applications. The integration of NFC makes it possible to link digital content such as URLs directly to a product. While RFID is mainly used for contactless identification and automated recording of products in logistics and warehouse processes, NFC supplements these functions with a user-oriented interface on mobile devices.

Each chip can be written to at least 100,000 times and offers a data retention period of up to 50 years. In addition to the security functions, the EM4425 has optional features such as an ACCESS counter, a random UID to ensure privacy and a password protection function for memory access.

- Total capacity: 2048 bit configurable memory

---

Do you need higher quantities?

[Contact us](#)

## Product properties

<b>Product number</b>	17257
<b>Weight</b>	0,8 g
<b>Antenna format</b>	60 x 30 mm
<b>Operating temperature</b>	Min -40°C - Max +85°C
<b>Storage temperature</b>	Min -50°C - Max +125°C
<b>Chip</b>	EM4425
<b>Chip standards / ISO Norm</b>	EPC™ Gen2v2, ISO/IEC 18000-63, ISO/IEC 29167-10, ISO/IEC 15693, ISO/IEC 18000-3
<b>Frequency</b>	860 - 960 MHz, 13.56 MHz
<b>Memory</b>	2080 Bit
<b>Dimensions</b>	63 x 33 mm (B x H)
<b>Material thickness</b>	0,2 mm (T)
<b>Type</b>	Sticker
<b>Number of write operations</b>	100.000 times
<b>Colour category</b>	white
<b>Detail colour</b>	white glossy
<b>Product form</b>	rectangular
<b>NFC Forum Type</b>	NFC Forum type 5
<b>Material</b>	PET
<b>Compatibility</b>	to NFC-enabled smartphones: 100%
<b>Further links</b>	ntag
<b>Adhesive layer</b>	Yes

<b>Antenna</b>	Aluminium
<b>Data transfer rates</b>	53 kbit/s
<b>Data retention</b>	50 years

## More images