

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

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

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

More images

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

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

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

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