

## 13.56MHz RFID/NFC Plastic Nail

PRODUCT ID: 1483



## Description

• This is a blank 13.56MHz RFID/NFC 'nail'- often used to 'hammer' in a 13.56MHz RFID/NFC tag. The nail contains a small RFID chip and an antenna, and is passively powered by the reader/writer when placed a couple inches away.

These can be read by almost any 13.56MHz RFID/NFC reader but make sure it can handle ISO/IEC 14443 Type A cards as there are a few other encoding standards (like FeLica) They are tested and work great with both our PN532 NFC/RFID breakout board and Adafruit NFC/RFID Shield for Arduino!

These chips can be written to & store up to 1 KB of data in writable EEPROM divided into banks, and can handle over 100,000 re-writes. You can use our PN532 NFC/RFID breakout board or Adafruit NFC/RFID Shield for Arduino to read and write data to the EEPROM inside the tag. There is also a permanent 4-byte ID burned into the chip that you can use to identify one tag from another - the ID number cannot be changed.

These use a ISO/IEC 14443 Type A chipset, which used to be the 'classic' NFC chipset. In ~2014, the NFC forum decided not to support this chipset anymore, so newer phones do not support it. This only matters if you're trying to use this tag with a phone/tablet.

## **Technical Details**

- RFID chip specification:
  - o 1 KiloByte (8 KiloBit) non-volatile EEPROM storage
  - Built in encryption engine with 48-bit key
  - 4 Byte unique identifier burned into the chip
  - o 13.56 MHz frequency

Tag specification:

- o Max Dimensions: 22.11mm / 0.87" round x 41.37" / 1.62" long
- $\circ~$  Head Dimensions: 22.11mm / 0.87" round x 4.06mm / 0.16" thick
- o Shaft Dimensions: 6mm / 0.23" round x 38.23mm / 1.5" long
- o 2.32g
- Works about 2" away from reader