

## RFID HARD TAG CL002

### MARKETS:



Access  
control



### COLOUR:



Transparent

The CL002 is a "**clear disk**," a unique circular hard tag comprising a transparent laminate or PVC layer encased between two transparent PET sheets. As a **semi-finished** product, the CL002 offers basic protection against mechanical damage. This tag is notably wide and thin, with a diameter of 144.7 mm, a thickness of 1 mm, and a weight of just 4.6 grams. Its **specialised design allows for seamless integration onto a wide range of non-metallic surfaces, and it's easily applied using its dedicated adhesive film.**

The CL002 is available in **LF (Low Frequency) and HF (High Frequency)**. It can be customised with a logo via offset and silkscreen printing, and serialisation is applied using inkjet technology.

### MARKETS

The CL002 "clear disk" is specifically engineered for **indoor localisation** applications, providing an effective and discreet solution for tracking and identification within various internal environments.



frequency 125 kHz

#### RFID features

| Chip             | Memory                   | ISO Standard      |
|------------------|--------------------------|-------------------|
| EM4100 or GK4100 | 0 bytes - UID: 8 bytes   | -                 |
| EM4102           | 0 bytes - UID: 8 bytes   | -                 |
| EM4200           | 0 bytes - UID: 8 bytes   | ISO 11784 / 11785 |
| EM4550 or TITAN  | 128 bytes - UID: 8 bytes | ISO 11784 / 11785 |
| EM4305           | 64 bytes - UID: 4 bytes  | ISO 11784 / 11785 |
| ATA5577 or T5567 | 36 bytes - UID: 8 bytes  | ISO 11784 / 11785 |
| Q5 or 5555       | 33 bytes - UID: 8 bytes  | ISO 11784 / 11785 |
| HITAG1           | 256 bytes                | -                 |
| HITAG2           | 32 bytes                 | ISO 11784 / 11785 |
| HITAG S 2048     | 256 bytes - UID: 4 bytes | ISO 11784 / 11785 |
| HITAG S 256      | 32 bytes - UID: 4 bytes  | ISO 11784 / 11785 |
| SIC279           | 16/24 bytes              | ISO 11784 / 11785 |
| S5777            | 28 bytes - UID: 8 bytes  | ISO 15693         |



frequency 13,56 MHz

#### RFID features

| Chip                              | Memory                    | ISO Standard | NFC Standard                             |
|-----------------------------------|---------------------------|--------------|--|
| RF81                              | 1024 bytes - UID: 4 bytes | ISO 14443 A  | Not supported by majority of NFC devices |
| FM11RF08                          | 1024 bytes - UID: 4 bytes | ISO 14443 A  | Not supported by majority of NFC devices |
| RF005                             | 64 bytes - UID: 7 bytes   | ISO 14443 A  | Not supported by majority of NFC devices |
| RF32                              | 4096 bytes - UID: 4 bytes | ISO 14443 A  | Not supported by majority of NFC devices |
| MIFARE CLASSIC 1K EV1 S50         | 1024 bytes - UID: 4 bytes | ISO 14443 A  | Not supported by majority of NFC devices |
| MIFARE CLASSIC 1K EV1 S50 7 BYTES | 1024 bytes - UID: 7 bytes | ISO 14443 A  | Not supported by majority of NFC devices |
| MIFARE CLASSIC 4K EV1 S70         | 4096 bytes - UID: 4 bytes | ISO 14443 A  | Type 2 - tag compliant                   |
| MIFARE ULTRALIGHT EV1-1           | 48 bytes - UID: 7 bytes   | ISO 14443 A  | Type 2 - tag compliant                   |
| MIFARE ULTRALIGHT EV1-2           | 128 bytes - UID: 7 bytes  | ISO 14443 A  | Type 2 - tag compliant                   |
| MIFARE ULTRALIGHT C               | 144 bytes - UID: 7 bytes  | ISO 14443 A  | Type 2 - tag compliant                   |



frequency 13,56 MHz

#### RFID features

| Chip                  | Memory  | ISO Standard            | NFC Standard                             |
|-----------------------|---|-------------------------|--|
| MIFARE DESFIRE EV1 2K | 2048 bytes - UID: 7 bytes                                 | ISO 14443 A             | Type 4 - tag compliant                   |
| MIFARE DESFIRE EV1 4K | 4096 bytes - UID: 7 bytes                                 | ISO 14443 A             | Type 4 - tag compliant                   |
| MIFARE DESFIRE EV1 8K | 8192 bytes - UID: 7 bytes                                 | ISO 14443 A             | Type 4 - tag compliant                   |
| MIFARE DESFIRE EV2 2K | 2048 bytes - UID: 7 bytes                                 | ISO 14443 A             | Type 4 - tag compliant                   |
| MIFARE DESFIRE EV2 4K | 4096 bytes - UID: 7 bytes                                 | ISO 14443 A             | Type 4 - tag compliant                   |
| MIFARE DESFIRE EV2 8K | 8192 bytes - UID: 7 bytes                                 | ISO 14443 A             | Type 4 - tag compliant                   |
| MIFARE DESFIRE EV3 2K | 2048 bytes - UID: 7 bytes                                 | ISO 14443 A             | Type 4 - tag compliant                   |
| MIFARE DESFIRE EV3 4K | 4096 bytes - UID: 7 bytes                                 | ISO 14443 A             | Type 4 - tag compliant                   |
| MIFARE DESFIRE EV3 8K | 8192 bytes - UID: 7 bytes                                 | ISO 14443 A             | Type 4 - tag compliant                   |
| MIFARE DESFIRE LIGHT  | 640 bytes - UID: 7 bytes                                  | ISO 14443 A             | Type 4 - tag compliant                   |
| MIFARE PLUS SE        | 1024 bytes - UID: 7 bytes                                 | ISO 14443 A             | Not supported by majority of NFC devices |
| MIFARE PLUS 2K        | 2048 bytes - UID: 7 bytes                                 | ISO 14443 A             | Not supported by majority of NFC devices |
| MIFARE PLUS 4K        | 4096 bytes - UID: 7 bytes                                 | ISO 14443 A             | Not supported by majority of NFC devices |
| MIFARE PLUS X 2K      | 2048 bytes - UID: 7 bytes                                 | ISO 14443 A             | Not supported by majority of NFC devices |
| MIFARE PLUS X 4K      | 4096 bytes - UID: 7 bytes                                 | ISO 14443 A             | Not supported by majority of NFC devices |
| MIFARE PLUS EV2 2K    | 2048 bytes - UID: 7 bytes                                 | ISO 14443 A             | Not supported by majority of NFC devices |
| MIFARE PLUS EV2 4K    | 4096 bytes - UID: 7 bytes                                 | ISO 14443 A             | Not supported by majority of NFC devices |
| ATC1024-MV110         | 944 bytes - UID: 8 bytes                                  | ISO 15693               | Not supported by majority of NFC devices |
| ATC256-MV410          | 224 bytes - UID: 8 bytes                                  | ISO 15693               | Not supported by majority of NFC devices |
| ATC4096-MP311         | 4096 bytes - UID: 7 bytes                                 | ISO 14443 A             | Not supported by majority of NFC devices |
| CTC4096-MP410         | 2984 bytes (advant) / 1002 bytes (prime) - UID: 4/7 bytes | ISO 14443 A             | Not supported by majority of NFC devices |
| CTC4096-MM410         | 2984 bytes (advant) / 1002 bytes (prime) - UID: 4/7 bytes | ISO 15693 - ISO 14443 A | Not supported by majority of NFC devices |
| EM4233                | 256 bytes - UID: 8 bytes                                  | ISO 15693               | Not supported by majority of NFC devices |



frequency 13,56 MHz

#### RFID features

| Chip                    | Memory                      | ISO Standard | NFC Standard                             |
|-------------------------|-----------------------------|--------------|--|
| ICODE SLI-S             | 256 bytes - UID: 8 bytes    | ISO 15693    | Type 5 - tag compliant                   |
| ICODE SLIX              | 128 bytes - UID: 8 bytes    | ISO 15693    | Type 5 - tag compliant                   |
| ICODE SLIX2             | 316 bytes - UID: 8 bytes    | ISO 15693    | Not supported by majority of NFC devices |
| ICODE SLIX-S            | 160 bytes - UID: 8 bytes    | ISO 15693    | Type 5 - tag compliant                   |
| ICODE DNA               | 252 bytes - UID: 8 bytes    | ISO 15693    | Type 5 - tag compliant                   |
| MIM1024/PRIME           | 1024 bytes                  | ISO 14443 A  | Not supported by majority of NFC devices |
| MIM256/PRIME            | 256 bytes                   | ISO 14443 A  | Not supported by majority of NFC devices |
| NTAG210                 | 48 bytes - UID: 7 bytes     | ISO 14443 A  | Type 2 - tag compliant                   |
| NTAG212                 | 128 bytes - UID: 7 bytes    | ISO 14443 A  | Type 2 - tag compliant                   |
| NTAG213                 | 144 bytes - UID: 7 bytes    | ISO 14443 A  | Type 2 - tag compliant                   |
| NTAG215                 | 504 bytes - UID: 7 bytes    | ISO 14443 A  | Type 2 - tag compliant                   |
| NTAG216                 | 888 bytes - UID: 7 bytes    | ISO 14443 A  | Type 2 - tag compliant                   |
| NTAG213 TT (TAG TAMPER) | 144 bytes - UID: 7 bytes    | ISO 14443 A  | Type 2 - tag compliant                   |
| NTAG413 DNA             | 32/128 bytes - UID: 7 bytes | ISO 14443 A  | Type 4 - tag compliant                   |
| NTAG424 DNA             | 416 bytes - UID: 7 bytes    | ISO 14443 A  | Type 4 - tag compliant                   |
| ST25TV02K               | 250 bytes - UID: 8 bytes    | ISO 15693    | Type 5 - tag compliant                   |
| ST25TB512               | 64 bytes - UID: 8 bytes     | ISO 14443 B  | Type 4 - tag compliant                   |
| ST25TB04K               | 512 bytes - UID: 8 bytes    | ISO 14443 B  | Type 4 - tag compliant                   |
| ST25TB02K               | 256 bytes - UID: 8 bytes    | ISO 14443 B  | Type 4 - tag compliant                   |
| TAG-IT 256              | 32 bytes - UID: 8 bytes     | ISO 15693    | Type 5 - tag compliant                   |
| TAG-IT 2K               | 256 bytes - UID: 8 bytes    | ISO 15693    | Type 5 - tag compliant                   |
| MB89R118                | 2000 bytes - UID: 8 bytes   | ISO 15693    | Not supported by majority of NFC devices |



#### Technical specifications

|  |  |
|--|--|
| <b>Application</b>                       | Non-metal surfaces   |
| <b>Dimensions</b>                        | ø 144.7 mm, h 1 mm   |
| <b>Material</b>                          | PVC clear disk sandwiched between two transparent PET sheets |
| <b>Weight</b>                            | 4.6 g  |
| <b>Application method</b>                | Adhesive   |
| <b>Operating and storage temperature</b> | -10°C ~ + 50°C   |

#### Customisation

|                          |                             |
|--------------------------|-----------------------------|
| <b>Colour</b>            | Transparent                 |
| <b>Type of printing</b>  | Offset, silkscreen printing |
| <b>Type of numbering</b> | Inkjet technology           |

