

# TW-R16-K2 HF Tag



### Technical data

| Туре                                       | TW-R16-K2                                                             |
|--------------------------------------------|-----------------------------------------------------------------------|
| ID                                         | 7030410                                                               |
| Remark to product                          | extended storage temperature range, suitable for Laundry applications |
| Data transfer                              | Inductive coupling                                                    |
| Technology                                 | HF RFID                                                               |
| Operating frequency                        | 13.56 MHz                                                             |
| Memory type                                | FRAM                                                                  |
| Chip                                       | Fujitsu MB89R118                                                      |
| Memory size                                | 2048 Byte                                                             |
| Memory                                     | Read/Write                                                            |
| Freely usable memory                       | 2000 Byte                                                             |
| Number of read operations                  | unlimited                                                             |
| Number of write operations                 | 10 <sup>10</sup>                                                      |
| Typical read time                          | 0.5 ms/Byte                                                           |
| Typical write time                         | 0.5 ms/Byte                                                           |
| Radio communication and protocol standards | ISO 15693<br>NFC Typ 5                                                |
| Minimum distance to metal                  | 10 mm                                                                 |
| Temperature during read/write access       | -25+85 °C                                                             |
| Temperature outside detection range        | -40+185 °C                                                            |
|                                            | 160 °C, 1 × 35 h                                                      |
|                                            | 220 °C, 1 × 30 s                                                      |
| Design                                     | Hard tag, R16                                                         |
| Diameter                                   | 16 mm                                                                 |



#### Features

FRAM memory 2 kB
Not for direct mounting on metal

## Functional principle

The HF read/write devices operating at a frequency of 13.56 MHz form a transmission zone the size of which (0...500 mm) varies, depending on the combination of read/write head and tag used.

The read/write distances mentioned here only represent standard values measured under laboratory conditions, free from any influences caused by surrounding materials.

The read/write distances of tags suitable for mounting in/on metal were determined in/on metal.

Attainable distances may vary by up to 30 % due to component tolerances, mounting conditions, ambient conditions and material qualities (especially when mounted in metal). Testing of the application under real operating conditions is therefore essential, especially with on-the-fly reading and writing!



# Technical data

| Housing material     | Plastic, PPS        |
|----------------------|---------------------|
| Active area material | Plastic, PPS, black |
| Protection class     | IP69K               |
| Packaging unit       | 1                   |