




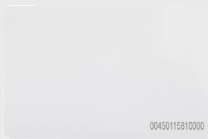


| Technical Data | Passive Transponders |
|------------------------------------|--|
| Power supply: | <ul style="list-style-type: none">• power supply by the radiated reader field• no battery necessary |
| Functional principle: | <ul style="list-style-type: none">• passive transponder technology (RFID, <u>R</u>adio <u>F</u>requency <u>I</u>dentification)• contactless, inductive communication with adequate devices |
| Transponder standards: | <ul style="list-style-type: none">• Mifare Classic 1k, Mifare DESFire EV2 8k (13,56 MHz)• Hitag 1, Hitag 2, Hitag S (125 kHz)• EM 4102, EM4450 (125 kHz)• depending on mounting form: Deister (125 kHz)• depending on mounting form available as combi-transponder (combination of different standards) |
| Data transfer / encryption: | <p>Hitag:</p> <ul style="list-style-type: none">• mutual authentication• encrypted data transfer according to manufacturer standard• for Hitag S: additional AES encryption (128 Bit) of the transponder data including the transponder UID (copy protection) <p>Mifare:</p> <ul style="list-style-type: none">• Classic: mutual authentication and encrypted data transfer according to manufacturer standard (CRYPTO1)• for DESFire: increased security level by 3DES / AES encryption of the transponder interface• additional AES encryption (128 Bit) of data on the transponder. |
| Temperature: | <ul style="list-style-type: none">• -25°C to +55°C <p>Please note that under certain conditions higher temperatures could arise and damage the transponder, e.g. if depositing the transponder on a car dashboard during solar irradiation.</p> |
| Relative humidity: | <ul style="list-style-type: none">• 25% to +95% |
| Protection class: | <ul style="list-style-type: none">• IP 54 |
| Models: | <ul style="list-style-type: none">• Clip Tag V2 (not as EM transponder) combination with mechanical keys• Standard Tag key fob (standard model)• Design Tag key fob with rectangular geometry• Premium Tag premium key fob with stainless steel enclosure• Premium Plus Tag premium key fob with stainless steel eyelet• ISO card dimension of standard bank card |

Techn. Data Passive Transponders

| | Clip Tag | Standard Tag | Design Tag | Premium Tag | Premium Plus Tag | ISO card |
|--------------------------|---|--|---|---|---|--|
| |  |  |  |  |  |  |
| Colours | <ul style="list-style-type: none"> anthracite alike RAL 7021 colourmarker red, gray, yellow blue, green, pink | <ul style="list-style-type: none"> standard: black, red, green, blue, white, yellow other colours on request | <ul style="list-style-type: none"> frame black inner part white other colours on request | <ul style="list-style-type: none"> enclosure: polished stainless steel inner part white, other colours on request | <ul style="list-style-type: none"> enclosure: polished stainless steel inner part white, other colours on request | <ul style="list-style-type: none"> standard: white special transponders with specific design |
| Offprint | no | on request | on request | on request | on request | on request |
| Size (approx.) | 38x48x12 mm | 34x43x5 mm | 50x16x5 mm | ∅32x4 mm (without eyelet) | ∅36,5x45,3x5,2 mm | 54x86x1 mm |
| Weight (approx.) | 22 g (without key) | 6 g | 5 g | 17 g | 10 g | 7 g |
| Material | ABS PA6 GF30 | ABS | ABS | stainless steel, plastics | stainless steel, plastics | PVC |
| Mifare Classic | yes | yes | nein | nein | yes | yes |
| Mifare DESFire | yes | yes | yes | yes | no | yes |
| Hitag 1, 2, S | yes | yes | yes | yes | no | yes |
| EM 41xx, 44xx | no | yes | on request | on request | no | yes |
| Combi-transponder | no | yes | on request | on request | yes | on request |
| Other features | | available with integrated NdFeB N30 magnet for automatic wake-up procedure of the cylinder ELS999R | | | | on request with HI-/LOCO magnetic stripe |

These data correspond to the actual development status and are subject to change at any time without notice.