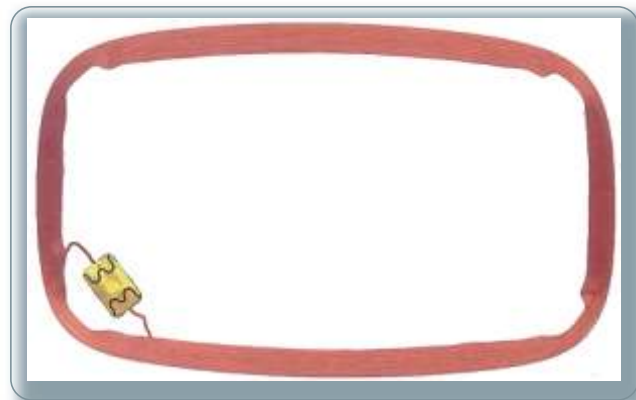


Hitag-1 Cards / Key Fobs

Utilization possibilities

The Hitag1 identification card always functions dependably even under difficult environmental conditions for example dampness, dirt or mechanical influences (also refer to the care instruction page). Simple functions such as for example BDE, Parking access or access control can be implemented with this device.



Function

As soon as the passive Hitag 1 transponder arrives in the readable sector of the terminal, an electro-magnetic field is built up, by which the Hitag 1 transponder and the reading device transfer the data. Through the utilization of difference access possibilities the identity card can for example be given a password. The complete storage facility is 2 KBit from which 224 Bytes are utilizable/configurable. The storage units for the Hitag 1-Chip are broken down into blocks. A block comprises of 4 pages.

The Hitag1 chip generally has an anti collision protection facility. This can however only be utilized if the reading device is fitted with the appropriate anti-collision protection protocol as well as the facility of allowing for a data collision recognition tool to run.

Print/refinement

Cards:

The identification card will be designed and produced according to the instructions and technical possibilities. The identification card can be printed both on the front and reverse in one or several colours. Additional safety characteristics such as for example geometrical printing or hologram are also possible. Other options are for example coding, numbering, or even personalization or embossing.

The optimal printing technology will be selected according to the print run and layout/colours, such as for example offset, screen, re-transfer or thermal sublimations/thermal transfer printing.

Keyfobs:





Laser engraving can be utilized for the production of for example for an optical numbering. A single or multiple colour printing with a logo or script is also possible. A photo printing underneath a transparent cover is also possible upon request.

Hybrid media (Multiple technologies)

The Hitag1 can naturally also be combined with other technologies within a medium. It must however be noted that same frequencies can lead to disruptions or even a complete loss of functionality capability for the individual technologies. Therefore multiple technologies within one medium working on the same frequencies are not recommended. Supplementary versions can for example be Legic®-, Mifare- or i-Code- or even the utilization of processor chips or a magnetic stripe



Technical information Hitag 1

Characteristics	Card	Keyfobs		
		A	B	C
Material	PVC	ABS plastic		
Colour		 *	 **	 *
		Each with a grey cover**		
Connections	laminated	Ultra sonically welded	pressed	pressed
Surface	High gloss/lusterless	lusterless	lusterless	lusterless
Formate	86 x 54 x ca. 0,76 mm	round	oval	round
	Special formats upon enquiry	Other construction formats upon enquiry		
Frequency	125 kHz			
Chip type	passive (without battery)			
Writing-/reading space	approximately 7 cm (Depending upon antenna and reading device)			
Storage medium	E ² PROM (Read/write)			
Storage size	2K Bit total, from that 224 Byte can be utilized			
Modulation	ASK (Amplitude shift keying)			
Transfer rate	Mode dependant			
Data storage lifetime	approximately 10 years			
Delete/write cycles	approximately 100,000			
Storage functions	32-Bit-Serial number /freely configurable data			
Access	Read/write OR write protected OR red/write protected OR OTP-Mode			
Safety	Read/write OR write protected OR red/write protected OR OTP-Mode			
Anti-collision protection	Password / Crypto			
Transaction time	Available (Reading device must be appropriately equipped)			
Temperature area	from approximately -40° C up to approximately . + 85° C			

*other colours upon enquiry

**cover colours tone-in-tone upon enquiry

Other construction formats available in the delivery program.
The right to make technical changes is retained.