



## TAGCODER-LITE

### Highest Security Level for High-level Immobilizer Systems

The TAGCODER-LITE is a cryptographic Read/Write Transponder with a two way authentication that was specially developed for high-level immobilizer systems.

The advantage of two way authentication over conventional cryptographic transponders is that only a valid interrogation of the transponder can result in the return of the cryptographic reply that is sent back to the vehicle reader.

The first authentication takes place within the transponder; the second authentication is carried out within the transponder unit itself.

Due to this two way authentication method and the 96 bit Secret Key one of the highest security level available for automotive transponders on the market is reached.

The transponder also contains a 32 bit identification number as well as 186 bits of freely programmable user memory. The user memory consists of 2 lock bits and 184 bits freely programmable memory.

The TAGCODER-LITE transponder works at a 125kHz resonant frequency and is available in a miniature, durable glass rod for easy moulding into ignition key heads.

It has the same high security algorithm as TagCoder so that it is usable across common vehicle platforms and electronics, e.g. TagCoder-Lite could be used in the valet key without incurring the additional cost of the remote key electronics.

#### Overview

##### Size / Package

Glass 3,15 × 13,3 mm

##### Type

Encrypted Read / Write

##### Encryption Algorithm

Two way authentication  
TagCoder Crypt

##### Password

Yes

##### Transponder Frequency

125 kHz ± 3 kHz

##### Total Memory

512 bit

##### Transponder baud rate

4 kBd @ 125 kHz

##### Transponder Coding type

Manchester

##### Operating Temperature

-40°C to +85°C

#### Applications

► Automotive for high-level immobilizer systems

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Dimensions	Frequency	Material	Type	Total Memory
3.15 × 13.3 mm	125 kHz ± 3 kHz	Glass	Encrypted Read/Write	512 bit

**IC Total Memory Overview:**

512 bit

- ▶ 186 bit Free User Memory
- ▶ 32 bit identifier
- ▶ 96 bit secret key Transponder mode
- ▶ 32 bit customer key
- ▶ 32 bit password

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