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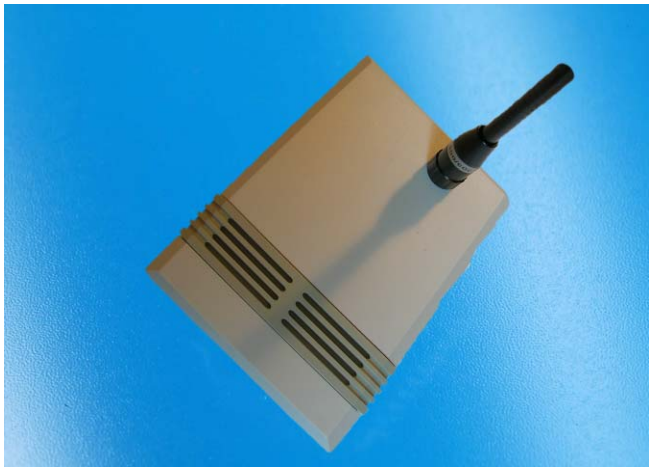

AS advanced Reader

The AS advanced Reader is the key component of one of the most advanced systems to track items reliable up to 12 m recognition distance with the additional feature to trace the position of the transponders in field in a pre-defined area.

The technology is already proven in mass production and therefore compared to other similar solutions available at a reasonable price and approved due to its reliability.

The reader allows to be operated with many transponders in the field enabled by the enhanced anti-collision mode.

In addition transponders in the field can be equipped with functional buttons, which allow sending signals to the reader to enrich the overall functionality, which is already supported by the AS Demo Kit where the Demo Software is included.

The reader module itself is possible to be damped to reduce the read/write distance according to specific application requirements.

Features

+ *Uplink 125kHz based*
+ *Downlink 433 based*
+ *Read Range up to 12 m*
+ *Various LF antenna designs available*
+ *Demo Software*
+ *Plug and Play Solution*
+ *HITAG 2 compatible*
+ *Works also in passive mode (HITAG)*
+ *Data Encryption Key Handling*
+ *Easy system integration*

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The drawings below show the working principle and advanced block diagram of the AS reader.

Reader Specification

Operating frequency: 125kHz for uplink, 433 MHz for downlink

Max. Supply Current: 550mA DC / 400 mA DC (operating)

Operating distance: up to 12 m

Power Supply: 7-15 V DC

Mechanical dimensions reader: 125 x 67 x 43m

Interface to host: RS 232, 115200 baud, 8N1.

USB Connector available, LAN interface optional

Air Interface: Manchester Coding for LF and UHF

3,9 kHz or 7,8 kHz LF baudrate (programmable), 31,2 kHz UHF baudrate

LF - Antenna interface: DIN cable plug type M/H-3 poles

Operating Temperature: -25°C……+85°C
Storage Temperature: -55°C……+125°C

The Working Principle

+ Figure 1: transponder communicates with reader 1 under signal 1 = transponder located in area 1

+ Figure 2: transponder communicates either with signal 2 to reader 1 and signal 3 to reader 2

+ Figure 2: if signal 2 > signal 3 = transponder in area 1- if signal 3 > signal 2 = transponder in area 2

+ Figure 3: transponder communicates with reader2 under signal 4 = transponder located in area 2

+ Figure 1

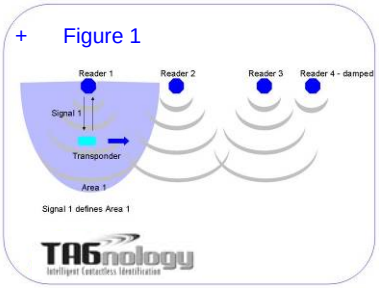


Figure 2

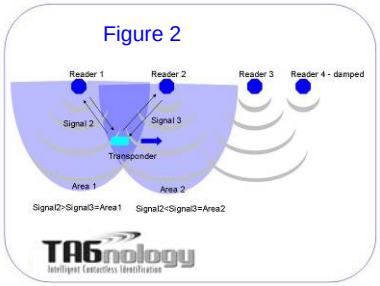
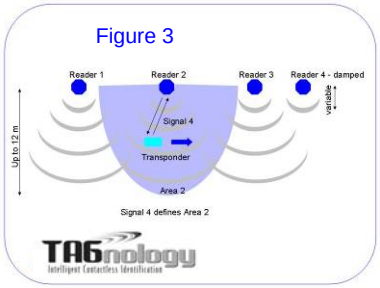
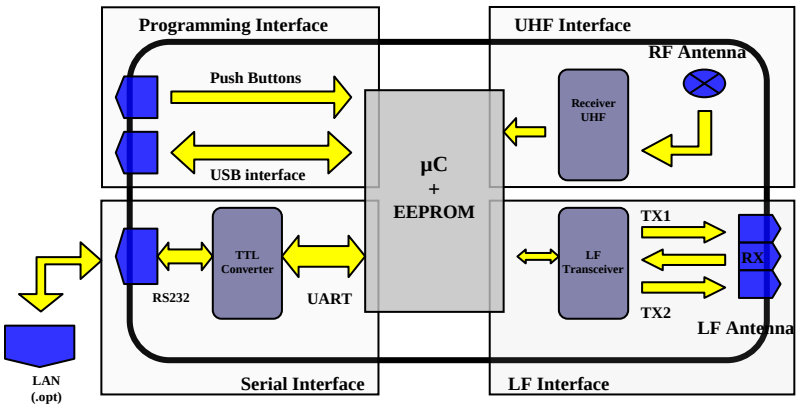


Figure 3



Block Diagramm



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