

Z-Tag for active RFID

S3135-H5xxx

ZOMOFI® - zone monitoring & find

Overview

The ZOMOFI® – zone monitoring & find – product family makes zone monitoring and asset tracking in buildings, warehouses, airports, on exterior premises and vehicles possible. The powerful active RFID technology consists of Tags, Controllers and accessories.

Functions and features

The 2.45 GHz Active Tag is used to identify and/or locate assets, containers or individuals. It is built around innovative low-power CMOS integrated circuits. This high scale of integration allows for very compact and low-power performance. The unique battery lifetime is achieved without sacrificing the reading and writing range. The Controller manages the configuration of the transmission mode.

The reading and writing range of up to 160m in free space is achieved with the ZOMOFI® Controller. The anticollision mechanism allows for a thousand Tags to be simultaneously present in the range of one single Controller – “patent pending”.

The unique transmission features make this Tag useful also in difficult environments, where non-friendly Radio Frequency material is present such as metal surroundings, concrete walls and water proximity. The alteration of the transmission remains usually very acceptable given the harsh conditions in which the ZOMOFI® Tag is operating.

The **Read-Only Tag** (S3135-H501 and S3135-H511) send the unique ID and battery status with each transmission in a regular 2 seconds interval.



The **Multifunction Tag** (S3135-H500 and S3135-H510) allow for read & write operations to the user data memory of 112 bytes, to mute and wake-up of the Tags, and to modificate the signalization rate. The mute function is particularly well suited to air transport. The Tag's service life of 3 to 7 years, depending on usage, is extremely long.



The **Motion Detection Tag** (S3135-H530) contains a motion sensor. This element measures the acceleration. With pre-adjusted sensitivity the Tag transmits a special command as soon as it is in motion. The Tag also differentiates clearly whether secured objects are in motion for one shock only or whether it is in continuous motion over seconds or even minutes. Even for periods in none-movement the Z-Tag it is assured that the application recognizes the presence of the Z-Tag continuously.



The **Temperature Sensor Tag** (S3135-H520) transmits beside the unique ID the temperature value measured once a minute. It allows “cold chain applications” in many ways. The sensor measures and transmits temperatures -40°C ~ 125°C.

The **Signal Tag** (S3135-H540) is the smallest ZOMOFI transponder in size. Its oval form in 52x27x8mm lets the tag being attached to almost any asset or valuable. In addition to all functions like unique ID, read & write the user memory, mute - the Z-Tag Signal is blinking the integrated red LED when being notified.

This feature is useful when one particular item of a stack of tagged assets needs to be found. In such case the application lets the asset blink for finding it quickly.

The Z-Tag Signal is typically attached to the asset with the included strip. In case the Tag is removed it will signal a purpose-built alarm to the Controller which can be interpreted appropriately.

All of these functions are available from the same Z-Controllers over the air without hardware or software modification.

Packages

Two water-resistant IP65 packages are available: The extra slim Badge Credit Card (S3135-H501 and S3135-H500), or the Domino format (S3135-H511, S3135-H510, S3135-H530 and S3135-H520). The package of the Tag Signal has LED and a mini-switch integrated. That version (S3135-H540) is IP50 protected.

Applications

Asset Tracking & Supply Chain

- Logistics
- Defense
- Airports / Ports
- Transport (Train/Trucks)
- Automotive
- Hospitals
- Museums

People Safety

- Fire Brigades
- Hospital / Care Homes
- Mining and Milling

Further more applications

- Access Control (long range)
- Intrusion Detection for Security
- Cold Chain

Technical data

Dimensions (L x W x H)

Credit Card	54 x 85.5 x 4 mm
Domino	31 x 90 x 10.5 mm
Signal	52 x 27 x 8 mm

Frequency Band

2.400 GHz ~ 2.483 GHz
worldwide unlicensed ISM band

Temperature

IEC 60068-2-14 (Na) - Operating -10°C ~65°C
Storage -20°C ~70°C

Temperature Sensor (S3135-H520-A-1)

-40° C ~125°C

Vibration

IEC 60068-2-64 - Test Fh

Free Fall

IEC 60068-2-32- part2 - Test Ed

Safety

EN 60950-1
EN 50371

EMC

EN 301 489-3 V1.4.1
EN 301 489-17 V2.1.1
EN 55022 + A1
EN 55024 + A1 + A2
EN 61000-6-2

Radio

EN 300 440-2 V1.1.2
EN 300 328 V1.6.1

Housing

Credit Card, Domino	IP65
Signal	IP50