

Z-Controller for active RFID

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 and Controllers.

Functions and Features

The 2.45 GHz Active RFID Controller is used in systems that integrate the Active Tags family ZOMOFI[®]. It is built around innovative CMOS circuits with very high density of integration. This technological breakthrough makes a low cost and a size-constrained design possible.

The controller can be fitted with a standard $\lambda/4$ rubber-duck antenna, like on the picture, for an up to 80m communication range. Expanding the reading distance and shaping the Radio Frequency field for distances up to more than 100m can be done with e.g. sector antennas.

In its basic configuration the anti-collision rate is in the range of 80 to 100 Tags per second – patent pending. One single Controller can operate at least one thousand Tags.

Several topologies are available – from simple star networks to complex clusters – for operation in dense Controller mode. A software demo application is available together with the full command set description. The firmware of the Controller is expandable in order to protect the customer's investment.

Health and safety is a major consideration. The Active Tag Controller is believed and certified to be totally harmless to any adjacent electronic equipment.

Available Versions

A standard RS232/RS485 interface as well as a RS232/RS485 + Ethernet + WiFi are provided. The Ethernet/WiFi interface of the Controller makes the flexible linking of existing IT infrastructures in the company possible. The integration into business applications is ensured by the available Z-Edgware (P900). The Controller can be supplemented with GPS and GPRS.



Technical data

Dimensions (L x W x H)	126 x 104 (82.5) x 28 mm
Power Supply	6 VDC, 50 – 700 mA (depending on selected connectivity)
Frequency Band	2.400 GHz ~ 2.483 GHz worldwide unlicensed ISM band
Temperature	Operating -20°C ~ +65°C Storage -40°C ~ +70°C
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	Metal Housing, IP50