

2.45GHz Active reader/writer solution



2.45G-AT-R-TCP (Reader only)



2.45G-AT-RW-TCP (Reader/writer)

Features

Active RFID technology allow to track the data from tags in long distance broadcasting in microwave frequency (2.45 GHz).

You are able to build up a network of readers for identification, tracking and tagging in all your premises.

Unlike passive RFID tags, active RFID tags have their own internal power source, which is used to power the integrated circuits and to broadcast the response signal to the reader. Communications from active tags to readers is typically much more reliable at larger cover reading range .

Typical Application

- Access control for personnel monitoring at schools, offices, hospitals, sports center etc.
- Asset tracking control / Vehicle access control

Specification

Frequency range	2.4GHz-2.5Ghz ISM band,125 channel, channel bandwidth 1MHz
Baud rate	9600Bps-115200Bps
Signal modulation	GFSK
Antenna polarizing	round polarization
Identified range	non-directional identification, < 80 meters (open area)
Recognized speed	80km/s
Anti- collision	>100 cards / second
Interface port	RS232 & TCP/IP port
Sound indication	buzzer inside
Power supply	DC+12V
Operation Temp.	-40'C to +85'C
Dimension	(130*120*35)mm
Read only version	Single antenna / external locator is needed
Read/write version	Dual antenna / built-in Locator

2.45G Active Tag – Specification

Memory Size

Read only Tag : 4 Byte Tag ID

Read/write Tag : 240 Byte

Ordering part No	2.45G-AT-T1-B	2.45G-AT-M1	2.45G-AT-W1
Description	<ul style="list-style-type: none"> - size : (87*55*5.5)mm - Frequency : 2.45Ghz - 3V x 2 lithium battery - battery life : > 2 years 	<ul style="list-style-type: none"> - PCB module - size : (60*50)mm - Frequency : 2.45Ghz - 3V x 2 lithium battery - battery life : > 2 years 	<ul style="list-style-type: none"> - watch type - Frequency : 2.45Ghz - 3V x 2 lithium battery - battery life : > 2 years
Photo			

2.45G Locator

Features

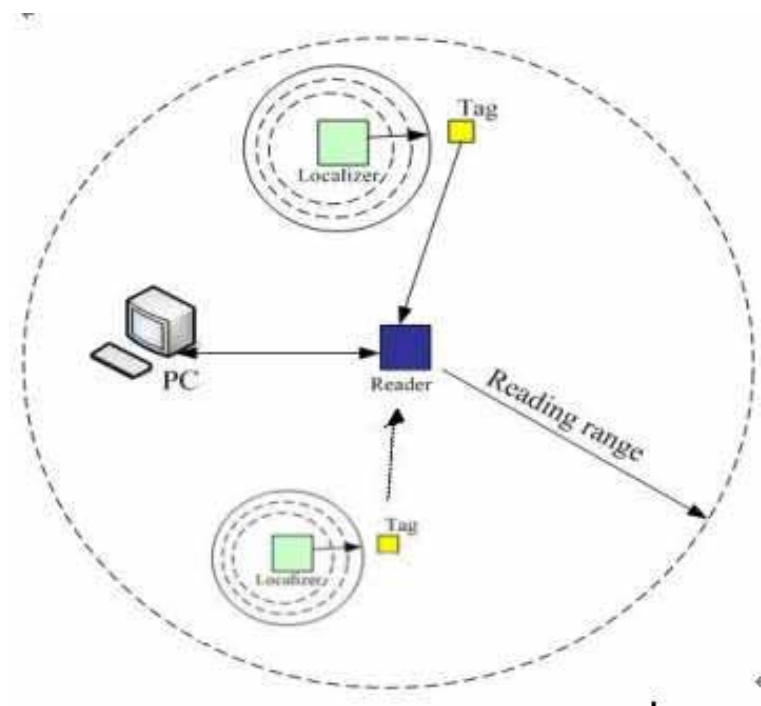
Locator can work together with 2.45GHz reader to implement asset tracking and locate the active tag location within a specified area

Specification

- Frequency : 2.4Ghz-2.5Ghz
- identified distance : max. 30 meter
- anti-collision : > 100 pcs
- interface : RS232
- size : (100x65x26)mm



Operation Diagram



Operation flow

Connect reader with PC and the Locator is placed within the reader reading area.

When TAG is within the reading range of reader but not in the range of locator.

Then the TAG can not be active to send data so the reader can't receive the tag data.

If the tag is within the Locator reading range , it will be wake up(activate) and received the locator ID from the locator .

Then the tag will send the Tag ID , Locator ID and data to the reader .