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RFID read/write test

◇ The RFID read/write test by using Anechoic box,signal analyzer and Programmable attenuator

[～*Application*～]

The various radio waves flit in the office and the factory. (PC, Server, Wireless LAN and etc.)
The radio waves of a public wireless and being used in other offices enter from the outside. (Cellular phone, Wireless LAN and PHS) If the DUT (device under test) is measured in the anechoic box, the correct data can be gotten because outside noise is inteercepted and internal radio wave is absorbed. The programmable attenuator with the frequency range from 750MHz to 12.5GHz enables the simulation of the receiving sensitivity.

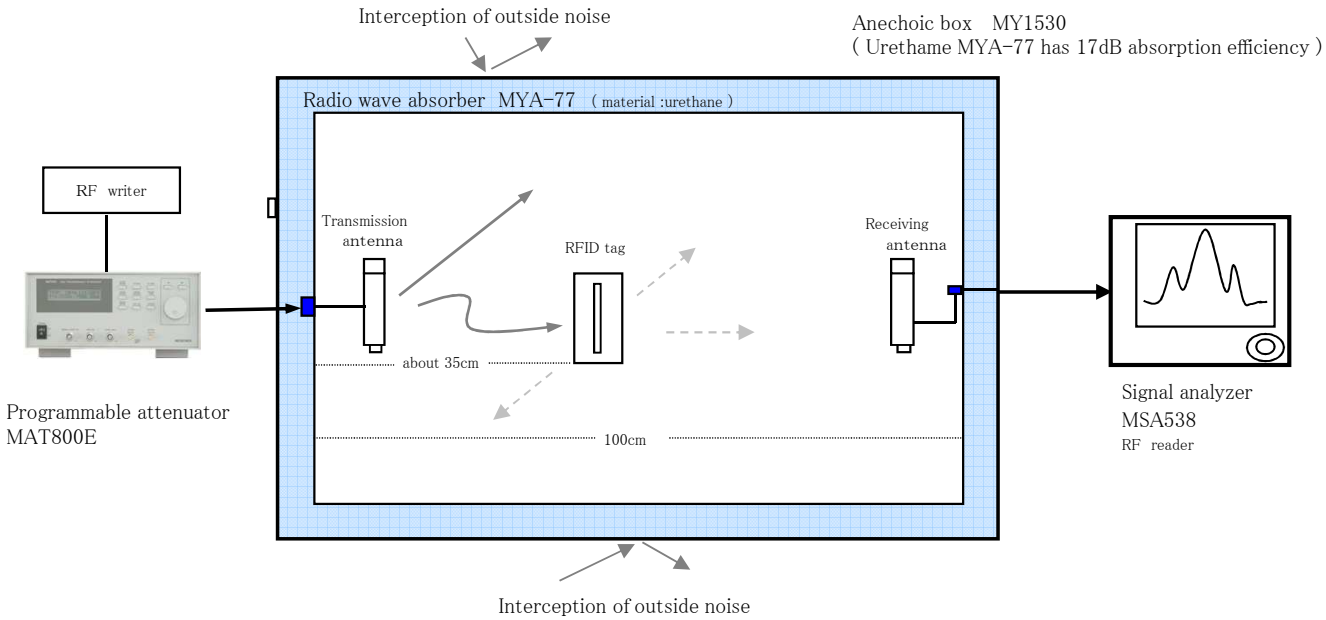
【 object 】 ･･･ slight wireless / 900MHz UHF band of RFID

[～*Solution*～]

[Problem and solution]

1. The measurement value from antenna displayed on a signal analyzer changes at each measurement
   → The measurement value becomes stable when the outside noise is cut off more than 60dB.
2. The strong reflection occurs in the shield box
   → The reflection decreases when it is absorbed more than 10dB by the radio wave absorber.
3. Fresnel zone is measured at the correct distance in the anechoic box
   → The measured data is almost same as in a chamber.
4. The handover test and the carrier sense level can be simulated by using the programmable attenuator together.

Usage example)
slight wireless / 900MHz UHF band of RFID (Fresnel zone 35cm ellipse)



[～*System constitution*～]

Anechoic box	MY1530
0.8 to 1GHz sleeve antenna	M301 × 2
3.3GHz signal analyzer	MSA538
0.75 to 2.2GHz Programmable attenuator	MAT800E

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MICRONIX Corporation
2987-2 Kobiki-cho, Hachioji-shi, Tokyo Japan
Tel:+81-42-637-3667 Fax:+81-42-637-0227
URL http://www.micronix-jp.com
E-mail micronix_e@micronix-jp.com