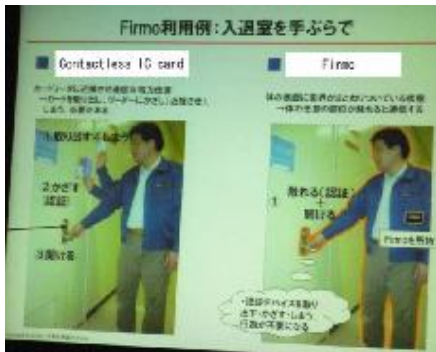


NTT Introduces Commercial RedTaction 'Firmo' Security Device



NTT Firmo Security Kit. Credit: NTT

NTT has developed a means to harness the Human Area Network to create Firmo. Firmo utilizes RedTaction which is a human body communication technology. It uses the surface of the human body as a transmission path. The Firmo Kit is used as an alternative to short-range wireless security card entrance/exit systems. NTT claims Firmo provides a higher degree of security than other technologies.

NTT has introduced the first RedTaction security entrance/exit kit. RedTaction is a human body communication technology. It utilizes the surface of the human body as a transmission path. NTT announced the sale of the Firmo evaluation kit, which includes an embeddable receiver, five card-type transmitters and a touch plate for the receiver. The cost for the Firmo kit is approximately \$7,722.

Most people are familiar with WAN or LAN transmissions. RedTaction is a human area network. Its acronym is HAN. It is the ability to utilize the body surface as the transmission for connectivity to terminals. NTT developed a photonic electric field sensor. This enables weak electric fields found on the surface of the human body to be measured by detecting changes in the optical properties of an electro-optic crystal with a laser beam.

By using the new extremely sensitive photonic field sensor, RedTaction is able to create duplex communications over the entire body at 10Mbps. A transmission path is formed the moment the human body comes in contact with the RedTaction transceiver. It is a safe method of achieving high speed network transmission because no current enters the body mass. Any part of the body can act as a transmitter. In fact, the transmission is not obstructed by rubber sole shoes or clothing. Everything is linked to the natural body movements of the individual.

According to NTT, the advantage of the use of HAN based Firmo security system ensures a higher level of security because the signal range is limited to several millimeters to several centimeters from the surface of the human body or clothing. Firmo means fairy motion. This is the conceptual framework of the Firmo security system. It is like the aura surrounding Tinkerbell. This is the field of Firmo and no more.

Other card security systems utilizing short-range wireless communications often times allow intruders several meters or more to gain entrance. This situation occurs when an individual with card authorization to enter a secure area may not be aware of someone in the area. Inadvertently, security is breached. The NTT Firmo security network would limit entrance to the single body.

According to NTT, the card-type transmitter runs on a battery with a one year life. It is a commercial

battery that is available on the open market. The system uses a 5MH carrier wave in communication. This is equivalent to the high frequency band used by ham radios. It will not interfere with ham frequency waves because it is 20db lower than the lowest radio frequency band. As a safeguard, NTT improved upon the electrode structure to prevent the waves from being emitted.

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