

all Frequencies can be Jammed...

Until Now

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Fact of the matter is that all frequencies can be jammed...it's not something anyone has really been able to prevent. There is always going to be hardware that can create the same frequency at a stronger level and jam signals...

Enter Polarizone and its anti jamming wireless triple play.

Why anti jamming is required?

Wireless networks are always exposed to a variety of security risks as the frequencies at which they operate are usually open for a clever eavesdropper to tap into. For wireless networks to be truly invulnerable, a system that offers low probability of exploitation (LPE) and anti jamming (AJ) features is required.

Existing conventional communication systems that offer LPE and AJ features such as frequency hopping and spread, occupy a very wide spectrum and are not suitable for broadband data transmissions. As the data of commercial and tactical networks go beyond 10Mbps, many of the existing systems are unsuitable due to their large spectral requirement.

The Pseudo-random Polarization Hopping (PPH) modulation system

innovatively occupies a narrow spectrum and offers a high level of LPE and AJ security for wireless linkage. The PPH modulation system is ideal for commercial and tactical networks as large quantities of data is able to be transferred using a very secure system and yet the process can be fairly inexpensive.

TRIATA

TRIATA provides a 'triple play' communications system where video, voice and data can be transmitted over the same wireless link connection. The wireless link connection is deployed by using a novel technique called Pseudo-random Polarization Hopping (PPH) to provide an extremely secure anti jamming broadband wireless to overcome the threats of eavesdropping and jamming.

- anti-jamming using polarization nulling and space coding.
- anti eavesdropping using polarization hopping.
- extreme security.
- video, voice and data wireless link.

TRIATA features

- data rate: 5 Mbps or more.

- jamming margin: 20dB using adaptive polarization nulling.
- hopping rate: 1 million hops/sec.
- frequency: 2.4 GHz, customizable to any frequency band.
- range: 1 mile, customizable to any range less than 20 miles.
- architecture: 2 in 2 out MIMO, SDR implementation.

TRIATA applications

- anti-jamming and anti eavesdropping wireless link to provide end-to-end solution for video, voice and data communication.
- a high data rate WLAN solution for invulnerable wireless local area network.
- extremely secure and high data rate network for mobile commerce applications.
- UAV data links.
- a point to point secure Broadband wireless link for corporate, defence, police and other security critical market.